REGISTRATION DOCUMENT AND ANNUAL FINANCIAL REPORT 2018

BNP PARIBAS

The bank for a changing world

BNP PARIBAS

2018 Registration document and annual financial report

AUTORITÉ DES MARCHÉS FINANCIERS

AMF

Only the French version of the Registration document has been submitted to the AMF. It is therefore the only version that is binding in law. The original document was filed with the AMF (French Securities Regulator) on 5 March 2019, in accordance with article 212-13 of the AMF's General Regulations. It may be used in support of a financial transaction only if supplemented by a Transaction Note that has received approval from the AMF. This document was prepared by the Issuer and its signatories assume responsibility for it.

The English language version of this report is a free translation from the original, which was prepared in French. All possible care has been taken, to ensure that the translation is an accurate presentation of the original. However, in all matters of interpretation, views or opinion expressed in the original language version of the document in French take precedence over the translation.

1 PRESENTATION OF THE BNP PARIBAS GROUP

1

1.1 Group presentation

BNP Paribas, Europe's leading provider of banking and financial services, has four domestic Retail Banking markets in Europe, namely in France, Belgium, Italy and Luxembourg.

It operates in 72 countries and has more than 202,000 employees, including over 154,000 in Europe. BNP Paribas holds key positions in its two main businesses:

- Retail Banking and Services, which includes:
  - Domestic Markets, comprising:
    - French Retail Banking (FRB),
    - BNL banca commerciale (BNL bc), Italian retail banking,
    - Belgian Retail Banking (BRB),
    - Other Domestic Markets activities including Luxembourg Retail Banking (LRB);
  - International Financial Services, comprising:
    - Europe-Mediterranean,
    - BancWest,
    - Personal Finance,
    - Insurance,
    - Wealth and Asset Management;
- Corporate and Institutional Banking (CIB):
  - Corporate Banking,
  - Global Markets,
  - Securities Services.

BNP Paribas SA is the parent company of the BNP Paribas Group.

1.2 Key figures

RESULTS

	2014(****)	2015	2016	2017	2018
Revenues *(in millions of euros)*	39,168	42,938	43,411	43,161	42,516
Gross operating income *(in millions of euros)*	12,644	13,684	14,033	13,217	11,933
Net income Group share *(in millions of euros)*	157	6,694	7,702	7,759	7,526
Earnings per share *(in euros)*(*)	4.70(**)	5.14	6.00	6.05	5.73
Return on equity(***)	7.7%(**)	8.3%	9.3%	8.9%	8.2%

(*) Based on net income Group share adjusted for interest on Undated Super Subordinated Notes deemed equivalent to preferred shares issued by BNP Paribas SA and treated as a dividend for accounting purposes.

(**) Excluding the costs related to the comprehensive settlement with the US authorities. Excluding this effect, net earnings per share came to -EUR 0.07 and return on equity stood at -0.1%.

(***) Return on equity is calculated by dividing net income attributable to equity holders (adjusted for interest on Undated Super Subordinated Notes issued by BNP Paribas SA, treated as a dividend for accounting purposes and adjusted for the foreign exchange effect on redeemed Undated Super Subordinated Notes) by average permanent shareholders' equity, not revaluated, between the beginning of the year and the end of the year (shareholders' equity attributable to equity holders adjusted for changes in assets and liabilities recognised directly in equity, Undated Super Subordinated Notes, remuneration net of tax payable to holders of Undated Super Subordinated Notes and proposed distribution of dividends).

(****) Figures restated following the application of IFRIC 21 interpretation.

MARKET CAPITALISATION

	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018
Market capitalisation *(in billions of euros)*	70.5	61.4	65.1	75.5	77.7	49.3

Source: Bloomberg.

1

LONG-TERM AND SHORT-TERM RATINGS

	Long-term and short-term ratings as at 6 March 2018	Long-term and short-term ratings as at 5 March 2019	Outlook	Date of last review
Standard & Poor's	A/A-1	A/A-1	Positive	4 July 2018
Fitch	A+/F1	A+/F1	Stable	21 June 2018
Moody's	Aa3/Prime-1	Aa3/Prime-1	Stable	27 September 2017
DBRS	AA (low)/R-1 (middle)	AA (low)/R-1 (middle)	Stable	13 July 2018

On 4 July 2018, Standard & Poor's confirmed the long-term credit rating of BNP Paribas at A with improving the outlook to positive.

On 21 June 2018, Fitch confirmed the long-term rating of BNP Paribas at A+ with a stable outlook.

On 27 September 2017, following its review, Moody's upgraded the long-term rating of BNP Paribas from A1 to Aa3, with a stable outlook.

On 13 July 2018, DBRS confirmed the long-term rating of BNP Paribas at AA (low) with a stable outlook.

1.3 History

1966: Creation of BNP

The merger of BNCI and CNEP to form BNP represented the largest restructuring operation in the French banking sector since the end of the Second World War.

1968: Creation of Compagnie Financière de Paris et des Pays-Bas

1982: Nationalisation of BNP and Compagnie Financière de Paris et des Pays-Bas at the time of the nationalisation of all French banks

In the 1980s, deregulation of the banking sector and the growing tendency of borrowers to raise funds directly on the financial market transformed the banking business in France and worldwide.

1987: Privatisation of Compagnie Financière de Paribas

With 3.8 million individual shareholders, Compagnie Financière de Paribas had more shareholders than any other company in the world. Compagnie Financière de Paribas owned 48% of the capital of Compagnie Bancaire.

1993: Privatisation of BNP

BNP's return to the private sector represented a new start. The 1990s were marked by a change in the level of profitability of the Bank, which had the highest return on equity of any major French institution in 1998. This period was marked by the launch of new banking products and services, the development of activities on the financial markets, expansion in France and at the international level, and preparation for the advent of the euro.

1998: Creation of Paribas

On 12 May 1998, the merger between Compagnie Financière de Paribas, Banque Paribas and Compagnie Bancaire was approved.

1999: A momentous year for the Group

Following an unprecedented double tender offer and a stock market battle waged over six months, BNP was in a position to carry out a merger of equals with Paribas. For both groups, this was the most important event since their privatisation. It gave rise to a new Group with tremendous prospects. At a time of economic globalisation, the merger created a leading player in the European banking sector.

2000: Creation of BNP Paribas

BNP and Paribas merged on 23 May 2000.

The new Group derived its strength from the two major financial and banking lines from which it descends. It has two goals: to create value for shareholders, clients and employees by building the bank of the future, and to become a leading global player.

2006: Acquisition of BNL in Italy

BNP Paribas acquired BNL, Italy's 6th-largest bank. This acquisition transformed BNP Paribas, providing it with access to a second domestic market in Europe. In both Italy and France, all of the Group's businesses can now develop their activities by leveraging a nationwide banking network.

2009: Merger with the Fortis group

BNP Paribas took control of Fortis Bank and BGL (Banque Générale du Luxembourg).

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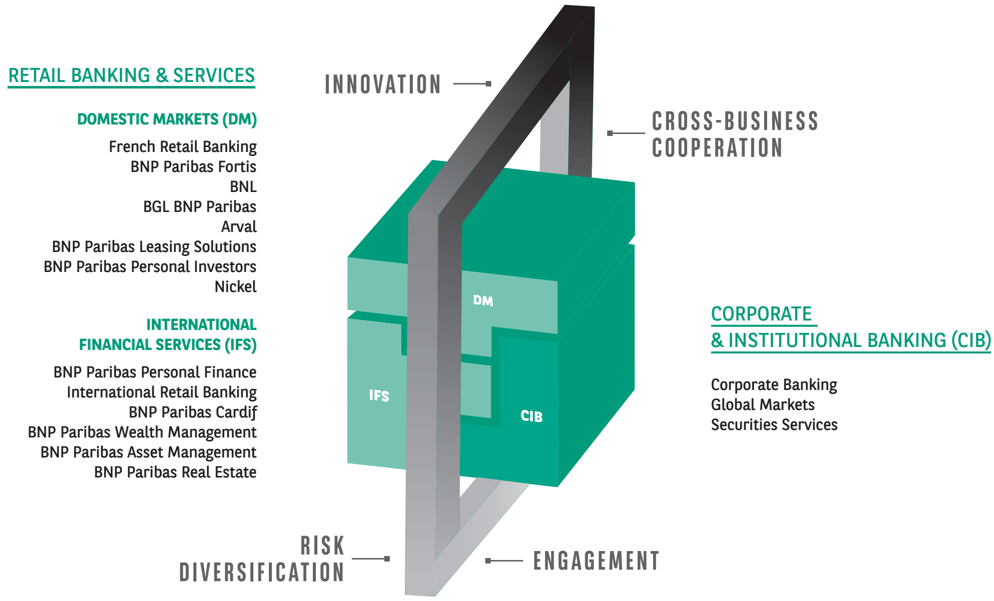
1.4 Presentation of operating divisions and business lines



RETAIL BANKING & SERVICES

Retail Banking & Services includes Retail Banking networks and specialised financial services in France and abroad. It is divided into Domestic Markets and International Financial Services. Established in more than 60 countries and employing over 148,000 people, Retail Banking & Services accounted for 74% of the 2018 revenue generated by BNP Paribas' operating divisions.

DOMESTIC MARKETS

Domestic Markets includes BNP Paribas' Retail Banking networks in France (FRB), Italy (BNL bc), Belgium (BRB, operating under the BNP Paribas Fortis brand) and Luxembourg (LRB, operating under the BGL BNP Paribas brand), as well as three specialised business lines: Arval (corporate vehicle leasing and services), BNP Paribas Leasing Solutions (leasing and financing solutions), BNP Paribas Personal Investors (online savings and brokerage), and Nickel (online banking services) acquired in July 2017.

Cash Management, Trade and Factoring round out the services provided to corporate clients under the One Bank for Corporates concept, in synergy with CIB's Corporate Banking. Wealth Management develops its Private Banking model in the domestic markets.

The purpose of Partners in Action for Customer Experience (PACE), a cross-functional team, is to help retail businesses offer a better customer experience and propose new business models to the entire Group.

Launched in 2013 and designed for use on smartphones and tablets, Hello bank! is the Group's digital bank in France, Belgium, Italy, Germany and Austria. At year-end 2018, Hello bank! had 3 million customers. With the acquisition of Compte-Nickel in 2017, the BNP Paribas set-up expanded to include new banking practices in France. The bank now offers a full set of solutions adapted to the needs of its various customer bases.

Domestic Markets employs nearly 70,000 people, including 53,400 working in the 4 domestic networks. It serves close to 18 million customers including over 850,000 professionals, small businesses and corporates in the 4 domestic networks.

Through Domestic Markets, BNP Paribas is the leading private bank in France[1] and Belgium[2], no. 1 in cash management in Europe[3] and no. 2 for professional equipment financing in Europe[4].

(1) Source: Euromoney.

(2) Source: WorldFinance.

(3) Source: Greenwich Associates January 2019.

(4) Source: Classement Leaseurope 2017, published in May 2018.

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FRENCH RETAIL BANKING (FRB)

With close to 27,000 employees, French Retail Banking (FRB) supports its customers with their plans and projects. FRB offers innovative financing, payment, wealth & asset management, and insurance solutions to 6.7 million individual customers, 585,000 professionals and VSEs, 31,200 corporates (SMEs, mid-sized and large corporates) and some 60,000 associations. Combining the best in digital with a relationship approach that emphasises human interaction, it provides its customers with broad interface capabilities, ranging from essential banking services, through a self-care solution, to customised guidance using dedicated teams that are experts in the relevant fields.

To enhance its efficiency and be closer to its customers, in 2018, French Retail Banking transformed its network management, in particular, by creating ten regions covering 158 territories, thereby ensuring a level of proximity adaptable to each customer type whilst maintaining synergies between business lines.

The network of branches and centres are designed to offer all customers the right facilities for their needs:

- for individual and professional customers, approximately 1,861 branches and 5,670 ATMs operating under the BNP Paribas and BNP Paribas – Banque de Bretagne brands;
- for Private Banking customers, BNP Paribas has Private Banking centres located throughout France (for customers with more than EUR 250,000 in financial assets) and 9 Wealth Management offices (for customers with more than EUR 5 million in financial assets), making BNP Paribas the leading private bank in France;
- for corporate clients and small businesses, a unique system organised by region:
  - 15 general business centres dedicated to corporate clients,
  - 47 SME centres to help small businesses or VSEs to manage their wealth planning and company life-cycle,
  - 39 WAI hubs to support innovative start-ups and companies by providing an offer dedicated to their specific needs;
- in addition, the Paris region has a specific structure to support corporate and small business clients:
  - 7 general business centres, 3 specialised business centres (Innovation, Real Estate and Institutions/Associations/Foundations) offering customised services in line with the specific needs of corporate clients, as well as 2 skills centres (Bank Agency and Image and Media hub) to address corporate sector challenges,
  - 13 business and advice centres dedicated to SMEs and their managers,
  - 20 business or VSE resource centres focusing on forging closer links with VSEs,
  - 22 WAI hubs including 1 dedicated fintech hub,
  - 2 sites dedicated to innovation: WAI Paris and WAI Massy-Saclay, places for acceleration and connection;
- specialised subsidiaries, including BNP Paribas Factor, one of European leader in factoring, which offers client/supplier management solutions, as well as BNP Paribas Développement, a private equity provider, and Protection 24, a remote surveillance firm;
- customer support centres such as a business assistance service – Service Assistance Entreprise (SAE) and a Cash Customer Service (CCS);
- lastly, 50 production and sales support branches, back offices that handle all transaction processing operations.

FRB also provides its clients with a full online relationship capability, based on:

- a mabanque.bnpparibas website and the mobile app "Mes Comptes", offering services used by more than 3.2 million unique customers per month, including 2.1 million on smartphones and tablets and 1.3 million smartphone-only customers, averaging 15.8 visits per month;
- 3 customer relationship centres in Paris, Lille and Orléans, which handle requests received by e-mail, phone, chat or secure messaging, and 3 specialist contact centres, "Net Épargne/Bourse", "Net Crédit" and "Net Assurance";
- BNP Paribas' online branch, which offers the full range of BNP Paribas products and services, with a dedicated advisor for individual support; and
- Hello bank!, the Group's fully online bank, with 430,000 customers at 31 December 2018.

BNP Paribas was voted best private bank in France by Euromoney, *PWM-The Banker* and *World Finance* magazines in 2018.

BNL BANCA COMMERCIALE

BNL bc is Italy's 6th-largest bank in terms of total assets and customer loans(1). It provides a comprehensive range of banking, financial and insurance products and services to meet the needs of its diversified customer base consisting of:

- roughly 2.6 million(2) individual customers, including approximately 382,000 Hello bank! customers;
- 55,000(2) Private Banking clients;
- 132,500(2) small business and VSE customers;
- approximately 11,700(2) medium and large corporates;
- 6,300(2) local authorities and non-profit organisations.

BNL bc has a strong position in lending, especially residential mortgages (market share of around 6.8%(3)), and has a deposit base (3.6%(3) of household current accounts) well above its market penetration rate (3.0%(3) in terms of branch numbers).

BNL bc is also well established in the markets for corporates (market share of around 4.4%(3) in terms of loans) and local authorities, with recognised expertise in cash management, cross-border payments, project finance, structured finance and factoring via its specialist subsidiary Ifitalia (ranked 3rd in Italy(4)).

(1) Source: annual and periodic reports of BNL and its competitors.

(2) Active clients.

(3) Source: Bank of Italy.

(4) Source: Assifact, ranking by turnover.

BNL bc optimises its omni-channel retail system, organised by region (*direzioni regionali*), with one structure for Retail and Private Banking, and a separate structure for Corporate Banking:

- 735 branches, including Open BNL omni-channel branches (approximately 108 branches) serving customers 24/7;
- 37 Private Banking centres;
- 48 small business centres;
- 46 branches dealing with SMEs, large corporates, local authorities and public sector organisations;
- 3 trade centres in Italy for its clients' cross-border activities;
- 2 Italian desks to assist Italian companies abroad and multinational companies with direct investments in Italy.

In addition, there are 1,800 ATMs, a network of approximately 423 financial advisers (called Life Bankers), and the Hello bank! digital bank.

BELGIAN RETAIL BANKING (BRB)

Retail & Private Banking (RPB)

BNP Paribas Fortis is the no. 1 bank for retail[1] customers in Belgium and shares first place for the corporate and small business[2] sector, with 3.5 million customers.

RPB serves individual customers, entrepreneurs, and small and medium enterprises through its different integrated networks, thus fitting into a hybrid banking strategy where the customer chooses between the branch network and digital channels:

- the commercial network comprises 678 branches (of which 287 are independent) and 18 centres of a new dedicated structure, the Banque des Entrepreneurs (the bank for small businesses). In addition, there are 302 Fintro[3] franchises and 661 retail outlets in partnership with Bpost Bank. Its 678 branches are organised as 46 branch groups reporting to 9 regions;
- RPB's digital platform manages a network of 3,256 ATMs, online banking services (Easy Banking) and mobile banking (2.0 million total aggregate active users);
- the bank is also available for customers thanks to the Easy Banking Centre which handles up to 38,000 calls per week.

The offer is completed by the Hello bank! digital bank.

RPB is also a major player in the Belgian Private Banking market. Its services are aimed at individual customers with assets of more than EUR 250,000. The Wealth Management department within Private Banking caters to clients with assets of more than EUR 5 million. Private Banking customers are served via 32 Private Banking centres, 1 Private Banking Centre by James[4] and 2 Wealth Management centres.

Corporate Banking Belgium

Corporate Banking in Belgium offers a comprehensive range of financial services to corporates, public entities and local authorities. With a very large corporate and midcap customer base, CB is an important actor in both categories as well as a challenger in public and non-profit banking.

LUXEMBOURG RETAIL BANKING (LRB)

With a 15%[5] market share of the Retail Banking market, and 20%[6] of the SME market, BGL BNP Paribas is the no. 2 bank in Luxembourg.

LRB is actively involved in financing the economy and constantly fine-tunes its strategy and network to align it with changing customer behaviour patterns, with a particular focus on digital.

Drawing on the expertise of its staff, LRB is there to support customers to bring their plans to fruition, with:

- a network providing banking services, on a daily basis, to 184,000 customers through:
  - 41 branches throughout the country and 135 ATMs for individual and business customers,
  - a comprehensive and diverse range of products and services offered through its innovative multi-channel presence, encompassing a branch network, online, telephone and mobile banking,
  - a remote investment advisory service, the specialist online savings and investment bank, with a dedicated team of financial advisers to assist customers in managing their portfolios;
- a Corporate Bank serving 1,700 corporates, with dedicated business managers;
- a Private Bank organised around 5 centres offering tailored financial and asset management services to 3,500 customers.

ARVAL

Arval is the BNP Paribas subsidiary specialising in full service vehicle leasing. It offers companies ranging from small businesses to large multinationals tailored solutions that optimise their mobility and that of their employees and outsource the risks associated with fleet management. It has recently extended its client base to individuals.

Arval offers services related to corporate vehicle leasing (financing, insurance, maintenance, tyres, etc.), additional services such as the complete outsourcing of driver management for its clients' fleet (Arval Outsourcing Solutions), a telematics solution (Arval Active Link), an online platform dedicated to customers and drivers (My Arval), and the expertise of Arval Consulting. To support its customers with their energy transition strategy, Arval also launched its "SMaRT" (Sustainable Mobility and Responsibility Targets) approach.

(1) Source: Benchmarking Monitor, 2018.

(2) Source: Strategic Monitor Professionals 2017. For the professional sector, 3 banks share 1st place.

(3) In December 2018, Fintro had 302 branches, 1,198 staff and EUR 11.05 billion in assets under management (excluding insurance business) for 323,789 active clients.

(4) Private Banking centre providing remote services through digital channels.

(5) Source: TNS ILRES – Bank Survey 2018.

(6) Source: TNS ILRES – SME Bank Studies 2018.

Arval had 7,000 employees at the end of 2018, in the 29 countries where the Company operates, and managed a total leased fleet of nearly 1,200,000 vehicles. Arval relies, in addition, on strategic partnerships, thanks to the Element-Arval Global Alliance, the world leader in the sector, with a total of more than 3 million vehicles in 50 countries.

BNP PARIBAS LEASING SOLUTIONS

BNP Paribas Leasing Solutions offers corporate and small business clients leasing and finance solutions for equipment for business use.

These solutions are offered via three sales channels:

- Industrial partners (professional equipment manufacturers, distributors and software publishers), with finance solutions for their end customers;
- Corporates, with leasing and fleet management offers;
- BNP Paribas banking network business customers, by supporting their investment plans.

BNP Paribas Leasing Solutions finances two main categories of equipment:

- Logistics rolling stock: farm machinery, construction and public works equipment, light commercial and industrial vehicles;
- Technological equipment: IT, office technology, telecoms, medical and specialist technologies.

As a major player in the functional economy, BNP Paribas Leasing Solutions gives corporates the flexibility they need to stay competitive and to grow both sustainably and responsibly.

Along with Leasing Solutions and Arval, BNP Paribas is number 2 in corporate leasing in Europe[(1)].

In 2018, BNP Paribas Leasing Solutions financed over 357,000 projects totalling EUR 13.5 billion. Its total outstandings under management at the end of December 2018 amounted to EUR 32.1 billion[(2)].

Its 3,150 employees support its customers' and partners' growth in 18 countries in Europe, China, the United States and Canada. BNP Paribas Leasing Solutions expanded into Norway this year, with the aim of servicing its Nordic partners and customers.

BNP PARIBAS PERSONAL INVESTORS

BNP Paribas Personal Investors is a digital banking and investment services specialist.

It offers a broad range of banking, savings and short- to long-term investment services to 3.6 million customers, on mobile applications, online, by phone or face to face. It provides decision-making tools, advice and analyses.

Personal Investors also provides services and its IT platform to independent financial advisors, asset managers and fintechs. Services include market access, transactions, account management and custody services.

Covering Germany, Austria, Spain, and India, Personal Investors currently has over 4,500 employees:

- BNP Paribas Personal Investors Germany

  Personal Investors operates under two brands in Germany, Consorsbank, targeted to individual customers, and DAB BNP Paribas for B2B customers. It is the 4th largest full-service direct bank in the market[(3)] by number of customers and the 2nd largest online broker by number of executed orders by individuals[(4)]. Personal Investors offers its services to nearly 1.6 million customers in Germany.
- Sharekhan in India

  Sharekhan, acquired in 2016, is India's 3rd largest online broker[(5)]. Its footprint extends to 575 towns through a network of 155 branches and close to 3,000 franchisees, serving 1.8 million customers.
- Hello bank! Austria

  Hello bank! Austria is the no. 4 online bank in the Austrian market[(6)]. It serves nearly 82,000 customers.
- BNP Paribas Personal Investors Spain

  Personal Investors Spain offers its services to individual customers and acts as a broker on the Spanish stock exchange.

NICKEL

BNP Paribas acquired Compte-Nickel in July 2017. With this acquisition, BNP Paribas has rounded out its offering dedicated to new banking practices, and, along with Hello bank!, the retail bank's digital offering, and the branch network, it has a full range of solutions tailored to the needs of its various customer bases.

Nickel accounts are available at more than 4,300 *buralistes* and were enhanced, in 2018, by the launch of the new premium card, Nickel Chrome.

Over 1.1 million Nickel accounts had been opened as at 31 December 2018.

(1) Source: Leaseurope 2017 ranking, published in May 2018.

(2) O/w 12.3 billion in outstandings across the 4 Domestic Markets retail networks.

(3) Excluding captive full-service direct banks of automobile makers.

(4) Financial communication from the major competitors.

(5) Ranking based on data communicated by the National Stock Exchange in India.

(6) Ranking based on data from modern-banking.act.

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INTERNATIONAL FINANCIAL SERVICES

International Financial Services comprises the following activities serving a broad range of individual, private, small business and institutional customers:

- International Retail Banking, which combines Retail Banking activities in 15 countries outside the euro zone, where it deploys BNP Paribas' integrated Retail Banking model to serve individuals, SMES, small businesses, and corporates;
- Personal Finance, offering credit solutions to individuals in around 30 countries through well-known brands such as Cetelem, Cofinoga or Findomestic;
- BNP Paribas Cardif, providing savings and protection solutions in 35 countries to insure people, their projects and assets;
- 3 leading specialist businesses in Wealth and Asset Management:
  - BNP Paribas Wealth Management: a global benchmark in Private Banking with a staff of close to 7,000, an international presence particularly in Europe and in Asia, and EUR 361 billion in assets under management,
  - BNP Paribas Asset Management: a significant player in asset management, it has more than 2,400 employees in 33 countries, with EUR 399 billion of assets under management,
  - BNP Paribas Real Estate Services: a leading provider of real estate services to corporates in Continental[1] Europe, with nearly 4,800 employees, in 33 countries and EUR 29 billion in assets under management.

International Financial Services employs close to 80,000 people in more than 60 countries and enjoys strong positions in the Asia-Pacific region and the Americas, which are key development regions for the Group, where it offers BNP Paribas' products and services to customers.

INTERNATIONAL RETAIL BANKING (IRB)

IRB combines retail and commercial banking activities in 15 countries outside the euro zone, where it deploys BNP Paribas' integrated model by leveraging the expertise from which the Group derives its strength (dynamic segmentation, multichannel, mobile banking, consumer credit, cash management, trade finance, leasing, fleet management, specialised financing, private banking, etc.), through its three business lines:

- Retail Banking, including multichannel local networks (more than 2,900[1] branches, serving more than 15 million customers[2]);
- Wealth Management, in cooperation with International Financial Services;
- Corporate Banking, with a network of 78 business centres, 25 trade centres and 13 desks for multinational companies, providing local access to BNP Paribas offers and support in all countries, in cooperation with CIB.

BancWest

In the United States, the Retail Banking business is conducted through Bank of the West and First Hawaiian Bank[3], subsidiaries of BancWest Corporation since 1998.

Bank of the West markets a very broad range of Retail Banking products and services to individuals, small businesses and corporate clients, through branches and offices in 24 States, primarily in western and mid-western America. It also has strong positions across the United States in several specialised lending activities, such as marine, recreational vehicles, church lending and agribusiness. The bank is expanding its business, especially in the corporate, Wealth Management and SME segments.

The digital offering is growing with an 85% increase in smartphone transactions per day and the integration of the Zelle[4] app enabling secure, rapid person-to-person transfers.

Bank of the West currently serves over 2 million customers. It has nearly 10,500 employees, 535 branches, and total assets estimated at USD 87.4 billion as at 31 December 2018. It ranks as the 7th largest commercial bank in the western United States in terms of deposits.

Europe-Mediterranean

With 30,500 employees and a network of more than 2,350[5] branches, Europe-Mediterranean now serves more than 13 million customers across 14 countries. The entity includes the banks TEB in Turkey, BGZ BNP Paribas Bank in Poland, UKRSIBBANK in Ukraine, BMCI in Morocco, UBCI in Tunisia, BNP Paribas El Djazaïr in Algeria, the BICIs of 7 countries in Sub-Saharan Africa and a partnership in Asia (Bank of Nanjing in China).

On 31 October 2018, the BNP Paribas SA Group also completed the acquisition of the core banking activities of Raiffeisen Bank Polska which were merged with BGŻ BNP Paribas. Due to the complementary nature of the two banks' activities, the transaction strengthened BGZ BNP Paribas' position as the 6th largest Polish bank with a pro forma market share of over 6% at the end of 2017 in terms of loans and deposits.

Europe-Med is continuing the development of its digital offering, in particular with CEPTETEB in Turkey, and BGZ OPTIMA in Poland which have respectively more than 650,000 clients and more than 233,000 clients. New digital services are on offer, such as the Gomobile account management app from BGŻ BNP Paribas. New branch formats are gradually being introduced, particularly at TEB, including digital services via new generation ATMs.

(1) Total branches, including branches in China and Gabon, entities consolidated under the equity method.

(2) Total clients outside China. Bank of Nanjing, which is consolidated under the equity method, has more than 9.2 million individual customers.

(3) Disposal of 13.2% on 8 May 2018, of 15.5% on 31 July 2018 and of 14.9% on 5 September 2018. First Hawaiian Bank has been reclassified since 30 June 2018 in accordance with IFRS 5 (Assets to be sold) and transferred to the Corporate Centre as of 1 October 2018.

(4) Developed by a consortium of US banks.

(5) Including branches in China and Gabon, entities consolidated under the equity method.

The banks' commitment to making a positive impact on society was rewarded: BMCI came out top in the VIGEO EIRIS ranking of the most responsible corporates in emerging markets and BGŻ BNP Paribas was ranked as the most responsible corporate in Poland in the banking, finance and insurance industry.

PERSONAL FINANCE

BNP Paribas Personal Finance, the leading specialist player in Europe(1)

BNP Paribas Personal Finance (PF) is the BNP Paribas Group's consumer credit specialist via its consumer loan business activities. With over 20,600 employees in some 30 countries, BNP Paribas Personal Finance ranks as the leading consumer credit specialist in Europe(1).

Through its brands such as Cetelem, Crédit Moderne, Findomestic and AlphaCredit, Personal Finance provides a full range of consumer loans at point of sale (retail stores and car dealerships) or through its customer relations centres, websites and mobile apps. The consumer credit business also operates within the Group's Retail Banking network in some countries, through the PF Inside set-up. BNP Paribas Personal Finance also offers insurance products tailored to local needs and practices in each of the countries where it operates. In Germany, Bulgaria, France, Hungary, Romania and Italy, the lending and insurance offer of Personal Finance has been complemented by savings products. BNP Paribas Personal Finance launched a digital bank under the Hello bank! brand through Cetelem in the Czech Republic.

BNP Paribas Personal Finance is also developing an active strategy of partnerships with retail chains, automobile makers and dealers, web merchants and other financial institutions (banking and insurance), drawing on its experience and its ability to integrate services tailored to the activity and commercial strategy of its partners.

In 2017, the business jointly acquired, with PSA Finance, the Opel/Vauxhall's financing businesses in 11 countries.

Digital transformation at the heart of the growth model

Central to the company's strategic plan, digitalisation and digital transformation focus on four key areas: simplification of the customer journey, development of new contact and distribution channels, automation of internal processes and the use of data analysis. In 2018, almost 50% of all contracts were already being signed electronically. BNP Paribas Personal Finance also has 89 robots in its back offices and for processing data.

The business plays an active role in the Plug and Play fintech & insurtech international acceleration programme.

A committed player in the fields of financial education and e-inclusion

As a key player in the field over the last 10 years, BNP Paribas Personal Finance has made responsible lending® the basis of its commitment to sustainable growth

This cross-company approach is implemented according to the specific characteristics of each country and always includes structural measures such as the design and distribution of accessible and responsible products and services.

The company is also heavily involved in teaching people how to manage their budget and in e-inclusion.

In its various locations, BNP Paribas Personal Finance, under its different brand names, develops and promotes financial education geared to prevention and supporting economic and social inclusion. In 2018, 21,700 people benefited from these programmes worldwide, and the aim is to reach 50,000 young people in 2019 and 100,000 in 2020.

The company is also working towards a society where digital technology is widely accessible and where inclusion is facilitated by shared knowledge and practices. Through the Cetelem Foundation, under the aegis of the Fondation de France, BNP Paribas Personal Finance has set itself the goal of supporting general interest projects selected on the basis of three key areas of intervention: access, good practice and the digital divide.

BNP PARIBAS CARDIF

For forty-five years, BNP Paribas Cardif has designed, developed and marketed savings and protection products and services to insure people, their projects and their assets.

With more than 100 million insurance customers in 35 countries, BNP Paribas Cardif provides saving solutions to build and grow capital but also prepare for the future, through guaranteed capital products, unit-linked funds, or Euro-growth contracts.

As a world leader in credit protection insurance, BNP Paribas Cardif has extended its protection offering to include health insurance; budget insurance, income protection, and means of payment insurance; protection against unforeseeable events (unemployment, injury, death, theft, or breakage); and personal data protection, to meet consumers' changing needs.

Building on a unique business model, BNP Paribas Cardif co-creates its products and services with more than 500 of the BNP Paribas Group's internal and external distribution partners. This multi-sector partner network comprises banks, credit institutions, financial institutions, car manufacturers, retailers, telecoms, brokers and independent wealth management advisers.

(1) Source: Annual Reports published by companies specialised in consumer credit. In terms of revenues from consumer credit business.

In 2018, the Group continued to grow with the launch of a new non-life insurance product in the French Retail Banking network via Cardif IARD (a joint venture with Matmut). In June 2018, BNP Paribas Cardif also took a controlling interest in Natio Assurance, a French non-life insurer, by acquiring the shares held by the AXA Group with which it exercised joint control. Lastly, BNP Paribas Cardif signed an agreement with Ageas to purchase its 33% stake in Cardif Lux Vie in December 2018.

To better serve its distribution partners and insurance customers, the insurer, which has more than 8,500 employees, has adopted a structure based on domestic markets (France, Italy, Luxembourg), international markets (other countries) and central functions.

WEALTH MANAGEMENT

BNP Paribas Wealth Management encompasses BNP Paribas' Private Banking activities and caters for all the wealth management and financial needs of a clientele of wealthy individuals, shareholder families and entrepreneurs.

BNP Paribas Wealth Management is structured to assist customers in different markets. In Europe and the United States in particular, the development of the Private Banking business is backed by BNP Paribas' retail banking networks. In the strongly growing Asia region, the private bank is supported by the Bank's historic presence in the market and by Corporate and Institutional Banking's businesses to meet the most sophisticated needs.

Due to its global approach, international network of specialists and customised solutions, it offers high value-added products and services, tailored to its customers' needs and aspirations:

- wealth planning services;
- financial services: advisory services in asset allocation, selection of investment products, discretionary portfolio management;
- customised financing;
- expert diversification advice: vineyards, artworks, real estate, and philanthropy;
- sustainable investments: supporting its customers in their responsible investment planning and combining financial performance with social and environmental impact.

Its integrated model also benefits from the full range of BNP Paribas resources:

- proximity of a retail banking network;
- Investment Banking, asset management, insurance, real estate know-how, etc.

To meet the specific needs of its entrepreneur customers, its experts create tailor-made solutions to build bridges between their private and business wealth in order to devise a wealth management strategy.

Innovation is at the heart of its offering: BNP Paribas Wealth Management continues to expand its range of digital solutions, thus offering a unique experience tailored to each individual customer's journey.

2018 was marked by two major developments:

- in Luxembourg, the acquisition of ABN AMRO Bank (Luxembourg) will enable the Private Bank to consolidate its position in the leading European entrepreneurs segment;
- in Germany, Wealth Management aims to expand its business activity in the HNW/UHNW segment (more than EUR 5 and EUR 25 million in outstandings, respectively) and the Mittelstand entrepreneurs segment.

As a world-renowned private bank, with EUR 361 billion in assets under management in 2018 and close to 7,000 professionals working in Europe, Asia and the United States, BNP Paribas Wealth Management was ranked in 2018:

- Best Private Bank in Europe[1] for the seventh consecutive year, and no. 1 in France[2] (for the third consecutive year) and in Belgium[3];
- Best Private Bank in North Asia[1] and in South-East Asia[4] and Hong Kong[5] ;
- Best Private Bank in the Western United States[6];
- Best Private Bank in the United Arab Emirates[4];
- Best Private Bank for ultra high net worth individuals (UHNWI)[4] and Millennials[7], as well as for its digital[8] strategy.

BNP PARIBAS ASSET MANAGEMENT

BNP Paribas Asset Management is the dedicated asset management business of the BNP Paribas Group and has over 2,400 employees. Ranked 9th largest asset manager in Europe[9], the Company manages EUR 399 billion in assets and has over 530 investment professionals. BNP Paribas Asset Management offers investment services for both private investors (through internal distributors – BNP Paribas Private Banking and Retail Banking – and external distributors), businesses, and institutional investors (insurance companies, pension funds, official institutions and consultants). It focuses on providing added value by drawing on a broad range of expertise through its active equity and fixed income management, its private debt and real asset management business, and its multi-asset, quantitative and solutions (MAQS) division. Its aim is to generate sustainable long-term performance within a rigorous risk management framework. BNP Paribas Asset Management also helps to finance an inclusive economy and combat climate change in the context of its activities.

BNP Paribas Asset Management has a major presence in Europe, with a unique set-up in the emerging countries and, in particular, in Asia.

(1) Private Banker International.

(2) Euromoney.

(3) World Finance.

(4) WealthBriefing.

(5) Triple AAA.

(6) Global Finance.

(7) PWM.

(8) MyPrivateBanking Research.

(9) IPE Top 400 2018.

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BNP PARIBAS REAL ESTATE SERVICES

With its extensive range of services, BNP Paribas Real Estate Services can support its customers across all stages of the property life cycle, from building design to everyday management:

- Development – 51,300 m² of commercial real estate and 3,001 homes under construction in 2018;
- Advisory (Transaction, Advisory, Expertise) – 7.2 million sq. m. sold and EUR 26 billion in investments supported in 2018; (4th largest in Europe[1]);
- Investment Management – EUR 29 billion in assets under management;
- Property Management – 43 million sq. m. of commercial real estate managed.

This multi-sector offering covers all asset classes: offices, homes, warehouses, logistics platforms, shops, hotels, serviced residences, etc.

With nearly 4,800 employees, the Group can offer a wide array of services, based on the needs of clients, including institutional investors, corporates, public entities, and individuals.

With its geographic network in 13 countries on this continent, BNP Paribas Real Estate is one of Europe's leaders in commercial real estate. Its major markets are France, Germany and the United Kingdom.

It also has:

- platforms in Hong Kong, Dubai and Singapore that are the link with investors from the Middle East and Asia investing in Europe;
- and a comprehensive network of business alliances with local partners in 17 other countries, in Europe, the United States, and Africa.

In residential development, BNP Paribas Real Estate Services operates for the most part in France's major cities, and is also developing projects in London, Frankfurt and Lisbon.

CORPORATE AND INSTITUTIONAL BANKING

CORPORATE & INSTITUTIONAL BANKING

With over 30,000 staff in 56 countries, BNP Paribas CIB offers capital markets, securities services, financing, treasury and financial advisory bespoke solutions to two client franchises: corporates and institutionals. Acting as a bridge between corporate and institutional clients, it aims at connecting the financing needs from corporate clients with institutional clients seeking investment opportunities. In 2018, 25% of BNP Paribas' revenues from operating divisions were generated by BNP Paribas CIB.

The CIB's streamlined and efficient organisation is designed to meet the needs of BNP Paribas' corporate and institutional clients. CIB is thus organised around three main businesses:

- Corporate Banking, with its own organisation in each region;
- Global Markets, grouping together all capital market activities; and
- Securities Services.

CIB is present in three main regions:

- EMEA (Europe, Middle East, Africa);
- Americas;
- APAC (Asia-Pacific).

2018 Awards

- World's Best Bank for Sustainable Finance (Euromoney – July 2018);
- Euro Bond House of the Year (IFR Awards 2018);
- Derivatives House of the Year (Risk Awards – January 2019);
- Custodian of the Year (Custody Risk Global Awards 2018);
- EMEA Loan House of the Year (IFR 2018).

CORPORATE BANKING

Corporate Banking combines services relating to debt financing solutions (traditional loans and specialised financings, including export financing, project financing, acquisition financing and leveraged financing) and primary activities on the equity markets (IPOs, capital increases, convertible and exchangeable bond issues, etc.), and all transaction banking products (liquidity management, cash management, deposit collection and international trade transactions). The full range of products and services is offered to customers all over the world. To better anticipate their needs, the teams are structured by geographic area, thereby combining global expertise and local knowledge.

Thanks to this set-up and the strong coordination between the regions, any client entering a business centre can have access to a global Corporate Banking platform and can benefit from the expertise of all other business centres for its activities.

In EMEA, Corporate Banking activities have a geographic presence in 34 countries. This set-up reinforces the One Bank for Corporates approach developed in close cooperation with the Group's four domestic markets and includes a network of 64 trade centres. Global Banking EMEA brings together all of CIB's financing (debt and equity), M&A advisory and transaction banking capabilities.

In Asia Pacific, our Corporate Banking and Advisory activities encompass the full suite of M&A advisory services, financing (including sustainable finance such as green and positive impact loans), capital raising (debt and equity capital markets) and transaction banking (cash management, international trade, related risk hedging services, deposit taking). We offer clients comprehensive and integrated end to end banking facilities in major currencies as well as local currencies through our full banking licence branches or subsidiaries in 12 different markets.

(1) Property Week.

In the Americas, Corporate Banking ("the Global Banking platform") is comprised of three product areas to support the Bank's corporate and institutional clients: Global Credit Markets (run in conjunction with Global Markets) which combines debt origination, financing, syndication, sales, trading & research; the core activities are Asset Finance, High Grade Finance and Leveraged Finance. Trade & Treasury Solutions, provides cash management, international trade, working capital, and liquidity solutions. The Investment Banking platform is split into several sectors (Technology, Media & Telco…) and provides M&A capabilities as well as strategic advice for key clients. Tasked with developing and managing long-term client relationships, the Corporate Coverage teams provide access to the BNP Paribas' global product offerings and extensive international network. Global Banking Americas has a presence in six North American cities and six countries in LatAm.

2018 awards

- Best Supply Chain Finance Bank (GTR Leaders in Trade 2018);
- Best Export Finance Bank (Trade Finance Magazine);
- Most Impressive Bank for Corporate Debt Capital Market in Euros (Global Capital Bond Awards – May 2018);
- Green Bond Lead Manager of the Year for Corporates (Environmental Finance 2018);
- RMB House of the Year (Asia RiskAwards 2018);
- Best Transaction Bank & Best Supply Chain Bank (The Asset Triple A, 2018);
- Mergermarket M&A CEE M&A Financial Adviser of the Year 2018.

2018 rankings

- No. 1 EMEA Syndicated Loan Bookrunner by volume, number of deals, and revenue (Dealogic, 2018);
- No. 1 in European Large Corporate Trade Finance & N°3 in Asian Large Corporate Trade Finance (Greenwich Share Leaders – 2018);
- No. 1 Cash Management and Corporate Banking by market penetration for large European Corporate (Greenwich Share Leaders – January 2019);
- Exane BNP Paribas pan-European Survey: No. 1 Overall Broker, No. 1 Overall Research, No. 1 Equity Sector Research (Extel survey – June 2018).

GLOBAL MARKETS

Global Markets provides investment, hedging, financing and research services across asset classes, to corporate and institutional clients – as well as private and Retail Banking networks. With over 3,500 staff located across 36 countries, Global Markets' sustainable, long-term business model seamlessly connects clients to capital markets throughout EMEA, Asia-Pacific and the Americas, with innovative solutions and digital platforms.

Recognised as a leading European player with global expertise in derivatives from decades of experience, Global Markets meets the diverse, specific needs of each client and contributes to the real economy with a comprehensive suite of best-in-class services, articulated around two activities covering five global business lines:

- Fixed Income, Currencies and Commodities:
  - Foreign exchange and Commodity Derivatives,
  - Rates,
  - Primary and Credit Markets (including debt capital market issuances);
- Equity and Prime Services:
  - Equity Derivatives,
  - Prime Solutions & Financing (brokerage and financing solutions).

This Global Markets offering includes a range of socially responsible capital markets financing and investment solutions designed to facilitate the energy transition.

2018 awards

- Credit Derivatives House of the Year (Risk Awards – January 2019);
- Currency Derivatives House of the Year (Risk Awards – January 2019);
- Interest Rates Derivatives House of the Year (Risk Awards – January 2019);
- Most Innovative Investment Bank for Equity Derivatives (The Banker - Investment Banking Awards 2018);
- Most innovative Investment Bank for Structured Investor Products (The Banker - Investment Banking Awards 2018);
- Best bank for Research (Global Capital Derivatives Awards 2018);
- Sustainable Investment House of the Year (Asia Risk Awards 2018);
- Commodities House of the Year (Asia Risk Awards 2018);
- Derivatives House of the Year (Energy Risk Asia Awards 2018).

2018 rankings

- No. 1 All bonds in Euros (Dealogic 2018);
- No. 3 All European Corporate Investment grade bonds in euros (Dealogic 2018);
- No. 1 All Financial institutions bonds in euros (IFR Refinitiv Bond Issuance Rankings for whole year 2018);
- No. 9 All International Bonds (Dealogic 2018);
- No. 3 All Global Green Bonds (Bloomberg 2018).

SECURITIES SERVICES

Securities Services is one of the major global players in securities services with assets under custody up 3.1% to 9,368 billion euros (annual average) compared with 2017 and assets under administration up 5.6% to 2,313 billion euros (annual average).

In 2018, the business continued to expand by signing new strategic mandates, in particular:

- the acquisition of the Janus Henderson Investors US mutual funds' administration platform;

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- a major mandate from the Carmignac management firm involving EUR 44 billion in assets and providing for a full partnership in asset servicing (global custody, UCITS depositary and transfer agent).

Securities Services offers solutions to all participants across the investment cycle:

- investment banks, broker-dealers, banks and market infrastructures (sell-side operators) are offered solutions in execution services, derivatives clearing, local and global clearing, settlement and custody for all asset classes worldwide. Outsourcing solutions for middle and back-office activities are also provided;
- institutional investors – asset managers, hedge funds, private equity funds, real estate and sovereign wealth funds, insurance companies, pension funds, fund distributors and promoters (buy-side operators) – enjoy a wide range of services: global custody, custodian and fiduciary services, transfer agent and fund distribution support, fund administration and middle-office outsourcing, investment, risk assessment and performance reporting;
- issuers (originators, arrangers and corporates) have access to a wide range of fiduciary management services: securitisation and structured finance services, debt agency services, issuer advisory, stock-option plans and employee shareholding management, shareholder services and management of Shareholders' Meetings;
- market and financing services are offered to all operators: securities lending and borrowing, foreign exchange, credit and collateral management, tripartite collateral management, trading service and financing.

2018 awards

- Custodian of the Year (Custody Risk Global Awards 2018);
- Best Global Custodian in Asia Pacific (Asia Asset Management Best of the Best Awards 2018);
- Best Depositary Solution (HFM European Hedge Fund Services Awards 2018);
- European Hedge Fund Administrator of the Year (Funds Europe Awards 2018);
- Best Administrator: Client Service (AltCredit European Awards 2018).

2018 rankings

- Category outperformer in 13 markets (Global Custodian Agent Banks in Major Markets Survey 2018);
- No. 2 Hedge Fund Administration out of 15 participants (Global Custodian Survey 2018);
- Outperformer in 8 categories (Global Custodian Hedge Fund Administration Prime Brokerage Survey 2018).

CORPORATE CENTRE

PRINCIPAL INVESTMENTS

Principal Investments manages the Group's portfolio of unlisted and listed industrial and commercial investments with a view to supporting clients and extracting value over the medium and long term. The Private Equity Investment Management unit specialises in providing support for transmission and development projects for unlisted companies by taking minority equity stakes or through private debt financings. It also provides indirect financing support for the economy through private equity funds. The Listed Investment Management unit acquires and manages minority interests in predominantly French listed companies.

PERSONAL FINANCE'S MORTGAGE BUSINESS

In the context of the Group's 2014-2016 business development plan, Personal Finance's Mortgage Business, of which a significant portion is managed in run-off, was allocated to the Corporate Centre as at 1 January 2014.

KEY FACTORS AFFECTING THE BUSINESS

BNP Paribas' activity is exposed to some key factors described in Chapter 5.1 under the heading *Risk Factors*. In summary, these risk factors are related to the macroeconomic environment, the market environment, regulation, the implementation of the Bank's strategy, the management of the Bank's business and the Bank's operations.

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1.5 BNP Paribas and its shareholders

SHARE CAPITAL

At 31 December 2017, BNP Paribas SA's share capital stood at EUR 2,497,718,772 divided into 1,248,859,386 shares. Details of historical change in share capital are provided in chapter 6, note 6a *Changes in share capital*.

In 2018, the number of shares comprising the share capital was impacted by the creation of 939,175 shares following the exercise of stock options.

Thus, at 31 December 2018, BNP Paribas' share capital stood at EUR 2,499,597,122 divided into 1,249,798,561 shares with a par value of EUR 2 each.

The shares are all fully paid-up and are held in registered or bearer form at the choice of their holders, subject to compliance with the relevant legal provisions. None of the Bank's shares entitles their holders to an increased dividend or double voting rights or limit the exercise of voting rights.

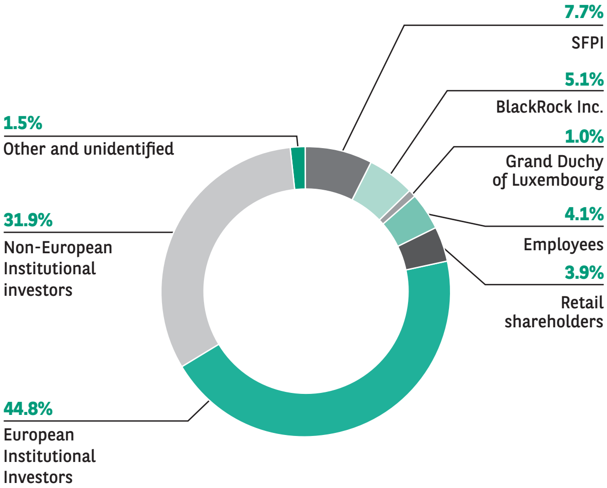
CHANGES IN SHARE OWNERSHIP

➤ CHANGES IN THE BANK'S OWNERSHIP STRUCTURE OVER THE LAST THREE YEARS

Dates			31/12/2016			31/12/2017			31/12/2018
Shareholders	Number of shares *(in millions)*	% of share capital	% of voting rights	Number of shares *(in millions)*	% of share capital	% of voting rights	Number of shares *(in millions)*	% of share capital	% of voting rights
SFPI(*)	127.75	10.2%	10.3%	96.55(**)	7.7%	7.7%	96.55(**)	7.7%	7.7%
BlackRock Inc.	64.39	5.2%	5.2%	63.22(***)	5.1%	5.1%	63.22(***)	5.1%	5.1%
Grand Duchy of Luxembourg	12.87	1.0%	1.0%	12.87	1.0%	1.0%	12.87	1.0%	1.0%
Employees	56.42	4.5%	4.5%	50.22	4.0%	4.0%	51.58	4.1%	4.1%
■ o/w FCPE (Group profit-sharing scheme)(****)	40.70	3.3%	3.3%	36.27	2.9%	2.9%	37.78	3.0%	3.0%
■ o/w direct ownership	15.72	1.2%	1.2%	13.95	1.1%	1.1%	13.80	1.1%	1.1%
Corporate officers	0.17	NS	NS	0.16	NS	NS	0.19	NS	NS
Treasury shares(*****)	1.17	0.1%	-	1.23	0.1%	-	1.16	0.1%	-
Retail shareholders	47.80	3.8%	3.8%	45.3	3.6%	3.6%	48.70	3.9%	3.9%
Institutional investors	916.30	73.5%	73.5%	904.42	76.2%	76.3%	957.26	76.6%	76.7%
■ European	538.62	43.2%	43.2%	536.60	44.3%	44.4%	559.04	44.7%	44.8%
■ Non-European	377.68	30.3%	30.3%	367.82	31.9%	31.9%	398.22	31.9%	31.9%
Other and unidentified	20.13	1.6%	1.6%	74.89	2.2%	2.2%	18.27	1.5%	1.5%
TOTAL	**1,247.00**	**100%**	**100%**	**1,248.86**	**100%**	**100%**	**1,249.8**	**100%**	**100%**

(*) Société de Participations et d'Investissement: a public-interest limited company (société anonyme) acting on behalf of the Belgian State.
(**) According to statement by SFPI, AMF Document No. 217C1156 dated 6 June 2017.
(***) According to statement by BlackRock, AMF Document No. 217C0939 dated 9 May 2017.
(****) The voting rights of the FCPE (profit-sharing scheme) are exercised, after the decision taken by the Supervisory Board, by its Chairman.
(*****) Excluding trading desks' inventory positions.

BNP PARIBAS' OWNERSHIP STRUCTURE AT 31 DECEMBER 2018 (% OF VOTING RIGHTS)



To the best of the Company's knowledge, no shareholder, other than SFPI *(Société Fédérale de Participations et d'investissements)* and BlackRock Inc., held more than 5% of the capital or voting rights as at 31 December 2018.

SFPI became a shareholder in BNP Paribas at the time of the integration with the Fortis group in 2009. During 2009, SFPI made two threshold crossing disclosures to the Autorité des Marchés Financiers (AMF):

- on 19 May 2009 (AMF disclosure No. 209C0702), SFPI disclosed that its interest in BNP Paribas' capital and voting rights had risen above the 5% and 10% disclosure thresholds following its transfer of a 74.94% stake in Fortis Bank SA/NV in return for 121,218,054 BNP Paribas shares, which at the time represented 9.83% of BNP Paribas' share capital and 11.59% of its voting rights. The disclosure stated in particular that neither the Belgian government nor SFPI were considering taking control of BNP Paribas.

  At the same time, BNP Paribas notified the AMF (AMF disclosure No. 209C0724) that an agreement had been reached between the Belgian government, SFPI and Fortis SA/NV (renamed Ageas SA/NV at end-April 2010), giving Fortis SA/NV an option to buy the 121,218,054 BNP Paribas shares issued as consideration for SFPI's transfer of its shares in Fortis Bank, with BNP Paribas having a right of subrogation regarding the shares concerned;
- on 4 December 2009 (AMF disclosure No. 209C1459), SFPI disclosed that it owned 10.8% of BNP Paribas' capital and voting rights. This change resulted mainly from:
  - BNP Paribas' capital increase through the issuance of ordinary shares in 2009,
  - the capital reduction through the cancellation, on 26 November 2009, of preferred shares issued on 31 March 2009 to Société de Prise de Participation de l'État.

On 27 April 2013, the Belgian government announced the buy-back via SFPI of the purchase option that had been given to Ageas.

On 6 June 2017 (AMF disclosure No. 217C1156), SFPI disclosed that it owned 7.74% of the share capital and voting rights of BNP Paribas; this drop below the 10% capital and voting rights thresholds resulted from the sale of shares on the market.

Since then, BNP Paribas has received no threshold crossing disclosures from SFPI.

On 9 May 2017 (AMF disclosure No. 217C0939), BlackRock Inc. disclosed that its interest in BNP Paribas' capital and voting rights had risen, as at 8 May 2017 above the 5% disclosure thresholds. On this date, BlackRock held 63,223,149 BNP Paribas shares on behalf of its clients and the funds it manages.

Since then, BNP Paribas has received no threshold crossing disclosures from BlackRock Inc.

LISTING INFORMATION

When the shareholders of BNP and Paribas approved the merger between the two banks at the Combined General Meeting of 23 May 2000, BNP shares became BNP Paribas shares. The Euroclear-France code for BNP Paribas is the same as the previous BNP code (13110). Since 30 June 2003, BNP Paribas shares have been registered under ISIN code FR0000131104. To help increase the number of shares held by retail shareholders, BNP Paribas carried out a two-for-one share split on 20 February 2002, reducing the par value of the shares to EUR 2.

BNP shares were first listed on the Cash Settlement Market of the Paris Stock Exchange on 18 October 1993, following privatisation, before being transferred to the Monthly Settlement Market on 25 October of that year. When the monthly settlement system was discontinued on 25 September 2000, BNP Paribas shares became eligible for Euronext's Deferred Settlement Service (SRD).

The shares are also traded on SEAQ International in London and on the Frankfurt Stock Exchange. Since 24 July 2006 they have been traded on the MTA International exchange in Milan. Since privatisation, a Level 1 144A ADR (American Depositary Receipt) programme has been active in the United States, where JP Morgan Chase is the depositary bank (2 ADRs correspond to 1 BNP Paribas share).

The ADRs have been traded on OTCQX International Premier since 14 July 2010 in order to provide better liquidity and clarity for US investors.

BNP Paribas has been part of the CAC 40 index since 17 November 1993 and became part of the EURO STOXX 50 index on 1 November 1999. Since 18 September 2000, it has been part of the STOXX 50 index. BNP Paribas also joined the DJ Banks Titans 30 Index, an index comprising the 30 largest banks worldwide. It is also included in the EURO Stoxx Banks and STOXX Banks indexes. BNP Paribas shares are also included in the main sustainable development benchmarks (see chapter 7), including Euronext Vigeo Eiris, FTSE4Good Index Series, Dow Jones Sustainability World Index and Stoxx Global ESG Leaders.

All of these elements foster liquidity and share price appreciation, as the BNP Paribas share is necessarily a component of every portfolio and fund that tracks the performance of these indexes.

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BNP PARIBAS SHARE PERFORMANCE BETWEEN 31 DECEMBER 2015 AND 31 DECEMBER 2018

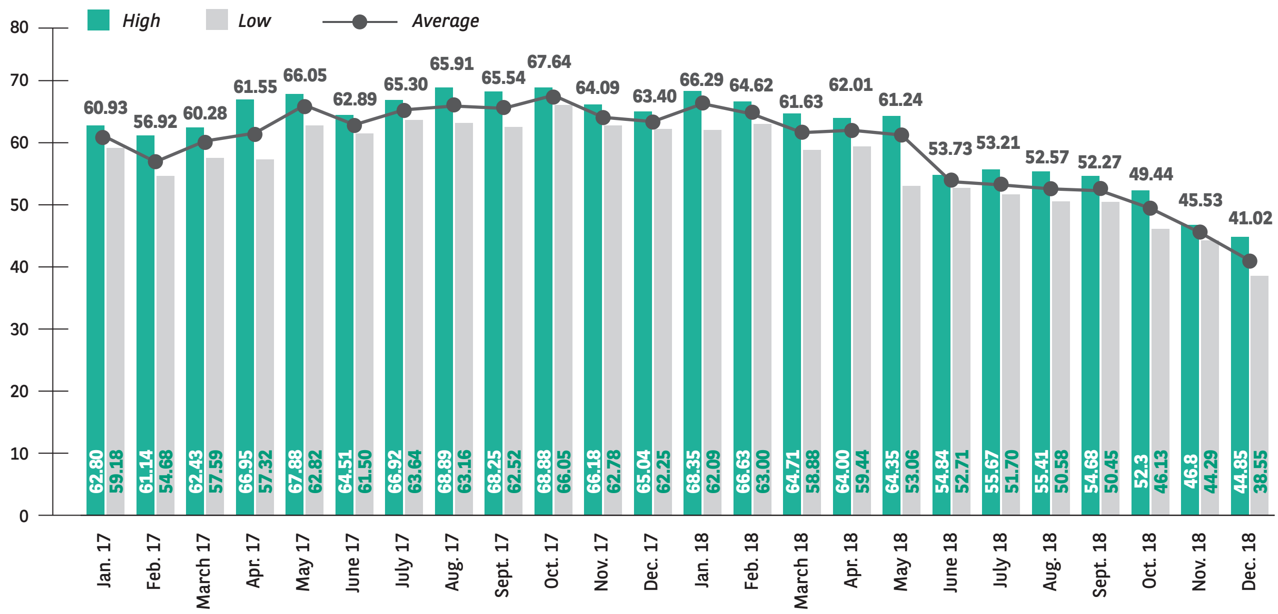
Comparison with the EURO STOXX Banks, STOXX Banks and CAC 40 indexes (rebased on share price).

Source: Bloomberg

In the three-year period from 31 December 2015 to 31 December 2018, BNP Paribas' share price fell 24.4% from EUR 52.23 to EUR 39.48, outperforming other euro zone banks (Euro Stoxx Banks: -31.9%), European banks (Stoxx Banks: -27.5%), but significantly underperforming the CAC 40 (+2.0%).

In 2018, European bank shares were impacted by threats to world trade growth, concerns regarding slowing economic growth, as well as expectations of slower-than-expected growth rates, all of which led to a drop in valuations.

BNP PARIBAS MONTHLY AVERAGES AND HIGH AND LOW MONTHLY CLOSING PRICES SINCE JANUARY 2017

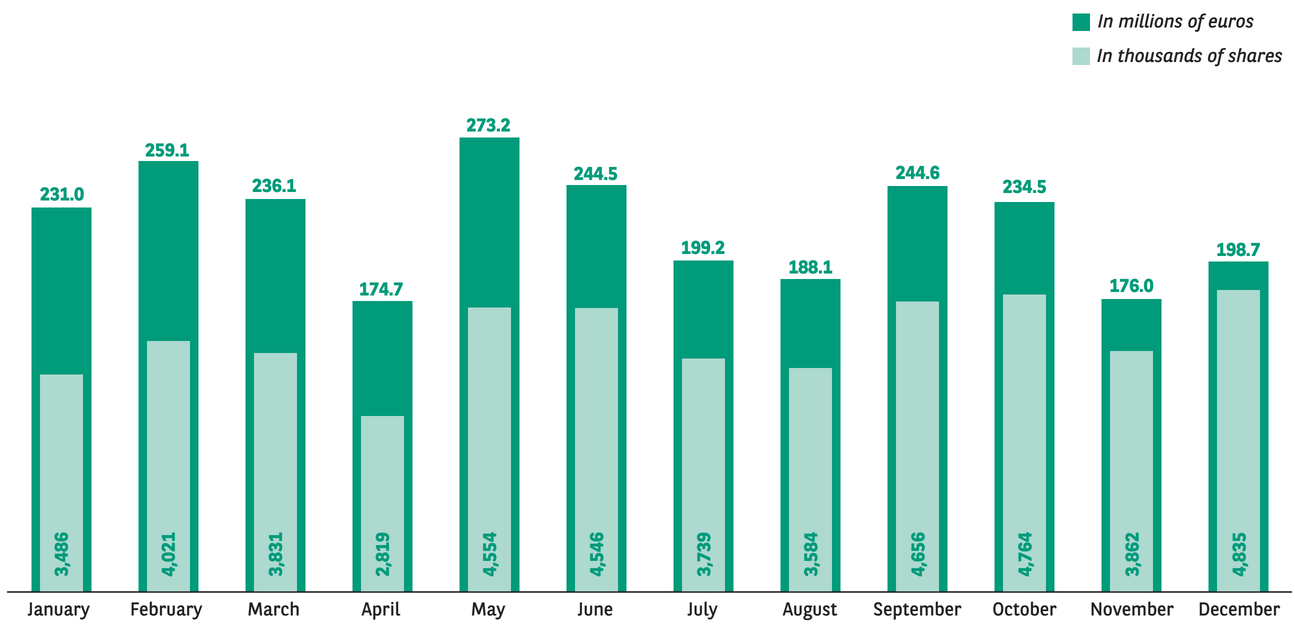


Source : Bloomberg

At 31 December 2018, BNP Paribas' market capitalisation was EUR 49.3 billion, ranking it 8th among CAC 40 stocks; BNP Paribas' free float also put the bank in 8th place on the Paris market index and in 20th place in the EURO STOXX 50 index.

- In 2018 daily trading volume on Euronext Paris averaged 4,054,122 shares, up 7.95% from the previous year (3,755,394 shares per trading session in 2017). Including the volumes traded on multilateral trading facilities (MTFs), daily trading volume averaged 6,099,424 shares in 2018, up 3.06% from 5,918,078 in 2017.

TRADING VOLUME ON EURONEXT PARIS IN 2018 (DAILY AVERAGE)



Source: Euronext

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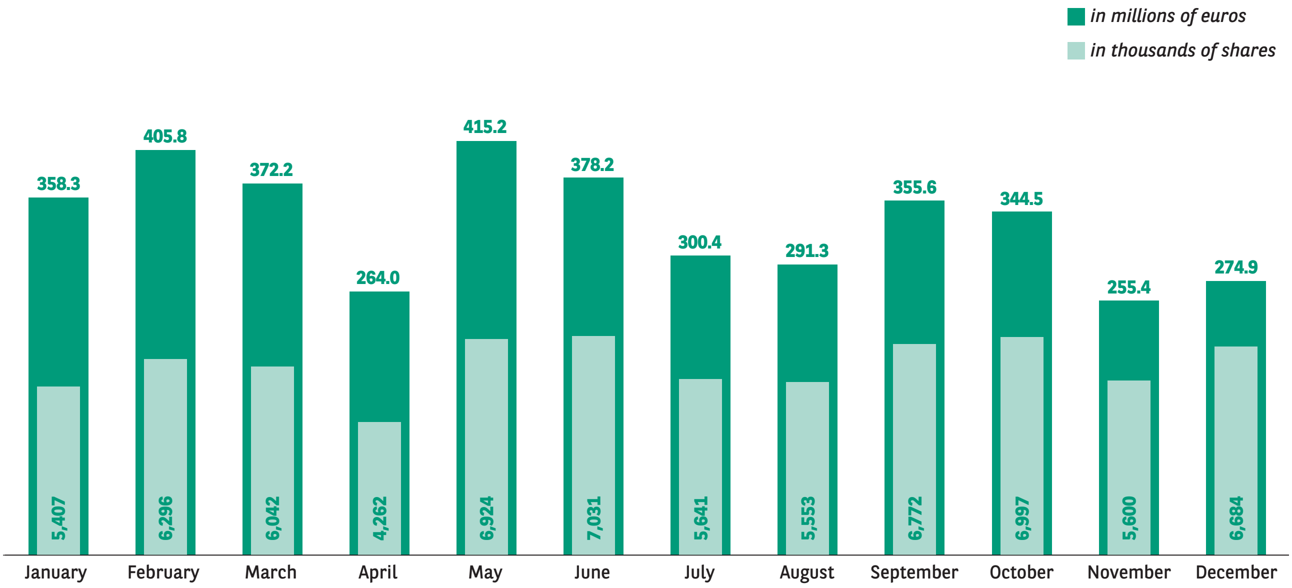
TOTAL OF TRADING VOLUME ON EURONEXT AND MTFS IN 2018 (DAILY AVERAGE)



Source: Euronext

KEY SHAREHOLDER DATA

In euros	2014	2015	2016	2017	2018
Earnings per share(1)	(0.07)(*)	5.14	6.00	6.05	5.73
Net book value per share(2)	66.61	70.95	73.90	75.1	74.7(**)
Net dividend per share	1.50	2.31	2.70	3.02	3.02(3)
Pay-out ratio (%)(4)	n.s.	45.0	45.0	50.0	52.72(3)
Share price					
High(5)	60.85	60.68	62.00	68.89	68.66
Low(5)	45.45	44.94	35.27	54.68	38.18
Year-end	49.26	52.23	60.55	62.25	39,475
CAC 40 index on 31 December	4,272.75	4,637.06	4,862.31	5,312.56	4,730.69

(1) *Based on the average number of shares outstanding during the fiscal year.*
(2) *Before dividends. Revalued net assets based on the number of shares outstanding at year-end.*
(3) *Subject to approval at the Annual General Meeting of 23 May 2019.*
(4) *Dividend distribution recommended at the Annual General Meeting expressed as a percentage of net income attributable to equity holders.*
(5) *Registered during trading.*
(*) *EUR 4.70 based on net income adjusted for the costs related to the comprehensive settlement with the US authorities.*
(**) *Impact of the first-time application of the new IFRS 9 accounting standard on shareholders' equity: 2.5 billion euros, i.e. €2 per share.*

CREATING VALUE FOR SHAREHOLDERS

TOTAL SHAREHOLDER RETURN (TSR)

Calculation parameters

- Dividends are reinvested in BNP shares then in BNP Paribas shares; 50% tax credit was included until this system was abolished in the beginning of 2005.
- Exercise of preferential subscription rights during the right issues in March 2006 and October 2009.
- Returns stated are gross, i.e. before any tax payments or brokerage fees.

Calculation results

The following table indicates, for various periods ending on 31 December 2018, the total return on a BNP share, then on a BNP Paribas share, as well as the effective annual rate of return.

Holding period	Investment date	Share price at the investment date	Number of shares at end of calculation period	Initial investment multiplied by	Effective annual rate of return
Since privatisation of BNP	18/10/1993	36.59	5.2840	5.7006	7.15%
25 years	03/01/1994	43.31	4.8116	4.3855	6.09%
24 years	03/01/1995	37.20	4.7239	5.0128	6.94%
23 years	02/01/1996	33.57	4.6254	5.4391	7.64%
22 years	02/01/1997	30.40	4.4908	5.8315	8.34%
21 years	02/01/1998	48.86	4.3510	3.5153	6.17%
20 years	04/01/1999	73.05	4.2612	2.3027	4.26%
Since the creation of BNP Paribas	01/09/1999	72.70	4.1459	2.2511	4.28%
19 years	03/01/2000	92.00	4.1459	1.7789	3.08%
18 years	02/01/2001	94.50	4.0332	1.6848	2.94%
17 years	02/01/2002	100.4	3.9021	1.5342	2.55%
16 years	02/01/2003	39.41	1.8882	1.8914	4.06%
15 years	02/01/2004	49.70	1.8161	1.4425	2.47%
14 years	03/01/2005	53.40	1.7411	1.2871	1.82%
13 years	02/01/2006	68.45	1.6794	0.9685	-0.25%
12 years	02/01/2007	83.50	1.6092	0.7608	-2.25%
11 years	02/01/2008	74.06	1.5552	0.8239	-1.69%
10 years	02/01/2009	30.50	1.4797	1.9151	6.71%
9 years	02/01/2010	56.11	1.4083	0.9908	-0.10%
8 years	03/01/2011	48.30	1.3672	1.1174	1.40%
7 years	02/01/2012	30.45	1.3147	1.7044	7.91%
6 years	02/01/2013	43.93	1.2600	1.1322	2.09%
5 years	02/01/2014	56.70	1.2188	0.8486	-3.23%
4 years	02/01/2015	49.43	1.1850	0.9463	-1.37%
3 years	04/01/2016	51.75	1.1542	0.8804	-4.17%
2 years	02/01/2017	60.12	1.0998	0.7222	-15.06%
1 year	02/01/2018	62.68	1.0552	0.6646	-33.69%

1

COMMUNICATION WITH SHAREHOLDERS

BNP Paribas endeavours to provide all shareholders with clear, consistent, high-quality information at regular intervals, in accordance with best market practice and the recommendations of stock market authorities.

The Investor Relations team informs institutional investors and financial analysts about the Group's strategy, major events concerning the Group's business and the Group's quarterly results.

In 2019, the timetable is as(1):

- 6 February 2019: publication of 2018 full year results;
- 2 May 2019: publication of first quarter 2019 results;
- 31 July 2019: publication of second quarter and first-half 2019 results;
- 31 October 2019: publication of third-quarter and nine-month 2019 results.

Informative briefings are organised several times a year for all market participants, in particular when the annual and half-year results are released, or on specific topics, providing senior management with an opportunity to present the BNP Paribas Group and its strategy. More specifically, a Relations Officer is responsible for liaising with managers of ethical and socially responsible funds.

The Shareholder Relations team provides information and deals with queries from the Bank's 402,000 retail shareholders (internal sources and TPI Survey as at 31 December 2018). Twice a year, shareholders receive a financial newsletter outlining the Group's main developments, and the minutes of the Annual General Meeting are sent in early July. During the year, retail shareholders are invited, in different French cities, to attend presentations during which the Group's accomplishments and strategy are presented by Executive Management (in 2018, for example, presentations were held in Versailles on 6 November and in Marseilles on 8 November). BNP Paribas representatives also met and spoke with nearly 1,000 people at the Actionaria shareholder fair held in Paris on 22 and 23 November 2018.

The members of the **Cercle des actionnaires de BNP Paribas** (BNP Paribas Shareholders' Group), set up in 1995, are the 47,000 retail shareholders holding at least 200 shares. They receive the financial newsletters each half-year and the minutes of the Annual General Meeting. They are also sent two printed editions of the magazine, *La Vie du Cercle*, in addition to two emails outlining new events. They are invited to attend artistic, sporting and cultural events with which BNP Paribas is associated, as well as online training sessions. These include stock trading (technical and financial analysis, placing orders etc.), wealth management and economic updates sessions in partnership with the relevant BNP Paribas teams. Nearly 250 events were organised for more than 10,000 participants in 2018.

To facilitate access these services, a **website dedicated to the Cercle des Actionnaires (www.cercle-actionnaires.bnpparibas)** features all the available products and services. Each Cercle member has a personal and secure access to the site which can be used to manage their event registrations and retrieve their invitations. A **freephone number** has also been made available, **0800 666 777**; it provides the market price and allows members to leave a voice message for the Cercle team. Messages can also be sent by email to **cercle.actionnaires@bnpparibas.com.**

The **BNP Paribas website (www.invest.bnpparibas.com)**, available in French and English, offers users access to all information on the BNP Paribas Group (including press releases, key figures, coverage of the main events, etc.). All financial documents such as Annual Reports and Registration documents can also be viewed and downloaded. The financial calendar gives the dates of important forthcoming events, such as the Annual General Meeting, results announcements and shareholder seminars. The website also features the latest share performance data and comparisons with major indexes, as well as a tool for calculating returns.

Reports and presentations relating to BNP Paribas' business and strategy aimed at all audiences (institutional investors, asset managers and financial analysts) are also available. The **"Individual Shareholder"** section shows information and features specifically designed for retail shareholders, in particular, access to information such as proposed events.

In addition, there is a specific section dedicated to **the Annual General Meeting of Shareholders**, which includes information regarding attendance at the meeting, ways to vote and practical matters, as well as a presentation of the resolutions and the complete text of all speeches made by corporate officers. Webcasts of the Annual General Meeting can be viewed on the Bank's website. In response to the expectations of individual shareholders and investors, and to meet strict transparency and regulatory disclosure requirements, BNP Paribas regularly adds sections to its website and improves existing sections with enhanced content and new functions.

(1) Subject to change at a later date.

1

SHAREHOLDER LIAISON COMMITTEE

After its formation in 2000, BNP Paribas decided to create a Shareholder Liaison Committee to help the Group improve communications with its retail shareholders. At the Shareholders' Meeting that approved the BNP Paribas merger, the Chairman of BNP Paribas initiated the process of appointing members to this committee, which was fully established in late 2000.

Chaired by Jean Lemierre, it includes ten shareholders who are both geographically and socio-professionally representative of the retail shareholder population, along with two employees or former employees. Each member serves a three-year term. When their terms expire, announcements are published in the press and/or in the Group's various financial publications, inviting new candidates to come forward. Any shareholder can become a candidate.

At its last meeting in September 2018, the members of the Liaison Committee were as follows:

- Mr Jean Lemierre, Chairman;
- Mr Adrien Besombes, resident of the Indre-et-Loire department;
- Mr Michel Cassou, resident of the Tarn department;
- Mr Patrick Cunin, resident of the Essonne department;
- Ms Catherine Drolc, resident of the Hérault department;
- Mr Laurent Dupuy, resident of the Alpes-Maritimes department;
- Mr François Ferrus, resident of Paris;
- Mr André Peron, resident of the Finistère department;
- Ms Dyna Peter-Ott, resident of the Bas-Rhin department;
- Mr Jean-Pierre Riou, resident of the Loire-Atlantique department;
- Mr Jean-Jacques Rohrer, resident of the Hauts-de-Seine department;
- Mr Philippe Tassin, BNP Paribas employee;
- Ms Christine Valence, BNP Paribas employee.

In accordance with the committee's Charter i.e. the Internal rules that all committee members have adopted, the committee met twice in 2018, on 30 March and 21 September, in addition to taking part in the Annual General Meeting and attending the Actionaria shareholder fair.

The main topics of discussion included:

- BNP Paribas' capital structure and changes therein, particularly among "retail shareholders";
- proposals submitted to "Cercle des actionnaires" members;
- the draft 2017 Registration document and Annual Report;
- quarterly results;
- initiatives taken in preparation for the Annual General Meeting;
- the Bank's participation in the Actionaria shareholder fair. At this event, several Liaison Committee members explained the role played by the committee to people who visited the Group's stand;
- the BNP Paribas "Corporate Engagement" programme, presented by the Executive Committee member responsible for this initiative;
- cyber security, an issue set out by the Head of Risk and a staff member specialising in these matters.

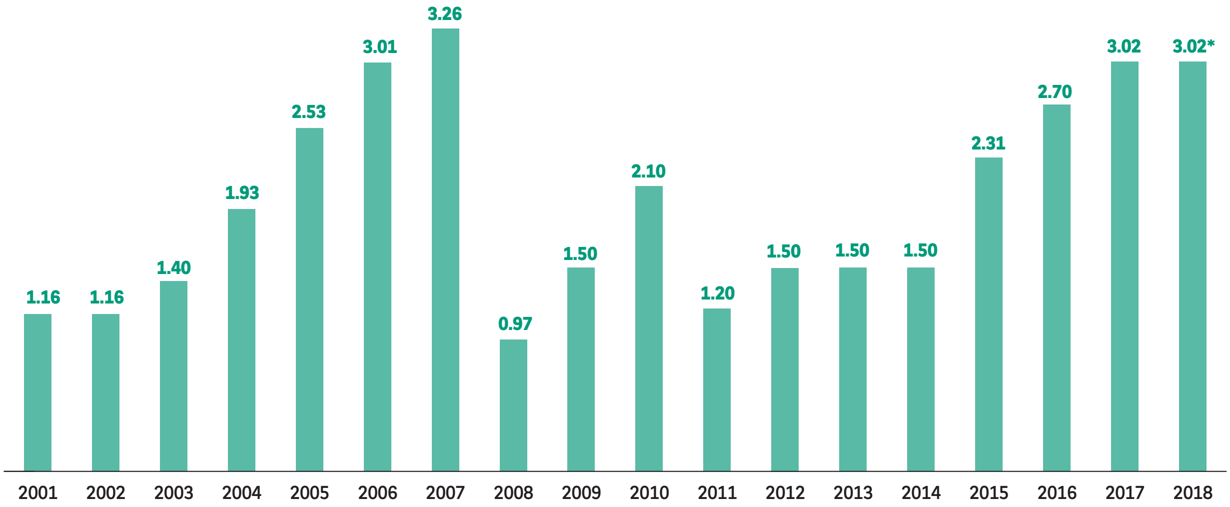
DIVIDEND

At the Annual General Meeting on 23 May 2019, the Board of directors will recommend a dividend of EUR 3.02 per share (almost unchanged on 2018). The shares will go ex-dividend on 29 May and the dividend will be paid on 31 May 2019, subject to approval at the Annual General Meeting.

The total amount of the proposed payout is EUR 3,774 million, against EUR 3,772 million paid in 2018.

1

CHANGE IN DIVIDEND (IN EURO PER SHARE)



(*) *Subject to approval at the Annual General Meeting of 23 May 2019.*

Dividends for the 2001-2008 fiscal years have been adjusted to reflect:

- the two-for-one share split on 20 February 2002;
- capital increases with preferential subscription rights in March 2006 and between 30 September and 13 October 2009.

Limitation period for dividends: any dividend unclaimed five years after its due date is forfeited, as provided by law. Dividends for which payment has not been sought are paid to the Public Treasury.

BNP PARIBAS REGISTERED SHARES

At 31 December 2018, 26,840 shareholders held BNP Paribas registered shares.

REGISTERED SHARES HELD DIRECTLY WITH BNP PARIBAS

Shareholders who hold registered shares directly with BNP Paribas:

- automatically receive all documents regarding the Bank that are sent to shareholders;
- can call a **French toll-free number: +33(0)800 600 700** to place buy and sell orders[(1)] and to obtain any information;
- benefit from special, discounted brokerage fees;
- have access to "PlanetShares" (https://planetshares.bnpparibas.com), a fully secure dedicated web server, allowing them to view registered share accounts and account movements, as well as place and track orders[(1)]; this server is also available on tablets and smartphones;
- are automatically invited to Annual General Meetings without the need for an ownership certificate;
- may receive notice of meetings online;
- pay no custody fees.

Registered shares held directly with BNP Paribas cannot be registered in a PEA (Share Savings Plan), given the regulations and procedures applicable to this vehicle. Investors whose shares are held in a PEA and who want to hold them "in registered" form can opt to hold them in an administered account (see below).

(1) Subject to prior signature of a "brokerage services agreement" (free of charge).

REGISTERED SHARES HELD IN AN ADMINISTERED ACCOUNT

BNP Paribas is also extending its administered share account services to institutional shareholders. For institutional shareholders, this type of account combines the main benefits of holding shares in bearer form with those of holding registered shares directly with BNP Paribas:

- shares can be traded at any time, through the shareholder's usual broker;
- the shareholder can have a single share account, combined with a cash account;
- the shareholder is automatically invited to attend and vote at Annual General Meetings, without the invitation being sent through a third party;
- shareholders may receive notice of meetings and vote at Annual General Meetings online.

SHAREHOLDERS' ANNUAL GENERAL MEETING

The procedures for BNP Paribas' Annual General Meetings are defined in article 18 of the Bank's Articles of association.

The Board of directors calls an Ordinary Shareholders' Meeting at least once a year to vote on the agenda set by the Board.

The Board may call Extraordinary Shareholders' Meetings for the purpose of amending the Articles of association, and especially to increase the Bank's share capital. Resolutions are adopted by a two-thirds majority of shareholders present or represented.

The combined Ordinary and Extraordinary General Meeting may be called in a single notice of meeting and held on the same date.

The Bank's last Annual General Meeting took place on 24 May 2018 on first notice. The text of the resolutions and the video of the meeting can be viewed on the BNP Paribas website, which is where the original live webcast was shown. The composition of the quorum and the results of the votes cast on resolutions were posted online the day after the meeting. The meeting was also covered by publications in the specialist press and a specific letter was sent to shareholders summarising the meeting.

The quorum broke down as follows:

➤ BREAKDOWN OF QUORUM

	Number of shareholders	(%)	Shares	(%)
Present	1,457	*10.13%*	167,270,818	*20.69%*
Appointment of proxy	437	*3.04%*	82,261	*0.01%*
Proxy given to Chairman	7,082	*49.24%*	3,100,806	*0.38%*
Postal votes	5,406	*37.59%*	638,222,634	*78.92%*
TOTAL	**14,382**	***100.00%***	**808,676,519**	***100.00%***
of which online	9,775	*67.97%*	279,214,216	*34.53%*
				Quorum
Number of ordinary shares (excluding treasury stock)			**1,248,546,972**	**64.76%**

Of the 9,775 shareholders who took part in our last Annual General Meeting online:

- 581 had requested an admission card;
- 5,716 had given the Chairman a proxy;
- 428 had given a third party (who, by law, must also be a shareholder) a mandate/proxy;
- 3,050 had voted by post.

All resolutions proposed to the shareholders were approved.

1

SHAREHOLDERS' COMBINED GENERAL MEETING OF 24 MAY 2018

Results	Rate of approval
ORDINARY MEETING	
First resolution: approval of the parent company financial statements for 2017	99.65%
Second resolution: approval of the consolidated financial statements for 2017	99.61%
Third resolution: appropriation of net income for the year ended 31 December 2017 and dividend distribution	99.75%
Fourth resolution: agreements and commitments referred to in articles L.225-38 and seq. of the French Commercial Code	99.61%
Fifth resolution: authorisation for BNP Paribas to buy back its own shares	98.43%
Sixth resolution: renewal of the term of office of the principal and substitute Statutory Auditors (Deloitte & Associés and BEAS)	92.53%
Seventh resolution: renewal of the term of office of the principal Statutory Auditors and appointment of a new substitute statutory auditor (Mazars and Mr Charles de Boisriou)	93.65%
Eighth resolution: renewal of the term of office of the principal statutory auditor and appointment of a new statutory auditor (PricewaterhouseCoopers Audit and Mr Jean-Baptiste Deschryver)	88.00%
Ninth resolution: renewal of the term of office of Mr Pierre André de Chalendar as a Director	95.33%
Tenth resolution: renewal of the term of office of Denis Kessler as a Director	83.32%
Eleventh resolution: renewal of the term of office of Mrs Laurence Parisot as a Director	95.74%
Twelfth resolution: vote on the components of the compensation policy attributable to the Chairman of the Board of directors	97.50%
Thirteenth resolution: vote on the components of the compensation policy attributable to the Chief Executive Officer and to the Chief Operating Officer	86.65%
Fourteenth resolution: vote on the components of the compensation paid or awarded in respect of fiscal year 2017 to Mr Jean Lemierre, Chairman of the Board of directors	97.82%
Fifteenth resolution: vote on the components of the compensation paid or awarded in respect of fiscal year 2017 to Mr Jean-Laurent Bonnafé, Chief Executive Officer	85.67%
Sixteenth resolution: vote on the components of the compensation paid or awarded in respect of fiscal year 2017 to Mr Philippe Bordenave, Chief Operating Officer	85.78%
Seventeenth resolution: advisory vote on the overall amount of compensation of any kind paid during fiscal year 2017 to executive officers and certain categories of staff	86.82%
Eighteenth resolution: setting the cap on the variable component of the compensation of executive officers and certain categories of staff	87.69%
EXTRAORDINARY MEETING	
Nineteenth resolution: capital increase with preferential subscription rights	87.73%
Twentieth resolution: capital increase without preferential subscription rights	90.12%
Twenty-first resolution: capital increase without preferential subscription rights to remunerate contributions of securities of up to 10% of the share capital	89.90%
Twenty-second resolution: Overall limit on authorisations to issue shares without preferential subscription rights for existing shareholders.	90.46%
Twenty-third resolution: capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium.	99.73%
Twenty-fourth resolution: Overall limit on authorisations to issue shares with or without preferential subscription rights for existing shareholders.	88.91%
Twenty-fifth resolution: Authorisation granted to the Board of directors to carry out transactions reserved for members of the BNP Paribas Group's Company Savings Plan	98.31%
Twenty-sixth resolution: Authorisation granted to the Board of directors to reduce the share capital by cancelling shares	99.61%
Twenty-seventh resolution: Amendment of the Articles of association with regard to the age limit for the Chairman, the Chief Executive Officer and the Chief Operating Officer(s)	97.47%
Twenty-eighth resolution: Powers to carry out formalities	99.90%

The 2018 Annual General Meeting was an additional opportunity for BNP Paribas to demonstrate its commitment to sustainable development, and to its social and environmental responsibility.

BNP Paribas seeks to create value consistently, to show its respect not only for traditional partners comprising shareholders, clients and employees, but also for the environment and the community at large.

To ensure that Annual General Meetings represent these principles and values, a decision was made, in conjunction with the Shareholder Liaison Committee, to donate EUR 12 for every investor attending the meeting to the Coup de pouce aux projets du personnel (a helping hand for employee projects) programme. This programme was specifically developed by the BNP Paribas Foundation to encourage public-interest initiatives for which Bank staff personally volunteer their time and efforts.

The amounts collected (EUR 17,484 in 2018) are donated in addition to the funds that the Bank already grants to this programme via the BNP Paribas Foundation, which operates under the aegis of the Fondation de France. In France, total 2018 contributions were ultimately divided between 25 projects, all of which were initiated by BNP Paribas staff. Beneficiaries are located mainly in Europe (54%), Africa (42%) and 4% in the rest of the world. The amounts awarded to 21 of these projects varied (from EUR 1,000 to EUR 4,000, with an average of EUR 3,900) depending on the scale of the project and its characteristics and on the level of employees' personal involvement in the operations proposed by them. Four other projects received a "coup de cœur" bonus, i.e. a grant of EUR 9,000 each. The projects mainly involved community outreach (education, poverty and integration: 53%), healthcare and disability (35%) as well as environmental protection (12%). The allocation of funds is contained in the notice calling the next Annual General Meeting.

NOTICES OF MEETING

BNP Paribas will hold its next Shareholders' Combined General Meeting on 23 May 2019(1).

The meeting notices and invitations are available on the invest.bnpparibas.com website in French and English from the time of their publication in the French Bulletin of Compulsory Legal Announcements (BALO). Shareholders are also notified by announcements in the daily, investor and financial press. Staffs at all BNP Paribas branches are specifically trained to provide the necessary assistance and carry out the required formalities.

Holders of registered shares are automatically notified, regardless of the number of shares held, with a complete notice of meeting containing in particular the agenda, the draft resolutions and a voting form. Having given their prior agreement, a significant proportion (13.7%) of holders of registered shares were sent notification via the internet.

BNP Paribas informs holders of bearer shares via the internet regardless of the number of shares held, provided solely that their custodians are part of the market system known as Votaccess. Shareholders notified of the Annual General Meeting may take part quickly and easily. The Bank also provides custodians with notices of meetings and printed postal voting forms, which can then be sent to those shareholders who request them.

ATTENDANCE AT MEETINGS

Holders of shares may gain admittance to a General Meeting provided these shares have been recorded in their accounts for at least two trading days. Holders of bearer shares must also present an entry card or certificate proving their ownership of the shares.

VOTING

Using the internet voting platform gives shareholders access to the notice of the Annual General Meeting. They can then either vote or appoint a proxy, or print their admission card if they wish to attend in person.

Nearly 68% of all shareholders taking part in the vote in 2018 used the platform provided.

Shareholders not using the online platform returned the printed form enclosed with the notice of meeting to BNP Paribas. Before the Annual General Meeting, this document may be used:

- to request an admission card;
- to vote by post;
- to give proxy to another individual or legal entity;
- to give proxy to the Chairman of the Meeting.

Since 1998, the shareholders present at General Meetings have cast votes using an electronic box.

(1) Subject to change at a later date.

1

DISCLOSURE THRESHOLDS

In addition to the legal thresholds, and in accordance with article 5 of the Articles of association, any shareholder, whether acting alone or in concert, who owns or may hold directly or indirectly at least 0.5% of the capital or voting rights of BNP Paribas, or any multiple of that percentage up to 5%, is required to notify BNP Paribas by registered letter with return receipt.

Once the 5% threshold is reached, shareholders are required to disclose any increase in their interest representing a multiple of 1% of the capital or voting rights of BNP Paribas.

The disclosures described in the previous two paragraphs shall also apply when the shareholding falls below the above-mentioned thresholds.

In the case of failure to comply with these disclosure requirements, either legal or statutory, the undisclosed shares will be stripped of voting rights at the request of one or more shareholders who hold a combined interest of at least 2% of the capital or voting rights of BNP Paribas.

2 CORPORATE GOVERNANCE AND INTERNAL CONTROL

2.1 Corporate governance report

This corporate governance report was prepared by the Board of directors in accordance with the last paragraph of article L.225-37 of the French Commercial Code.

The information contained herein notably takes into account annex I of European Regulation (EC) no. 809/2004 of 29 April 2004 (as amended), AMF Recommendation no. 2012-02[1] amended on 22 November 2017, the AMF's 2018 report[2] and the October 2018 Annual Report of the High Committee for Corporate Governance (*Haut Comité de Gouvernement d'Entreprise* – HCGE). In addition, the complementary information referred to in article L.225-37-4-6 of the French Commercial Code on employees is given in section 7.3 "Strong Results" and section 7.4 "Our Employees" of this document[3].

(1) AMF recommendation no. 2012-02 – Corporate governance and remuneration of corporate officers, referring to the Afep-Medef Code – Consolidated presentation of the recommendations contained in the Annual Reports of the AMF.

(2) 2018 AMF report on Corporate governance and remuneration of corporate officers, internal control and risk management (November 2018).

(3) This information supplement the description of the diversity policy applied to members of the Board of directors.

2

2.1.1 PRESENTATION OF CORPORATE OFFICERS

➤ MEMBERSHIP OF THE BOARD OF DIRECTORS AT 31 DECEMBER 2018

Jean LEMIERRE
Principal function: Chairman of the Board of directors of BNP Paribas

Date of birth: 6 June 1950
Nationality: French
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board of directors: 1 December 2014, ratified by the Annual General Meeting of 13 May 2015

Number of BNP Paribas shares held[(1)]*:* 30,826
Office address: 3, rue d'Antin
75002 PARIS
FRANCE

Education
Graduate of the Institut d'Études Politiques de Paris
Graduate of the École Nationale d'Administration
Law Degree

Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[(*)], Chairman of the Board of directors
TEB Holding AS (Turkey), director
Other offices [(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Total SA[(*)], director
Participation[(1)] in specialised committees of French or foreign companies:
Total SA, member of the Corporate Governance and Ethics Committee and member of the Strategy & CSR Committee
Other[(1)]:
Centre for Prospective Studies and International Information (CEPII), Chairman
Institute of International Finance (IIF), member
International Advisory Board of Orange, member
International Advisory Council of China Development Bank (CDB), member
International Advisory Council of China Investment Corporation (CIC), member
International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS), member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman of the Board of directors: BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey) **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC)	**Chairman of the Board of directors:** BNP Paribas **Director:** Bank Gospodarki Zywnosciowej (BGZ) (Poland), TEB Holding AS (Turkey) **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC)

(1) At 31 December 2018.
(*) Listed company.

Jean-Laurent BONNAFÉ
Principal function: Director and Chief Executive Officer of BNP Paribas

Date of birth: 14 July 1961
Nationality: French
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 12 May 2010

Number of BNP Paribas shares held(1): 84,426(2)
Office address: 3, rue d'Antin
75002 PARIS
FRANCE

Education
Graduate of the École Polytechnique
Graduate of the École des Mines

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas(*), Director and Chief Executive Officer
Other offices (1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Carrefour(*), director
Others (1):
Association pour le Rayonnement de l'Opéra de Paris, Chairman
Entreprise pour l'Environnement, Vice-Chairman
Fédération Bancaire Française, member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Director and Chief Executive Officer: BNP Paribas **Chairman:** Fédération Bancaire Française, Association pour le Rayonnement de l'Opéra de Paris **Vice-Chairman:** Entreprise pour l'Environnement **Director:** Carrefour	**Director and Chief Executive Officer:** BNP Paribas **Director:** Carrefour	**Director and Chief Executive Officer:** BNP Paribas **Director:** Carrefour, BNP Paribas Fortis (Belgium)	**Director and Chief Executive Officer:** BNP Paribas **Director:** Carrefour, BNP Paribas Fortis (Belgium)

(1) At 31 December 2018.
(2) Includes 21,881 BNP Paribas shares held as units in the shareholders' fund under the Company Savings Plan.
(*) Listed company.

Jacques ASCHENBROICH
Principal function: Chairman and Chief Executive Officer of the Valeo Group

Date of birth: 3 June 1954
Nationality: French
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 23 May 2017

Number of BNP Paribas shares held(1): 1,900
Office address: 43, rue Bayen
75017 PARIS,
FRANCE

Education
Graduate of the École des Mines
Corps des Mines

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas(*), director
Offices(1) held under the principal function:
Valeo Group(*), Chairman and Chief Executive Officer
Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Veolia Environnement(*), director
Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee
Veolia Environnement, member of the Audit Committee and Chairman of the Research, Innovation and Sustainable Development Committee
Other:
École Nationale Supérieure Mines ParisTech, Chairman
Club d'affaires Franco-Japonais, Co-Chairman

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:		
Chairman and Chief Executive Officer: Valeo Group **Director:** BNP Paribas, Véolia Environnement **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires Franco-Japonais	**Chairman and Chief Executive Officer:** Valeo Group **Director:** BNP Paribas, Véolia Environnement **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires Franco-Japonais		

(1) At 31 December 2018.
(*) Listed company.

Pierre André de CHALENDAR
Principal function: Chairman and Chief Executive Officer of Compagnie de Saint-Gobain

Date of birth: 12 April 1958
Nationality: French
Term start and end dates: 24 May 2018 – 2021 AGM
Date first elected to the Board: 23 May 2012

Number of BNP Paribas shares held[1]: 3,000
Office address: Les Miroirs
92096 LA DEFENSE CEDEX,
FRANCE

Education
Graduate of École Supérieure des Sciences Économiques et Commerciales (ESSEC)
Graduate of the École Nationale d'Administration

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[*], director

Offices[1] held under the principal function:
Compagnie de Saint-Gobain[*], Chairman and Chief Executive Officer
GIE SGPM Recherches, director
Saint-Gobain Corporation, director

Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, Chairman of the Remuneration Committee and member of the Corporate Governance, Ethics, Nominations and CSR Committee
Compagnie de Saint-Gobain, member of the Strategic Committee

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman and Chief Executive Officer: Compagnie de Saint-Gobain **Director:** BNP Paribas GIE SGPM Recherches, Saint-Gobain Corporation (United States)	**Chairman and Chief Executive Officer**: Compagnie de Saint-Gobain **Director:** BNP Paribas GIE SGPM Recherches, Saint-Gobain Corporation (United States)	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas GIE SGPM Recherches, Saint-Gobain Corporation (United States)	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas, Veolia Environnement, GIE SGPM Recherches, Saint-Gobain Corporation (United States)

(1) At 31 December 2018.
(*) Listed company.

Monique COHEN
Principal function: Partner of Apax Partners

Date of birth: 28 January 1956
Nationality: French
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 12 February 2014, ratified by the Annual General Meeting of 14 May 2014

Number of BNP Paribas shares held[(1)]: 9,620
Office address: 1, rue Paul-Cézanne
75008 PARIS,
FRANCE

Education
Graduate of the École Polytechnique
Master's Degree in Mathematics
Master's Degree in Business Law

Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[(*)], director
Offices[(1)] held under the principal function:
Apax Partners SAS, director
Proxima Investissement SA (Luxembourg), Chairman of the Board
Fides Holdings, Chairman of the Board of directors
Fides Acquisitions, director
Other offices[(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Hermès[(*)], Vice-Chairman of the Supervisory Board
Safran[(*)], senior director
Participation[(1)] in specialised committees of French or foreign companies:
BNP Paribas, Chairman of the Governance, Ethics, Nominations and CSR Committee, member of the Internal Control, Risk and Compliance Committee
Hermès, Chairman of the Audit and Risk Committee
Safran, member of the Audit and Risk Committee

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman of the Board of directors: Proxima Investments SA (Luxembourg), Fides Holdings, Fides Acquisitions **Vice-Chairman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners SAS	**Chairman of the Board of directors:** Proxima Investment SA (Luxembourg) **Vice-Chairman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux	**Chairman of the Board of directors:** Proxima Investment SA (Luxembourg) **Vice-Chairman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux	**Chairman of the Board of directors:** Proxima Investment SA (Luxembourg) **Chairman of the Supervisory Board:** Trocadero Participations SAS **Vice-Chairman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Chief Operating Officer:** Altamir Gérance SA **Chairman:** Trocadero Participations II SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux

(1) At 31 December 2018.
(*) Listed company.

Wouter DE PLOEY
Principal function: Chief Executive Officer of ZNA (hospital group in Antwerp, Belgium)

Date of birth: 5 April 1965
Nationality: Belgian
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 26 May 2016

Number of BNP Paribas shares held[1]: 1,000
Office address: Leopoldstraat 26
B-2000 ANTWERPEN/ANVERS,
BELGIUM

Education
Master's degree and Doctorate in Economics from the University of Michigan, Ann Arbor (United States of America)
Master's in Economics (Magna cum Laude) and Philosophy, University of Leuven (Belgium)

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[(*)], director

Offices[1] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Vanbreda Risk & Benefits NV, director
Unibreda NV, director

Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee

Other[1]:
Gasthuiszusters Antwerpen, director
Regroupement GZA-ZNA, director
BluHealth Innovation Center, director
Chamber of Commerce bureau, VOKA Antwerp - Waasland (Belgium), Vice-Chairman

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:
Director: BNP Paribas Vanbreda Risk & Benefits NV (Belgium), Unibreda NV
Vice-Chairman: Chamber of Commerce bureau, VOKA Antwerp - Waasland (Belgium)
Member: Belgian - American Educational Foundation (Belgium)
Adviser to the Board of directors: Lannoo publishing company (Belgium)

2016:
Member of the Supervisory Board: GIMV XL
Director: BNP Paribas
Vice-Chairman: Waasland (Belgium)
Chairman: Board of directors of the Museum of Contemporary Art, Antwerp (Belgium)
Member: Belgian - American Educational Foundation (Belgium), of the Board of directors of Haute École Odisee (Belgium)
Adviser to the Board of directors: Lannoo publishing company (Belgium)

(1) At 31 December 2018.
(*) Listed company.

Hugues EPAILLARD **Principal function: Real estate business manager**	
Date of birth: 22 June 1966 *Nationality:* French *Term start and end dates:* elected by BNP Paribas executives employees for three years from 16 February 2018 - 15 February 2021 *Date first elected to the Board:* 16 February 2018 *Number of BNP Paribas shares held*(1): 300(2) *Office address:* 83, La Canebière 13001 MARSEILLE	**Participation(1) in specialised committees of French or foreign companies:** BNP Paribas, member of the Internal Control, Risk and Compliance Committee and of the Remuneration Committee **Other(1):** Judge at the Marseille Employment Tribunal, Management section Commission Paritaire de la Banque (Association Française des Banques – Recourse Commission), member

(1) At 31 December 2018.
(2) Includes 295 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Rajna Gibson-Brandon **Principal function: Professor in Finance at the University of Geneva**	
Date of birth: 20 December 1962 *Nationality:* Swiss *Term start and end dates:* 28 November 2018 – 2021 AGM *Date first elected to the Board:* 28 November 2018 *Number of BNP Paribas shares held*(1): 0 *Office address:* 40, Boulevard Pont d'Arve CH-1211 GENEVA 4 SWITZERLAND **Education** Doctorate in Social Sciences & Economics (Specialising in Finance), University of Geneva	**Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:** BNP Paribas(*), director **Participation(1) in specialised committees of French or foreign companies:** n/a **Other:** Geneva Finance Research Institute, Deputy director Geneva Institute for Wealth Management Foundation, director Bülach Investment Professionals' Scientific and Training Board, Chairman Strategic Committee and Sustainable Finance Supervisory Committee in Geneva, Member Applic8 SA, director

(1) At 31 December 2018.
(*) Listed company.

Marion GUILLOU
Principal function: Chairman of the Board of directors of IAVFF-Agreenium, Extraordinary State Councillor

Date of birth: 17 September 1954
Nationality: French
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 15 May 2013

Number of BNP Paribas shares held(1): 1,000
Office address : 1 place du Palais Royal
75001 PARIS,
FRANCE

Education
Graduate of the École Polytechnique
Graduate of the École Nationale du Génie Rural, des Eaux et des Forêts
Doctor of Food Sciences
Institut français des administrateurs

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas(*), director

Offices(1) held under the principal function:
IAVFF-Agreenium (public institution), Chairman of the Board of directors of Institut Agronomique, Vétérinaire et Forestier de France

Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Imerys(*), director
Veolia Environnement(*), director

Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, member of the Corporate Governance, Ethics, Nominations and CSR Committee, and of the Internal Control, Risk Management and Compliance Committee
Imerys, member of the Nominations and Remuneration Committee
Veolia Environnement, member of the Research, Innovation and Sustainable Development Committee and the Remuneration Committee

Other(1):
Care - France (NGO), director
International agricultural research centre (CIAT), director
Bioversity International, director
IFRI, director
Universcience, director

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman of the Board of directors: IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Imerys, Veolia Environnement **Member:** Board of directors of Universcience, Board of directors of Care - France (NGO), Board of directors of IHEST (Institut des Hautes Études en Sciences et Technologies), Academic Council of the Academy of Technologies, Board of directors of Bioversity International	**Chairman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement **Member:** Board of directors of Care - France (NGO), Board of directors of IHEST (Institut des Hautes Études en Sciences et Technologies), Board of directors of Bioversity International	**Chairman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement **Member:** Board of directors of Fondation Nationale des Sciences Politiques (FNSP)	**Chairman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement

(1) At 31 December 2018.
(*) Listed company.

Denis KESSLER
Principal function: Chairman and Chief Executive Officer of SCOR SE

Date of birth: 25 March 1952
Nationality: French
Term start and end dates: 24 May 2018 – 2021 AGM
Date first elected to the Board: 23 May 2000

Number of BNP Paribas shares held[1]: 2,684
Office address: 5, avenue Kléber
75016 PARIS,
FRANCE

Education
Degree in Economic Science
Degree in Social Science
Doctor of Economic Science
Graduate of the French École des Hautes Études Commerciales
French Institute of Actuaries, qualified member

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[(*)], director
Offices[1] held under the principal function:
SCOR SE[(*)], Chairman and Chief Executive Officer
Other offices [1] held in listed or unlisted companies outside the BNP Paribas Group, including abroad:
Invesco Ltd[(*)] (United States), director
Participation [1] in specialised committees of French or foreign companies:
BNP Paribas, Chairman of the Financial Statements Committtee
Invesco Ltd, Member of the Audit Committee, the Remuneration Committee, the Nominations and Corporate Governance Committee
SCOR SE, Chairman of the Strategic Committee
Other[1]:
Association de Genève, director
Global Reinsurance Forum - Reinsurance Advisory Board, member
Institut des Sciences morales et politiques, member
French Institute of Actuaries, qualified member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman and Chief Executive Officer: SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum - Reinsurance Advisory Board, Conference Board (Global counsellor) Institut des sciences morales et politiques, Institute of Actuaries	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum - Reinsurance Advisory Board, Conference Board (Global counsellor)	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of the Association de Genève, Bureau of the French insurance companies federation (Fédération Française des Sociétés d'Assurance), Global Reinsurance Forum - Reinsurance Advisory Board, Conference Board (Global counsellor)	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member of the Supervisory Board:** Yam Invest NV (Netherlands) **Member:** Board of directors of the Geneva Association, Board of directors of the Association Le Siècle, Global Reinsurance Forum-Reinsurance Advisory Board Laboratoire d'Excellence Finance et Croissance Durable (LabexFCD), Conference Board (Global counsellor)

(1) At 31 December 2018.
(*) Listed company.

Nicole MISSON (until 15 February 2018)
Principal function: Customer Advisor

Date of birth: 21 May 1950 *Nationality:* French *Term start and end dates:* elected by BNP Paribas executives employees for three years from 16 February 2015 - 15 February 2018 *Date first elected to the Board:* 1 July 2011 *Number of BNP Paribas shares held:* 1,937[2] *Office address:* 32, rue de Clignancourt 75018 PARIS, FRANCE	**Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:** BNP Paribas[*], director **Participation[1] in specialised committees of French or foreign companies:** BNP Paribas, member of the Internal Control, Risk and Compliance Committee and of the Remuneration Committee **Other[1]:** Judge at the Paris Employment Tribunal, Management section Commission Paritaire de la Banque (AFB – Recourse Commission), member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)	Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)	Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)	Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)

(1) At 5 February 2018.
(2) Includes 1,763 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Laurence PARISOT (until 25 September 2018)
Principal function: Chief Development Officer of Gradiva

Date of birth: 31 August 1959
Nationality: French
Term start and end dates: 13 May 2015 – 2018 AGM
Date first elected to the Board: 23 May 2006

Number of BNP Paribas shares held: 1,255
Office address: Immeuble Millénaire 2
35, rue de la Gare
75019 PARIS,
FRANCE

Education
Graduate of the Institut d'Études Politiques de Paris
Master's in Public Law, Université de Nancy II
Master of Advanced Studies, Institut d'Études Politiques de Paris

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[*], director

Offices[1] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
EDF[*], director
Foxintelligence (SAS), director
Fives Group, member of the Supervisory Board

Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, member of the Internal Control, Risk and Compliance Committee and of the Remuneration Committee
EDF, member of the Audit Committee and the Strategy Committee

Other[1]:
Scientific and Assessment Board of Fondapol, Chairman
Fondation Nationale des Sciences Politiques, director, member of the Audit Committee
Université franco-allemande, director
European Council for Foreign Relations, member
Mouvement des Entreprises de France (Medef), Honorary Chairman
Fondation Brigitte Bardot, director

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Director: BNP Paribas, EDF, Foxintelligence (SAS) **Honorary Chairman:** Mouvement des Entreprises de France (Medef) **Chairman:** Scientific and Assessment Board of Fondapol **Member:** Supervisory Board of Fives Group, Board of directors and Audit Committee of Fondation Nationale des Sciences Politiques, European Council for Foreign Relations, Board of directors of the Brigitte Bardot Foundation	**Director:** BNP Paribas, EDF **Honorary Chairman:** Mouvement des Entreprises de France (Medef) **Chairman:** Scientific and Assessment Board of Fondapol **Member:** European Council for Foreign Relations, Board of directors of Fondation Nationale des Sciences Politiques, Board of directors of Université franco-allemande	**Director:** BNP Paribas, EDF **Vice-Chairman of the Management Board:** Ifop SA **Honorary Chairman:** Mouvement des Entreprises de France (Medef) **Chairman:** Scientific and Assessment Board of Fondapol **Member:** European Council for Foreign Relations	**Director:** BNP Paribas, Fives **Vice-Chairman of the Management Board:** Ifop SA **Honorary Chairman:** Mouvement des Entreprises de France (Medef) **Chairman:** Scientific and Assessment Board of Fondapol **Member:** Supervisory Board of Compagnie Générale des Établissements Michelin (SCA), Economic, social and Environmental Council (CESE), European Council for Foreign Relations

(1) At 25 September 2018.
(*) Listed company.

Daniela SCHWARZER
Principal function: Director of think tank, DGAP (Deutsche Gesellschaft für Auswärtige Politik) (German Council on Foreign Relations)

Date of birth: 19 July 1973
Nationality: German
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 14 May 2014

Number of BNP Paribas shares held[1]: 1,000
Office address: Rauchstrasse 17-18
10787 BERLIN,
GERMANY

Education
Doctorate in Economics from the Free University of Berlin
Master's degree in Political Science and in Linguistics from the University of Tübingen

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[*], director

Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, member of the Corporate Governance, Ethics, Nominations and CSR Committee

Other:
Jacques-Delors Institute, director
Foundation United Europe (Germany), director
Open Society Foundation, member of the Advisory Committee

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Director: BNP Paribas **Member:** Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)	**Director:** BNP Paribas **Member:** Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)	**Director:** BNP Paribas **Member:** Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)	**Director:** BNP Paribas **Member:** Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)

(1) At 31 December 2018.
(*) Listed company.

Michel TILMANT
Principal function: Director of companies

Date of birth: 21 July 1952
Nationality: Belgian
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 12 May 2010
(Michel Tilmant served as non-voting director (censeur) of BNP Paribas from 4 November 2009 to 11 May 2010)

Number of BNP Paribas shares held(1): 1,000
Office address: Rue du Moulin 10
B-1310 LA HULPE,
BELGIUM

Education
Graduate of the University of Louvain

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas(*), director

Offices(1) held under the principal function:
Strafin sprl (Belgium), manager

Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Sofina SA(*) (Belgium), director
Foyer Group:
CapitalatWork Foyer Group SA (Luxembourg), Chairman
Foyer SA (Luxembourg), director
Foyer Finance SA, director
Groupe Lhoist SA (Belgium), director

Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, Chairman of the Internal Control, Risk and Compliance Committee
Sofina SA, member of the Nominations and Remuneration Committee
Groupe Lhoist SA, member of the Audit Committee

Other(1):
Cinven Ltd (United Kingdom), senior advisor
Royal Automobile Club of Belgium (Belgium), director
Université Catholique de Louvain (Belgium), director

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman: CapitalatWork Foyer Group SA (Luxembourg) **Director:** BNP Paribas, Foyer SA (Luxembourg), Foyer Finance SA, Lhoist Group SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium) **Senior advisor**: Cinven Ltd (United Kingdom)	**Director:** BNP Paribas, CapitalatWork, Foyer Group SA (Luxembourg), Foyer SA (Luxembourg), Lhoist Group SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium) **Senior advisor:** Cinven Ltd (United Kingdom)	**Director:** BNP Paribas, CapitalatWork, Foyer Group SA (Luxembourg), Foyer SA (Luxembourg), Lhoist Group SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium) **Senior advisor:** Cinven Ltd (United Kingdom)	**Director:** BNP Paribas, CapitalatWork, Foyer Group SA (Luxembourg), Foyer Assurances SA (Luxembourg), Lhoist Group SA (Belgium), Ark Life Ltd (Ireland), Guardian Acquisitions Limited (United Kingdom), Guardian Assurance Limited (United Kingdom), Guardian Financial Services Holdings Limited (United Kingdom), Guardian Holdings Limited (Jersey), NBGB SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium) **Senior advisor:** Cinven Ltd (United Kingdom)

(1) At 31 December 2018.
(*) Listed company.

Sandrine VERRIER
Principal function: Production and sales support assistant

Date of birth: 9 April 1979
Nationality: French
Term start and end dates: elected by BNP Paribas technician employees for three years from 16 February 2018 - 15 February 2021
Date first elected to the Board: 16 February 2015

Number of BNP Paribas shares held[1]: 10
Office address: 22, rue de Clignancourt
75018 PARIS,
FRANCE

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[*], director
Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee

2017:	2016:	2015:
Director: BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas

(1) At 31 December 2018.

Fields WICKER-MIURIN
Principal function: Director of companies

Date of birth: 30 July 1958
Nationalities: British and American
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 11 May 2011

Number of BNP Paribas shares held[1]: 1,000
Office address: 11-13 Worple Way
RICHMOND-UPON-THAMES,
SURREY TW10 6DG,
UNITED KINGDOM

Education
Graduate of the Institut d'Études Politiques de Paris
Master's Degree from the School of Advanced International Studies, Johns Hopkins University
BA, University of Virginia

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas[*], director
Offices[1] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Prudential Plc[*], director
SCOR SE[*], director
Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee and of the Remuneration Committee
SCOR SE, member of the Strategic Committee, Risk Committee, Nominations and Remuneration Committee and Audit Committee, member of the Crisis Management Committee and Chairman of the CSR Committee
Other[1]:
Co-founder and Partner at Leaders' Quest (United Kingdom)
UK Department of Digital Culture, Media and Sports, independent member of the Ministry Council, and Chairman of the Audit and Risk Committee

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Director: BNP Paribas, Control Risks Group, SCOR SE **Independent member of the Ministry Council and Chairman of the Audit and Risks Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Control Risks Group, SCOR SE **Independent member and Chairman of the Audit and Risk Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Bilt Paper BV (Netherlands), SCOR SE **Member:** the Board of the Batten School of Leadership – University of Virginia (United States)	**Director:** BNP Paribas, Bilt Paper BV (Netherlands), SCOR SE, Ministry of Justice of Her Majesty's Government (United Kingdom) **Member:** the Board of the Batten School of Leadership – University of Virginia (United States)

(1) At 31 December 2018.
(*) Listed company.

SCHEDULE OF THE TERMS OF DIRECTORSHIP OF COMPANY DIRECTORS

On the Board's proposal, the Shareholders' Annual General Meeting of 23 May 2000 decided to limit the term of office of new directors to three years.

Directors	2019 (AGM called to approve the 2018 financial statements)	2020 (AGM called to approve the 2019 financial statements)	2021 (AGM called to approve the 2020 financial statements)
J. Lemierre		✓	
J-L. Bonnafé	✓		
J. Aschenbroich		✓	
P.A. de Chalendar			✓
M. Cohen		✓	
W. De Ploey	✓		
H. Epaillard			✓(i)
R. Gibson-Brandon			✓(ii)
M. Guillou	✓		
D. Kessler			✓
D. Schwarzer		✓	
M. Tilmant	✓		
S. Verrier			✓(iii)
F. Wicker-Miurin		✓	

(i) Director elected by executive employees in the first round of voting on 21 November 2017 (took office on 16 February 2018).
(ii) Director co-opted by the Board of directors on 28 November 2018 to replace Laurence Parisot. This decision will be submitted to the Annual General Meeting of 23 May 2019 for ratification. Her term will run for the remainder of Mrs Laurence Parisot's term of directorship.
(iii) Director elected by technician employees, start and end of term of previous term of office: 16 February 2015 – 15 February 2018. Re-elected by technician employees in the second round of voting on 12 December 2017 (took office on 16 February 2018).

2

OTHER CORPORATE OFFICER

Philippe BORDENAVE
Principal function: Chief Operating Officer of BNP Paribas

Date of birth: 2 August 1954
Nationality: French
Number of BNP Paribas shares held [(1)]: 76,574
Office address: 3, rue d'Antin
75002 PARIS,
FRANCE

Education
Graduate of the École Polytechnique
Graduate of the École Nationale d'Administration
DEA in Economics

Offices[(1)] held under the principal function:
BNP Paribas[(*)], Chief Operating Officer
Verner Investissements, director
Exane BNP Paribas, non-voting director (censeur)

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chief Operating Officer: BNP Paribas **Director:** Verner Investissements **Non-voting Director (censeur):** Exane BNP Paribas	**Chief Operating Officer:** BNP Paribas **Director:** Verner Investissements **Non-voting Director (censeur):** Exane BNP Paribas	**Chief Operating Officer:** BNP Paribas **Director:** Verner Investissements **Non-voting Director (censeur):** Exane BNP Paribas	**Chief Operating Officer:** BNP Paribas **Director:** BNP Paribas Personal Finance **Permanent representative:** Antin Participation 5 (SAS), BNP Paribas Securities Services (SCA) **Non-voting Director (censeur):** Exane BNP Paribas

(1) At 31 December 2018.
(*) Listed company.

2.1.2 CORPORATE GOVERNANCE AT BNP PARIBAS

The Corporate Governance Code referred to by BNP Paribas on a voluntary basis in this report is the Corporate Governance Code for Listed Companies (revised in June 2018) published by the French employers' organisations, *Association Française des Entreprises Privées* (Afep) and the *Mouvement des Entreprises de France* (Medef). BNP Paribas applies the recommendations of this Code, hereinafter referred to as the Corporate Governance Code or Afep-Medef Code, which can be viewed on the BNP Paribas website (http://invest.bnpparibas.com), the Afep website (http://www.afep.com) and the Medef website (http://www.medef.com).

The special guidelines on the participation of shareholders at the Shareholders' Annual General Meeting are laid out in article 18, Title V Shareholders' Meetings of BNP Paribas' Articles of association published in the Registration document and the annual financial report, in the section Founding Documents and Articles of association. Moreover, a summary of these guidelines and a report on the organisation and proceedings of the Shareholders' Annual General Meeting of 24 May 2018 are provided in the BNP Paribas and its shareholders section of said document.

In addition, BNP Paribas is governed in accordance with French and European banking regulations, and the guidelines issued by the EBA (European Banking Authority) and is subject to permanent supervision of the European Central Bank (ECB) pursuant to the Single Supervisory Mechanism (SSM).

1. PRINCIPLES OF GOVERNANCE

In accordance with the proposal made by the Board of directors and approved by the Annual General Meeting of 24 May 2018, the BNP Paribas SA Articles of association have been amended in light of major transformation issues within the banking sector to ensure efficiency, stability and visibility of governance. Thus, in the interest of the Company and the shareholders, the age limits for the Chairman and Chief Executive Officer were raised to 72 years of age for the Chairman and 65 years of age for the Chief Executive Officer, giving the Board of directors the option to extend their duties for an extra year. This option was extended, as for other corporate officers, to the Chief Operating Officer. This will give greater flexibility when preparing for future transitions.

The Internal rules adopted by the Board define the duties of the Board and of its specialised Committees. They are updated periodically to comply with current laws, regulations and market guidelines, and to keep pace with best practice in the area of corporate governance.

The Internal rules were extensively revised in 2015 to reflect the provisions of Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (hereinafter "CRD 4"), then amended in October 2016 with, in particular, the development of three procedures applicable to non executive directors (number of directorships; conflicts of interest; identification, selection and succession of directors). In 2018, the Internal rules were revised once again and the three existing procedures were replaced by a Suitability policy for Members of the management body and Key function holders, hereinafter "Suitability policy". The proposed amendments comply with the Afep-Medef Code, revised in June 2018, EBA Guidelines on internal governance and on the assessment of suitability of members of the management body and key function holders (the "Fit and Proper Guidelines") published on 26 September 2017 and applicable from 30 June 2018 and Ordinance No. 2017-1162 of 12 July 2017.

A Group Code of conduct, approved by the Board of directors, was introduced in 2016.

Code of conduct (article 1.2 of the Internal rules)

The Board of directors and Executive Management of BNP Paribas share the conviction that the success of the bank depends directly on the behaviour of each employee. "[The Code of conduct] sets out the rules to uphold our values and perform the Bank's missions. This Code, which shall be integrated by each business line and each employee, governs the actions of each employee and guides the decisions at every level of the organisation. For this purpose, the Board ensures the Executive Management implements this Code into business lines, countries and regions".

Note that the Internal rules reiterate and emphasise the collegial nature of the Board of directors, which jointly represents all shareholders and must act in the Company's best interest at all times. It details the Board responsibilities (article 1).

In addition, the Board of directors is backed by four specialised committees (the Financial Statements Committee, the Internal Control, Risk Management and Compliance Committee, Governance, Ethics, Nominations and CSR Committee, the Remuneration Committee) as well as any *ad hoc* committees. The Internal rules detail each committee's missions, in line with the provisions of CRD 4 and EBA Guidelines. They provide for joint meetings between the Financial Statements Committee and the Internal Control, Risk Management and Compliance Committee and the Financial Statements Committee whenever required.

Neither the member of the Executive Management nor the Chairman of the Board of directors has sat on any Committee since 1997.

As far as the Board is aware, no agreement has been entered into directly, or through an intermediary, between on the one hand, one of the corporate officers (BNP Paribas' corporate officers) and, on the other, another company in which BNP Paribas owns, directly or indirectly, over half the share capital (article L.225-37-4 paragraph two of the French Commercial Code), without prejudice to any agreements relating to current operations concluded under normal conditions.

The Internal rules and Suitability policy mentioned above have been adopted by the Board of directors and are included in this report.

The Board of directors (at 31 December 2018)
Chairman: Jean Lemierre

Missions and controls in the following areas:

- Guidelines and strategic operations;
- CSR promotion;
- Governance, Internal Control and financial statements;
- Supervision of risk management;
- Financial communication;
- Remuneration;
- Preventive recovery plan;
- Monitoring the application of the Code of conduct.

Financial Statements Committee (CdC)

Members

Denis Kessler (C) (i)
Jacques Aschenbroich (i)
Wouter De Ploey (i)
Sandrine Verrier (ii)
Fields Wicker-Miurin (i)

Missions

- Monitoring the preparation of the financial information
- Monitoring the efficiency of the Internal Control systems and of risk management systems regarding accounting and financial matters
- Monitoring the Statutory Auditors' audits of the annual and consolidated financial statements as well as their independence

Internal Control, Risk Management and Compliance Committee (CCIRC)

Members

Michel Tilmant (C) (i)
Monique Cohen (i)
Hugues Epaillard (ii)
Rajna Gibson-Brandon (i) (a)
Marion Guillou (i)

Missions

- Reviewing the global strategy concerning risks
- Monitoring the remuneration principles in relation to risks
- Reviewing issues relating to Internal Control and compliance
- Reviewing the prices of products and services in relation to the risk strategy

Corporate Governance, Ethics, Nominations and CSR Committee (CGEN)

Members

Monique Cohen (C) (i)
Pierre André de Chalendar (i)
Marion Guillou (i)
Daniela Schwarzer (i)

Missions

- Oversight and monitoring of compliance of governance principles with changes in regulations and best practice in the area of corporate governance
- Identification of, selection of, and succession plan for directors and committee members
- Assessment of the Board of directors
- Periodic review of the selection of, appointment of and succession process for executive corporate officers
- Monitoring Executive Management's application of the Suitability policy to Key function holders under EBA guidelines
- Assessment of executive corporate officers
- Appraising the independence of the directors
- Maintaining the general balance of the Board of directors
- Regular monitoring of updates to the Code of conduct
- Monitoring CSR issues (Group's contribution to economic, sustainable and responsible development)

Remuneration Committee (RemCo)

Members

Pierre André de Chalendar (C) (i)
Hughes Epaillard (ii)
Fields Wicker-Miurin (i)

Missions

- Annual review of the principles that underpin the Group's remuneration policy
- Annual review of the remuneration, allowances and benefits in kind granted to the corporate officers of the Company and of the Group's major French subsidiaries
- Annual review of the remuneration of the Group's regulated staff categories
- Control of the remuneration of the Head of the Risk Management Function and Head of Compliance

Joint meetings of the CdC and the CCIRC
Chairman: Denis Kessler (i)

Missions

- Examining the mission plan of the General Inspection and the audit plan of the Statutory Auditors and preparing the work of the Board on the assessment of the risk policies and risk management measures
- Dealing with the common issues relating to the risk policies and their financial impacts

(C) Chairman.
(i) Independent director according to the provisions of the Afep-Medef Code.
(ii) Director elected by employees.
(a) At 1st March 2019.

Each Committee is composed of members with expertise in the relevant areas and complies with the provisions of the French Monetary and Financial Code and the recommendations of the Afep-Medef Code. Thus,

- most of the members of the Financial Statements Committee have qualifications and experience in the Company's financial management, accounting and financial information. In consideration of his financial skills, reinforced by his position as Chief Executive Officer of SCOR, a major international reinsurance company, Mr Denis Kessler was appointed Chairman of the committee;
- most of the members of the Internal Control, Risk Management and Compliance Committee have specific expertise in financial matters and risk management, either through their training or experience. Its Chairman has international experience in banking management. Another of its members has been a member of the Board of the Autorité des Marchés Financier (AMF);

- the members of the Corporate Governance, Ethics, Nominations and CSR Committee are independent directors who have expertise in corporate governance and in putting together management teams in international companies. Some deal with CSR issues professionally;
- the Remuneration Committee is made up of independent members who have experience of remuneration systems and market practices in this area and includes a director elected by employees. One member of the Remuneration Committee is also a member of the Internal Control, Risk Management and Compliance Committee. This composition is intended to facilitate the Board's work on the appropriateness of BNP Paribas' remuneration principles with the risk policy.

The Chairman of the Board of directors is not a member of any committee, but may attend committee meetings and may add subjects he considers relevant to their agenda.

The ECB did not issue any objections as regards the composition of the Board of directors or its specialised committees.

1.a Separation of the functions of Chairman and Chief Executive Officer

As of 11 June 2003, BNP Paribas has dissociated the offices of Chairman of the Board and Chief Executive Officer. This decision complies with the obligations imposed on credit institutions since 2014 by French law transposing CRD 4.

The duties of the Chairman

They are described in article 3.1 of the Internal rules.

The Chairman is responsible for ensuring that the quality of the relationship with shareholders is maintained, coordinating closely with any steps taken by Executive Management in this area. In this connection, the Chairman chairs the Shareholder Liaison Committee, whose task is to assist the Bank in its communications with individual shareholders; several times a year, he invites the shareholders to meetings where the Company's strategy is explained. He reports on his duties to the Board of directors.

The Chairman is careful to maintain a close and trusting relationship with Executive Management and provides the team with assistance and advice while respecting its executive responsibilities. The Chairman organises his activities so as to ensure his availability and put his experience to the Group's service. His duties are contributory in nature and do not confer any executive power on him. They do not in any way restrict the powers of the Chief Executive Officer, who has sole operational responsibility for the Group.

Coordinating closely with Executive Management, the Chairman can represent the Group in its high-level relationships, particularly with major clients, public authorities and institutions, at national, European and international levels. He plays an active part in discussions concerning regulatory developments and public policies affecting BNP Paribas, and, more generally, the financial services sector.

The Chairman contributes to promoting the values and image of BNP Paribas, both within the Group and externally. He expresses his views on the principles of action governing BNP Paribas, in particular in the field of professional ethics. He contributes to enhancing the Group's image through the responsibilities he exercises personally in national or international public bodies.

At the request of the Chief Executive Officer, he can take part in any internal meeting on subjects relating to strategy, organisation, investment or disinvestment projects, risks and financial information. He expresses his opinions without prejudice to the remit of the Board of directors; he provides support to the teams responsible for covering major companies and international financial institutions; he also contributes to the development of BNP Paribas' advisory activities, particularly by assisting in the completion of major corporate finance transactions.

He ensures that principles of corporate governance are defined and implemented.

The Chairman is the custodian of the proper functioning of the Board of directors of BNP Paribas. As such:

- with the support of the Corporate governance, Ethics, Nominations and CSR Committee, with the approval of the Board of directors and of the Shareholders' Annual General Meeting, where appropriate, he endeavours to build an efficient and balanced Board, and to manage, both in the short- and long-term, the replacement and succession processes related to the Board of directors and nominations which will acknowledge the Company's strategic ambitions;
- on the basis of the dissociation of the functions of Chairman and Chief Executive Officer, his role is to ensure directors' independence and freedom of speech;
- he ensures that the directors have the documentation and information necessary to carry out their duties in a timely manner and in a clear and appropriate form.

The powers of the Chief Executive Officer

The Chief Executive Officer has the broadest powers to act in all circumstances on behalf of BNP Paribas, and to represent the Bank in its relation with third parties. He is responsible for the organisation of internal control procedures and for all the information required by regulations in that regard.

He exercises his powers within the limitations of the corporate object, and subject to any powers expressly attributed by law to the Shareholders' Annual General Meeting and Board of directors.

The Internal rules of the Board of directors provide that the Chief Executive Officer shall request its prior approval for all investment or disinvestment decisions (other than portfolio transactions) in excess of EUR 250 million, and for any proposal to acquire or dispose of shareholdings in excess of that threshold (other than portfolio transactions) (article 1.1). The Chief Executive Officer must also ask the Board's Financial Statements Committee for prior approval of any non-audit related assignment involving fees in an amount of over EUR 1 million (excluding taxes) (article 7.1.3).

1.b Membership of the Board – Directors' independence

Membership of the Board of directors: a collegial body with collective competence

On the proposal of the Board of directors, the Shareholders' Annual General Meeting of 24 May 2018 reappointed Laurence Parisot, Pierre André de Chalendar and Denis Kessler for a three-year term.

Following Laurence Parisot's resignation of her directorship on 25 September 2018, the Board of directors co-opted Rajna Gibson-Brandon as her replacement on 28 November 2018. The appointment is subject to ratification by the Annual General Meeting on 23 May 2019.

At the end of the Annual General Meeting of 24 May 2018 and as of 31 December 2018,

Number of Board members	O/w elected Board members	Nationalities	Percentage of women	Independence
14	2	5	41.6%	>50%

Independence of Directors (as of 31 December 2018)

The following table shows the position of each director with regard to the independence criteria contained in the Afep-Medef Code to define an independent director:

Criteria	Jean LEMIERRE	Jean-Laurent BONNAFÉ	Jacques ASCHENBROICH	Pierre André de CHALENDAR	Monique COHEN	Hugues EPAILLARD	Rajna GIBSON-BRANDON	Marion GUILLOU	Denis KESSLER	Daniela SCHWARZER	Michel TILMANT	Wouter DE PLOEY	Sandrine VERRIER	Fields WICKER-MIURIN
1 Employee or corporate officer of the Company within the previous five years	o	o	✓	✓	✓	o	✓	✓	✓	✓	✓	✓	o	✓
2 Whether or not corporate offices are held in another company	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 Whether or not significant business relationships exist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4 Whether or not there are close family ties to a corporate officer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5 Not an auditor of the Company within the previous five years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6 Not a Director of the Company for more than 12 years	✓	✓	✓	✓	✓	✓	✓	✓	o(*)	✓	✓	✓	✓	✓
7 Major shareholder status	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ *represents compliance with an independence criterion defined in the Afep-Medef Code.*
O *represents non-compliance with an independence criterion defined in the Afep-Medef Code.*
(*) *See below.*

- The following directors meet the independence criteria contained in the Corporate Governance Code and reviewed by the Board of directors: Monique Cohen, Rajna Gibson-Brandon, Marion Guillou, Daniela Schwarzer, Fields Wicker-Miurin, Jacques Aschenbroich, Pierre André de Chalendar, Wouter De Ploey and Michel Tilmant;

  In particular, for Monique Cohen, Jacques Aschenbroich, Pierre André de Chalendar and Denis Kessler, the Board of directors confirmed that the business relations between BNP Paribas and respectively (i) Apax Partners, as well as the companies in which Apax Partners holds interests, (ii) Valeo and its group (iii) Saint-Gobain and its group, and (iv) the SCOR SE group are not significant (the revenue generated by each of these business relations accounted for less than 0.5% of the total revenue reported by BNP Paribas);

- Finally, during the period of more than 12 years that Denis Kessler has sat on the Board, he has served under three successive Chief Executive Officers each having managed the Bank in accordance with his own personality and his own methods and practices. Consequently, the Board of directors deems that Denis Kessler's critical faculties are renewed with each effective change of management, thereby guaranteeing his independence. The Board also took into consideration Denis Kessler's financial expertise, a critical factor in understanding banking mechanisms (Doctorate in economics and HEC graduate), reinforced by his position as the Chairman and Chief Executive Officer of one of world's major reinsurance companies;

- The two employee representatives on the Board, Sandrine Verrier and Hugues Epaillard, do not qualify as independent directors pursuant to the criteria contained in the Afep-Medef Code, despite their status and the method by which they were elected, which nevertheless guarantee their independence;
- Two directors appointed by the shareholders – the Chairman of the Board of directors Jean Lemierre, and the Chief Executive Officer Jean-Laurent Bonnafé – do not fulfil the independence criteria laid down by the Corporate Governance Code.

Over half of the directors of BNP Paribas are therefore independent in terms of the criteria for independence contained in the Afep-Medef Code and the Board of directors' assessment.

Directors' knowledge, skills and experience – Diversity and complementarity

When the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN) reviews the skills and experience of potential directors, it is careful to maintain the diversity and collective skills of the Board of directors in light of changes to the Bank's strategy and in accordance with the Suitability policy. Thus, the Board brings together expertise in banking and finance, risk management, international digital transformation and CSR, as well as experience in Executive Management of large corporate groups.

These candidates are identified and recommended by the committee on the basis of criteria that combine personal and collective skills, according to the procedures in the Internal rules (article 4.2.1) and by the Suitability policy (section II *Identification of, selection of and succession plan for Members of the management body and Key function holders*), which ensure their independent of mind:

- competence, based on experience and the ability to understand the issues and risks, enabling the directors to make informed and effective decisions;
- courage, in particular to express opinions and make judgements, enabling the directors to remain objective;
- availability and assiduity, which allow for the necessary detachment and promote the directors' commitment and sense of responsibility regarding the exercise of their office;
- loyalty, which fosters directors' commitment to the Company and to their duties within the Board, which collectively represents the shareholders;
- directors' proper understanding of the Company's culture and ethics.

Directors all have a range of skills and experience that they have acquired during their professional careers. The table below aims to reflect this diversity within the Board of directors and lists more specific contributions made by each of the directors.

Director	Age	Gender	Nationality	Areas of expertise	End of term of office
Jean LEMIERRE (Chairman)	68	M	French	Banking/Finance Risks/Regulation monitoring International	2020
Jean-Laurent BONNAFÉ (Director, Chief Executive Officer)	57	M	French	Banking/Finance Business operations International	2019
Jacques ASCHENBROICH	64	M	French	Industrialist International Transformation	2020
Pierre André DE CHALENDAR	60	M	French	Industrialist International CSR	2021
Monique COHEN	62	F	French	Banking/Finance Business operations CSR	2020
Wouter DE PLOEY	53	M	Belgian	Banking/Finance Digital Transformation	2019
Rajna GIBSON-BRANDON	56	F	Swiss	Financial markets Risks/Regulation monitoring CSR	2021
Marion GUILLOU	64	F	French	Risks/Regulation monitoring CSR Technology	2019
Hugues EPAILLARD (Director elected by employees)	52	M	French	Organisation representing employees	2021
Denis KESSLER	66	M	French	Insurance Business operations Risks/Regulation monitoring	2021
Daniela SCHWARZER	45	F	German	Money markets Geopolitics International	2020
Michel TILMANT	66	M	Belgian	Banking/Finance Risks/Regulation Monitoring International	2019
Sandrine VERRIER (Director elected by employees)	39	F	French	Organisation representing employees	2021
Fields WICKER-MIURIN	60	F	British/ American	Banking/Finance Financial markets International	2020

1.c Directors' Ethical Conduct

- As far as the Board is aware, there are no conflicts of interests between BNP Paribas and any of the directors. The Suitability policy requires directors to report any situation likely to constitute a conflict of interest to the Chairman and the Board of directors who may then ask the director in question to refrain from taking part in voting on the relevant issues.
- As far as the Board is aware, none of the Board members has been found guilty of fraud or been associated, as member of an administrative, management or supervisory body, or as Chief Executive Officer, with any insolvency, receivership or liquidation proceedings during at least the last five years.
- As far as the Board is aware, no member of the Board of directors is subject to any official public accusation and/or penalty. No director has been prohibited from acting in an official capacity during at least the last five years.
- There are no arrangements or agreements with key shareholders, customers, suppliers or other persons that involve the selection of any member of the Board of directors.
- The directors must carry out their duties in a responsible manner, particularly as regards the regulations relating to insider dealing. They are notably required to comply with legal requirements relating to being in possession of insider information. Under the terms of the Internal rules, they must also refrain from carrying out any transactions in BNP Paribas shares that could be regarded as speculative (article 4.3.1 of the Internal rules). They are informed of the periods during which they may, except in special circumstances, carry out any transactions in BNP Paribas shares (article 4.3.1 of the Internal rules).

1.d Directors' training and information

- Pursuant to the Internal rules, every director can ask the Chairman or the Chief Executive Officer to provide them with all the documents and information required to enable them to carry out their duties, to participate effectively in the meetings of the Board of directors and to make informed decisions, provided that such documents are necessary to the decisions to be taken and connected with the Board's powers (article 3.4.1 of the Internal rules).
- The directors have unrestricted and continuous access to the minutes of meetings of the Board's specialised committees in a digital system reserved for directors. This system also provides directors with a range of useful information in a secure and timely manner to facilitate them in their work. Since 2017, it has been possible to use this system to deliver e-learning training modules to directors.
- Committee meetings provide an opportunity to update the directors on the topical issues on the agenda. In addition, the Board is kept informed of changes in the banking regulations and reference texts concerning governance. Training may also be provided on such occasions.
- As provided in the Volcker Rule in the United States and the law on the separation and regulation of banking activities in France, Board members receive training on these two regulations every year (June 2018).
- Over three days of training (March, June and September 2018), directors received training in (i) securitisation, (ii) payment means, (iii) counterparty credit risk, and (iv) the EBA Fit and Proper Guidelines published on 26 September 2017 and applicable from 30 June 2018. It was also the opportunity for directors to meet with the relevant managers in the Group.
- Pursuant to the provisions of the French Commercial Code on the training of directors elected by employees and the time allotted to them for the preparation of the meetings of the Board of directors and its committees, the Board determined that the content of the training programme would include the bank's activities and organisation and applicable regulations.
- In 2018, the two directors elected by employees received a total of 8 hours of internal training with various operations managers. One of them recorded 104 training hours with a view to obtaining a director's certificate. Moreover, like any other directors, they receive the training provided by BNP Paribas as described below in addition to the training modules delivered by external training providers.

1.e Directors' attendance at Board and Committee meetings in 2018

Director	Board of directors	Specialised committees	Individual attendance rates
J. LEMIERRE	100%		100%
J-L. BONNAFÉ	91%		91%
J. ASCHENBROICH	100%	83%	94%
P. A. de CHALENDAR	100%	100%	100%
M. COHEN	91%	100%	97%
W. DE PLOEY	100%	100%	100%
H. EPAILLARD	100%	100%	100%
R. GIBSON-BRANDON(1)	0%	-	0%
M. GUILLOU	100%	89%	93%
D. KESSLER	100%	100%	100%
N. MISSON	100%	100%	100%
L. PARISOT	100%	90%	94%
D. SCHWARZER	100%	100%	100%
M. TILMANT	91%	100%	95%
S. VERRIER(2)	91%	67%	82%
F. WICKER-MIURIN	100%	100%	100%
Average	**97%**	**95%**	

(1) New director co-opted on 28 November 2018 and only absent from one Board of directors' meeting.
(2) Director elected by employees on maternity leave for part of 2018.

2. WORKS OF THE BOARD AND COMMITTEES IN 2018

2.a Works of the Board in 2018

Meetings	Including extraordinary meetings	Investment stake/holding/ interest average	Strategy seminar
11	1	97%	1

The Board of directors, which determines BNP Paribas' strategy and overall business objectives based on proposals submitted by Executive Management and with the aim of promoting long-term value creation in the light of social and environmental issues:

- looked at the best way of ensuring the efficiency, stability and visibility of corporate governance and, in particular, proposed to the Shareholders' Annual General Meeting of 24 May 2018, that the BNP Paribas Articles of association should be amended to raise the age limit for executive corporate officers so as to prepare for the long-term succession process;
- amended its Internal rules and adopted the Suitability policy to replace the three existing procedures (number of directorships; conflicts of interest; identification, selection and succession of directors) under EBA Guidelines and the new provisions of the Afep-Medef Code;
- co-opted Rajna Gibson-Brandon to replace Laurence Parisot, who resigned;
- monitored the implementation of the 2017-2020 Transformation and Development Plan in terms of 2018 operating division results, the economic climate and the interest rate scenario. The guidelines for this 2017-2020 Transformation Plan were implemented in 2020 through:
  - the good performance of growth-driving business lines,
  - the strengthening of compliance and control capacities,
  - a stringent risk management policy,
- was informed of the impacts on Group equity of first-time application of IFRS 9, replacing IAS 39;
- monitored the changes in prudential requirements regarding capital and examined the provisional results of the Supervisory Review and Evaluation Process (SREP) and their impact on the solvency ratio;
- approved the acquisition of Raiffeisen Bank Polska's core banking activities;
- was informed of the continuing gradual divestment in 2018, based on market conditions, of the equity interest in First Hawaiian Bank;
- approved BNP Paribas' merger by absorption of BNP Paribas Commodity Futures Limited and Von Essen Bank GmbH;
- monitored changes in the shareholding structure and share price;
- discussed the Bank's performance relative to the competition and its balance sheet, based on the results available for the 2018 financial year; reviewed the regulatory ratios of the main systemically important banks;
- was advised of the situation regarding the Bank's systems in the Asia-Pacific territory;
- was informed of the Bank's position in Turkey;
- was informed of adjustments to the Bank's mechanism within the context of Brexit;
- was informed of BNP Paribas policy on professional equality and equal pay;
- reviewed the work of the Ethics Committee;
- was informed of the results of the annual employee satisfaction survey (Global People Survey) and of the follow-up actions;
- reviewed the recommendation of the Central Works Council on the Bank's strategic guidelines and issued a response to its observations;
- examined the issuance amounts of debt securities in the form of senior and subordinated debt;
- acknowledged the Executive Management's comments on the net margin generated on new lending in 2017 and in the first half of 2018;
- decided to pay additional profit-sharing for 2017;
- continued to track the amounts allocated to the various objectives of the Company's share buyback programme authorised by the Annual General Meeting;
- authorised the delegations of authority for the issuance of debt securities, particularly for bonds and similar;
- examined each of the related-party agreements entered into and authorised in previous years but still in force in the past year;
- discussed the delegation of responsibility for internal control functions, on the basis of an update of the subsidiaries in question;
- reviewed and approved the answers to written questions submitted by shareholders at the Annual General Meeting.

For the fourth time, SSM representatives from the ECB and representatives of the *Autorité de contrôle prudentiel et de résolution* (ACPR) attended a Board meeting (on 23 February 2018). They outlined their priorities for banking supervision for 2018, which was followed by an exchange of views with the members of the Board.

As in previous years, the Board of directors met on 19 December 2018 for a strategy seminar focused, *inter alia*, on the performance of the 2017-2020 strategic plan and the challenges for the Group's major business lines: Domestic Markets, Corporate and Institutional Banking and International Financial Services.

2.b Works performed by the Financial Statements Committee and work approved by the Board of directors in 2018

Number of members	Meetings	Attendance rate
5	4	90%

Examination of the financial statements and financial information

The Financial Statements Committee:

- conducted quarterly reviews of the financial statements based on the documents and information provided by Executive Management and the work carried out by the Statutory Auditors;
- conducted quarterly analyses of the synthesis of consolidated results and annualised return on equity, as well as the results and ROE by business segment; examined the Group's consolidated balance sheet at 31 December 2017 and the changes that took place between that date and 30 June 2018. On that occasion, it was given an update on off-balance sheet commitments;
- examined the dividend distribution policy in view of the ECB recommendation concerning compliance with prudential and solvency rules;
- kept track of the changes in prudential requirements and reviewed changes in risk-weighted assets;
- examined the provisions for litigation on a regular basis;
- examined goodwill and proposed adjustments;
- conducted a detailed analysis of the composition of the Group's balance sheet;
- read the explanations relating to Credit Valuation Adjustment (CVA) adjustments;

> The Board:
>
> - examined and approved the results of the fourth quarter of 2017, full-year 2017 and the first three quarters of 2018;
> - examined trends in revenues and the cost/income ratio by business for each quarter. For each of the periods, the Board heard a summary of the work of the Financial Statements Committee and the findings of the Statutory Auditors;
> - heard the comments of the Financial Statements Committee on the accounting internal control report reviewed each quarter by the committee;
> - reviewed and approved a draft press release at each meeting devoted to results, and approved the report of the Board of directors in respect of 2017;
> - discussed changes in equity and the capital adequacy ratio with regard to the new prudential solvency regulations and new requirements imposed by the regulator.

- upon the review of the income statement, the committee heard the comments of the Group's Chief Financial Officer and senior executive in charge of accounting and financial reporting. Every quarter, it interviewed the Group's Chief Financial Officer, without the presence of the Executive Management. The Committee heard the comments and findings of the Statutory Auditors concerning the results for each quarter. It met with the Statutory Auditors, without the presence of the Executive Management or the Group's Chief Financial Officer, and asked the questions it considered necessary:

> The Board acknowledged the report of the discussions held by the Financial Statements Committee with the Statutory Auditors and the Group's Chief Financial Officer, without the presence of General Management.

- reviewed the accounting certification mechanisms as part of the internal control procedures;
- examined the section of the management report concerning the internal control procedures relating to the preparation and processing of accounting and financial information in respect of 2017; it recommended approval by the Board of directors.

> The Board approved the section of the management report on the preparation and processing of accounting and financial information in respect of 2017.

Ad hoc works performed by the Financial Statements Committee in 2018

Examination of the financial statements and financial information

- Each quarter, the Financial Statements Committee examined the report on audit control points flagged by Group entities in the context of certification of their financial statements. It analysed trends in the risk level observed for each of the thirty major accounting controls.
- The Financial Statements Committee reviewed the impact on the Group's consolidated financial statements of the first-time application of IFRS 9, which came into force on 1 January 2018. It was informed, on a quarterly basis, of the impacts of this new standard on the Bank's profit and loss account, as well as of work to make models used to calculate credit risk provisions more reliable.

> The Board was informed of the impacts on Group equity of the first-time application of IFRS 9, replacing IAS 39.

Relations with the Statutory Auditors

- The Financial Statements Committee received a written certificate of independence from each of the Statutory Auditors.
- It was informed of the amount of fees paid to the Statutory Auditors and reviewed the summary report on assignments not directly related to the statutory audit, without the presence of the Statutory Auditors. It authorised 4 assignments falling within the remit of non-prohibited services for which the Committee's prior authorisation is required.

2.c Works performed by the Financial Statements Committee and the Internal Control, Risk Management and Compliance Committee in their joint meetings, and work approved by the Board of directors in 2018

Number of members	Meetings	Attendance rate
9	2	88%

The committees:

- reviewed the ICAAP (Internal Capital Adequacy Assessment Process) report. They examined the Bank's assessment of its risks, and made sure that it had appropriate controls and the required capital to cover those risks;
- studied the nature and organisation of the joint work of the Finance and RISK Functions, including impairments and provisions, fair value measurement of financial instruments, stress tests, ICAAP processes and the Internal Liquidity Adequacy Assessment Process (ILAAP);
- examined the Statutory Auditors' audit plan;
- discussed whether the prices of the products and services proposed to customers are compatible with the risk strategy (CRD 4);
- were informed of the implementation of the Bank's action plan to close recommendations made by the ECB in its follow-up letter on its topical review of the implementation of BCBS 239;
- acknolwedged the results of BNP Paribas stress tests forwarded to the EBA and asked that the Board be kept informed of the final outcome for all European banks;
- reviewed the Global Systemically Important Bank notification system.

The Board:

- approved the Internal Capital Adequacy Assessment Process and its conclusions;
- was regularly informed of the development of negotiations conducted within the scope of class actions, and inquiries or investigations conducted by the regulatory and judicial authorities of several countries concerning transactions on foreign exchange markets;
- was informed about the global systemically important bank notification system;
- was informed of the final outcome of the EBA's stress tests.

2.d Works performed by the Internal Control, Risk Management and Compliance Committee and work approved by the Board of directors in 2018

Number of members	Meetings	Attendance rate
4	8	94%

Risks and liquidity

The Internal Control, Risk Management and Compliance Committee:

- continued to monitor the implementation of the organisation of the RISK Function which is intended to improve the operational efficiency of control mechanisms and procedures, most notably, those linked to cybersecurity and liquidity as well as the anticipation of risks, including those linked to regulations;
- reviewed trends in market, counterparty and credit risk and liquidity. It deliberated on the basis of information presented by the RISK Function. The Head of RISK answered the committee's questions on the various categories of risks during a meeting;
- examined the dashboard presented quarterly by the Head of RISK and proposed some changes to its presentation;
- was informed of any risk indicator thresholds or limits that had been exceeded and, where applicable, any action plans decided by Executive Management;
- reviewed the 2017 internal control report, including the report on operational risk, including IT and cybersecurity, permanent control and business continuity as well as the control of outsourced activities;
- reviewed the interim Operational Risk report;
- monitored the introduction of the action plan to expand the Risk Appetite Statement (RAS) with credit packages for specific sectors and businesses;
- acknowledged the follow-up letter on the ECB's operational risk mission;
- reviewed the RAS, its changes in relation to liquidity risk, banking book and operational interest rate risk and aggregate risk thresholds;
- examined and monitored the Group's liquidity risks and the liquidity policy implemented by Executive Management in view of market and regulatory changes;
- acknowledged the ECB's ongoing review of internal models (Targeted Review of Internal Model or TRIM);
- acknowledged the General Data Protection Regulation (GDPR) and its implementation (in particular, the introduction of a network of Data Protection Officers (DPO));
- reviewed the Group's cybersecurity programme and its deployment schedule;
- reviewed monitoring indicators relating to cyber risk on a quarterly basis enabling the Bank's exposure to security breaches to be measured;
- reviewed the risks arising from the Group's exposure in Turkey;

- examined the ILAAP report. It examined the tolerance threshold above which it may be deemed that the liquidity situation is compliant with the Bank's risk tolerance;
- decided whether the Group's compensation policy was compatible with its risk profile.

The Board:

- approved changes to the Group's RAS and aggregate risk thresholds and limits;
- examined, based on the RAS and the Committee Chairman's report, the Risk Dashboard presenting the indicators adopted for the different risk categories, as well as the risk governance, management and monitoring measures on a regular basis;
- was informed, where applicable, of any risk threshold or limit that had been exceeded, in accordance with the governance policy decided in 2016;
- was informed of the Committee's review of the ECB's follow-up letter on the Operational Risk Management topical review and the Bank's response letter;
- based on the Committee Chairman's report, acknowledged the Committee's work on Group risks;
- was regularly informed of trends in the cost of risk by business line and geographical area;
- approved the liquidity risk tolerance level and the policies, procedures and internal systems relating to liquidity risk;
- confirmed that the operational risk, permanent control and business continuity components of the internal control report had been forwarded to the ACPR.

Compliance, internal control, litigation and periodic control

The Internal Control, Risk Management and Compliance Committee:

- continued to monitor the implementation of the remediation plan initiated in 2014 on the US authorities' request, reflecting the commitments made by BNP Paribas to control activities carried out in US dollars;
- continued to monitor the outcome of the General Inspection review of remediation;
- examined the 2017 internal control report including the Compliance Risk Assessment report, the key compliance points across all business lines and geographical areas, and the periodic control report;
- reviewed the section of the management report on internal control and submitted it for the approval of the Board;
- examined the report on the assessment and monitoring of risks in 2017, in accordance with the provisions of the Decree of 3 November 2014 on the internal control of companies operating in the banking, payment services and investment services sector subject to the control of the ACPR. It assessed the effectiveness of the policies and systems in place;
- analysed the Compliance Function's interim report;
- discussed the main results of periodic control in 2017 and in the first half of 2018; it reviewed the results of the second wave of audits in entities with clearing operations in dollars;
- reviewed the General Inspection half-year report;
- reviewed, at each of its meetings, the list of ongoing legal disputes and proceedings, as well as the developments in each of the cases between meetings. It monitored the most significant legal disputes and group investigations and actions with regard to banks' foreign exchange market practices and their resolution;
- was informed of the modification requests and additional requests made by the regulators concerning the recovery and resolution plans;
- examined the annual update to the recovery plan and resolution documents, and recommended their approval by the Board; examined changes in French and European resolution regulations; and was informed of the complexities linked to the set-up of the Total Loss Absorbing Capacity (TLAC) and of the Minimum Requirement for own funds and Eligible Liabilities (MREL) mechanisms and the regulatory changes in progress;
- monitored implementation of the Volcker Rule and the updated programme for the certification process and the French law on the separation and regulation of banking activities;
- was informed as part of the certification process of the Group's compliance with Swap-Dealer, Foreign Account Tax Compliance (FATCA) and Qualified Intermediaries (QI) regulations;
- reviewed the MiFID 2 control framework and the controls implemented in 2018;
- acknowledged the follow-up letter subsequent to the ACPR's audit of the Bank's fulfilment of its obligations in terms of listing customers on, and deleting them from, the central register of refused cheques, the central "bank card" register and the national database of incidents of repayments of personal loans.

The Board:

- approved, based on the Committee Chairman's report, the internal control section of the 2017 management report;
- confirmed that the compliance and periodic control sections of the internal control report had been forwarded to the ACPR;
- reviewed the modifications made to the resolution documents, of which the updated version was submitted to the ECB;
- approved the recovery plan, of which the updated version was submitted to the ECB;
- was informed of the modifications to the bank resolution plan made by the European authorities;
- continued to monitor the deployment of the Remediation Plan;
- was informed of the progress of legal proceedings and disputes, as well as incidents and the amount of losses incurred for those incidents;
- heard the Committee Chairman on the monitoring of the implementation of the Volcker Rule and the French law on the separation and regulation of banking activities, reviewed the Volcker Group Policy, approved the update of the Volcker Rule compliance programme and took note of the range of policies, procedures and controls within each business line;
- heard the results of the work done based on a report drawn up for the assessment and monitoring of risks in 2017; confirmed that the report on the assessment and monitoring of risks had been forwarded to the ACPR;
- was informed by the Committee of the ACPR follow-up letter on the Bank's fulfilment of its obligations in terms of listing customers on, and deleting them from, the central register of refused cheques, the central "bank card" register and the national database of incidents of repayments of personal loans as well as of the Bank's response letter.

The Committee dedicated a meeting to interviewing the Heads of the RISK, Compliance, General Inspection and Legal Functions, without the presence of Executive Management and Business Line Management.

The Board:

- heard the report of the interviews.

2.e Works performed by the Corporate Governance, Ethics, Nominations and CSR Committee and works approved by the Board of directors in 2018

Number of members	Meetings	Interest rate
4	8	100%

Changes in the membership of the Board and its specialised committees

The Governance, Ethics, Nominations and CSR Committee:

- examined the expiry dates of the directors' terms of office and proposed that the Board ask the Shareholders' Annual General Meeting to renew the terms of directorships expiring in 2018, namely those of Mr Pierre-André de Chalendar, Mr Denis Kessler and Mrs Laurence Parisot;
- reviewed the situation of each director and asked the Board to appoint:
  - Mrs Monique Cohen as Chairwoman of the Corporate Governance, Ethics, Nominations and CSR Committee to replace Mrs Laurence Parisot,
  - Mrs Laurence Parisot as a member of the Remuneration Committee,
  - Mr Hugues Epaillard as a member of the Remuneration Committee and the CCIRC
- examined the situation of directors asked to take up corporate offices outside the Group, as provided for in the Suitability Policy;
- continued its review of the changes in the composition of the Board of directors and appointed an external consultant to continually identify candidates for independent directors;
- is responsible for selecting, following the resignation of Mrs Laurence Parisot, several candidates that it interviewed and then proposed the co-option of Mrs Rajna Gibson-Brandon to the Board. The appointment is subject to ratification by the Annual General Meeting on 23 May 2019.

The Board:

- proposed that the Shareholders' Annual General Meeting renew the terms of office of the Directors in question;
- appointed the directors proposed as members of the different Committees;
- co-opted Mrs Rajna Gibson-Brandon. The appointment is subject to ratification by the Annual General Meeting on 23 May 2019.

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Governance

The Governance, Ethics, Nominations and CSR Committee:

- examined, as part of a long-term review of the succession of executive corporate officers and taking into account the major transformation challenges within the banking sector, the best way to ensure the efficiency, balance, stability and visibility of governance in the interest of the Company and its shareholders.

  To this effect, it proposed that the Board submit an amendment to the Articles of association to the Annual General Meeting on 24 May 2018, which it approved. This amendment consists of raising the age limit of executive corporate officers by four years for the Chairman and by two years for the Chief Executive Officer, as well as allowing the Board of directors, and other executive corporate officers, to extend the age limit of the Chief Operating Officer by one year;
- examined and proposed that the Board reviews the Internal rules and the replacement of the three existing procedures (multiple directorships; conflicts of interest; identification, selection and succession of directors) by the Suitability policy for Members of the management body and Key function holders in accordance with recent regulatory changes. Thus, the amendments proposed comply with the Afep-Medef Code reviewed in June 2018, the EBA Guidelines published on 26 September and effective on 30 June 2018 and Ordinance No. 2017-1162 of 12 July 2017.
  - **(i)** The Committee proposed amending the Internal rules by specifying the duties relating to the selection of appointment of and succession plan for the Chairman, Members of the management body and Key function holders within the meaning of the EBA. In particular, it indicated to the Board that the Committee (i) will regularly examine the Suitability policy for Members of the management body and Key function holders in terms of selection of, appointment of and succession plan for effective directors, Chief Operating Officer(s), the Chairman and Key function holders defined in this policy and will formulate recommendations in this respect, (ii) will help with selections and appointments as well as the preparation of succession plans for the Chairman and the members of the Executive Management in accordance with the Suitability Policy;
  - **(ii)** The Committee has drafted the Suitability policy for Members of the management body and Key function holders. In particular it has defined the scope of Key function holders within the meaning of the EBA for BNP Paribas. The Committee will monitor the application of this Suitability policy by Executive Management for key functions in particular conducting continuous suitability and Fit and Proper assessments;
- was informed of the policy defined by Executive Management to put in place a Group Corporate Governance Policy applicable to all of the Group's subsidiaries which are consolidated prudentially regardless of whether or not they are governed within Europe. The Committee will be informed annually of the implementation of this policy and the result of the associated controls;
- took note of the minutes of the Nominations Committees of the subsidiaries with a balance sheet total of over EUR 5 billion;
- was informed of the content of exchanges between the Chairman of the Board of directors and investors about the Bank's governance;
- examined the report on corporate governance with respect to 2017; it recommended approval by the Board of directors.

> The Board:
>
> - unanimously approved the amendment of the Articles of association submitted to the vote of the Annual General Meeting on 24 May 2018;
> - approved the updated version of the Internal rules, the Suitability policy for Members of the management body and Key function holders within the meaning of the EBA Guidelines and the scope of key function holders within the meaning of these Guidelines;
> - approved the corporate governance report with respect to 2017.

Assessment of the Board of directors

The Corporate Governance, Ethics, Nominations and CSR Committee appointed an external expert advisor to perform this assessment on the Board.

Within this framework, the Committee:

- validated the content of the questionnaire proposed by the advisor prior to performing the assessment. The advisor conducted individual interviews with each of the directors based on an interview guide and their written responses to the questionnaire;
- examined the result of the 2017 assessment performed by the advisor. This highlighted that the BNP Paribas Board of directors observed the highest standards of the CAC 40. The advisor revealed (i) the satisfaction of directors on how the Board functions which they believe has improved during their terms of office, in particular thanks to the optimal relationship between the Chairman and the Chief Executive Officer and (ii) the Board's professionalism and commitment;
- proposed to the Board, following improvements identified by the advisor, to base the action plan on:
  - **(i)** continued formalisation of processes linked to the succession of executive corporate officers and discussion on the best means for the Board to monitor succession processes for key managers,
  - **(ii)** deepening directors' understanding of regional issues and the organisation of meetings with operational managers;
  - **(iii)** optimisation of the balance between issues relating to the Bank's business and those concerning compliance and regulations;
- prepared the internal assessment of the Board of directors for 2018.

> The Board approved the action plan following the 2017 assessment.

Code of conduct

The Corporate Governance, Ethics, Nominations and CSR Committee, in accordance with its powers, dedicated a session to examining the deployment of the Code of conduct within the subsidiaries and the Group's geographical areas. In particular, it was informed of the creation of a unit supporting victims of harassment and the review of the Bank's whistleblowing system in accordance with the new banking requirements.

The Board of directors examined the progress of the deployment of the Code of conduct within the Group's subsidiaries and geographical areas.

Directors' remuneration

In light of the Remuneration Committee's approval of the allocation of attendance fees for 2018, the Corporate Governance, Ethics, Appointment and CSR Committee examined the actual attendance of each director on the Committees and Board in 2018.

Social and Environmental Responsibility

As part of the extension of its powers, the Corporate Governance, Ethics, Nominations and CSR Committee examined the report on the Group's social and environmental responsibility and proposed some amendments and modifications.

The committee:

- reviewed the Bank's statement under the British Modern Slavery Act which aims to ensure that the Bank's business activity does not involve slavery or human trafficking. This statement is included in the Group's social and environmental responsibility report;
- in cooperation with the Remuneration Committee, it assessed the introduction of the CSR criteria allowing the indexation of variable remuneration of executive corporate officers to the Group's CSR policy in accordance with the Afep-Medef Code as amended in June 2018.

The Board of directors

- approved the Group's social and environmental responsibility report with the amendments proposed by the Committee;
- approved the Bank's statement in relation to the "*Modern Slavery Act*".

2.f Works performed by the Remuneration Committee and works approved by the Board of directors in 2018

Number of members	Meetings	Interest rate
3	4	100%

One member of the Remuneration Committee is also a member of the Internal Control, Risk Management and Compliance Committee promoting therein the work of the Committee on the adequacy of BNP Paribas' remuneration and risk policy, thus meeting the requirements of CRD 4.

The Remuneration Committee:

- examined the issues relating to the 2017 remuneration of Group employees whose responsibilities within the Bank have a significant impact on the Group's risk profile ("material risk takers"), after receiving detailed information on these regulated persons:
  - the final scope of regulated persons;
  - deferred payment rules and methods concerning the payment of variable remuneration to regulated persons, as well as the 2018 public report on the remuneration paid to material risk takers in respect of 2017;
  - the summary of the General Inspection report concerning the implementation of the review of material risk takers' remuneration in respect of 2017;
  - The recommendations of the ECB as part of its annual supervision of the implementation of the Group's remuneration policy and other one-off assignments;
- reviewed the list of the highest paid employees in 2017;
- reviewed the scope of material risk takers identified in respect of 2018;
- reviewed the criteria for determining those individuals' variable remuneration packages and was informed of the process for determining the remuneration of the relevant employees;
- checked the remuneration of the Head of Risk and Head of Compliance;
- reviewed the implementation of provisions of the Group's remuneration policy regarding issues relating to the management of conflicts of interest and the protection of clients' interests, as part of European Directive MiFID II which entered into force on 3 January 2018;
- examined the quantitative and qualitative performance criteria linked to the annual variable remuneration of executive corporate officers and proposed to the Board to approve the variable remuneration to be paid to them in respect of 2017;
- assessed the introduction of the CSR criteria allowing the indexation of variable remuneration of executive corporate officers to the Group's CSR policy in accordance with the Afep-Medef Code as amended in June 2018. In this context, in cooperation with the Corporate Governance, Ethics, Nominations and CSR Committee, it proposed that the Board include, starting with the performance from 2019, criteria linked to the Group's CSR performance to account for 10% in the annual variable remuneration of executive corporate officers, with the remainder determined 75% based on criteria linked to the Group's financial performance and 15% based on qualitative criteria.
- set the principles of the remuneration policy, actual remuneration, allowances and benefits in kind granted to the corporate officers and Heads of Risk and Compliance of Group subsidiaries that meet the threshold set by law and that have delegated these missions to the committee;
- reviewed the Say on Pay sheets for each executive corporate officer of BNP Paribas;
- reviewed the resolution relating to remuneration paid to material risk takers;
- examined the allocation of directors' fees and the amount paid to each director in respect of 2018 on the basis of an audit of Directors' actual attendance at Board and Committee meetings.

The Board:

- adopted the principles and criteria for remuneration of the corporate executive officers in respect of 2018;
- appraised and approved the committee's assessment of the quantitative and qualitative performance criteria linked to the annual variable remuneration of executive corporate officers in respect of 2017;
- ensured that the change in the variable remuneration of executive corporate officers was appropriate;
- approved the introduction, starting with the performance in 2019, of criteria linked to the Group's CSR performance to account for 10% in the annual variable remuneration of executive corporate officers, with the remainder determined 75% based on criteria linked to the Group's financial performance and 15% based on qualitative criteria. This decision will be referred to the Annual General Meeting of 23 May 2019;
- approved the Say on Pay sheets with respect to 2017 of executive corporate officers to be submitted for the vote of the Shareholders' Annual General Meeting;
- was informed by the Committee Chairman of the approach used to identify those employees whose professional activities have a significant impact on the Company's risk profile ("material risk takers") and the principles for their remuneration as proposed by Executive Management;
- heard the Committee Chairman's report on the appropriateness of the remuneration of the Head of Risk and Head of Compliance;
- approved the individual allocation of Directors' fees for 2018.

INTERNAL RULES OF THE BOARD OF DIRECTORS

PREAMBLE

The rules concerning:

- the Board of directors;
- the members of the Board of directors, including their rights and obligations;
- the Board of directors' Committees;

are set by the statutory and regulatory provisions, the Company's Articles of Association, and these rules (in addition to these Internal rules of the Board of directors, there is the Policy on the suitability of Members of the management body and Key function holders mentioned in 1.3 below).

The Board of directors also takes into account the French market guidelines concerning corporate governance and, in particular, the provisions of the corporate governance Code for listed companies published by the French employers' organisations *Association Française des Entreprises Privées* (Afep) and the *Mouvement des Entreprises de France* (Medef), hereinafter called the Afep-Medef Code, to which BNP Paribas (the "**Company**") refers.

The Board of directors is a collegial body that collectively represents all shareholders and acts in all circumstances in the corporate interests of the Company.

The Board of directors is assisted by specialised committees:

- financial statements Committee;
- internal control, risk management and compliance Committee;
- corporate governance, ethics, nominations and CSR Committee; and
- remuneration Committee;

as well as by any *ad hoc* committee.

PART ONE – THE BOARD OF DIRECTORS, COLLEGIAL BODY

ARTICLE 1. DUTIES OF THE BOARD OF DIRECTORS

The Board of directors discusses any question coming within the scope of its statutory and regulatory duties and contributes to promoting the corporate values aimed, in particular, to ensuring that the conduct of BNP Paribas' activities by its employees complies with the highest ethical requirements in order to protect the reputation of the Bank.

In particular and non-exhaustively, the Board of directors is competent in the following areas:

1.1. ORIENTATIONS AND STRATEGIC OPERATIONS

The Board of directors:

- determines BNP Paribas' s business orientations and supervises their implementation by the Executive Management;
- subject to the powers expressly allocated to the shareholders' meetings and within the limit of the corporate purpose, it handles any issue concerning the smooth running of the Company and settles by its decisions any matters concerning it;
- gives its prior approval with respect to all investment or disinvestment decisions (other than portfolio transactions) in an amount in excess of EUR 250 million, and any proposal to acquire or dispose of shareholdings (other than portfolio transactions) in excess of that threshold, submitted to it by the Chief Executive Officer. It is also regularly informed by the Chief Executive Officer of significant transactions which fall below this limit;

- gives its prior approval to any significant strategic operation which falls outside the approved orientations;
- promotes long-term value creation by BNP Paribas, taking the social and environmental challenges of BNP Paribas' activities into consideration.

1.2. CODE OF CONDUCT

The Board of directors and the Executive Management have developed a Code of conduct of BNP Paribas Group which defines the standards of conduct in line with the values and missions determined by the Bank. This Code, which shall be integrated by each business line and each employee, governs the actions of each employee and guides the decisions at every level of the organisation. For this purpose, the Board ensures the Executive Management implements this Code into business lines, countries and regions.

1.3. GOVERNANCE, INTERNAL CONTROL AND FINANCIAL STATEMENTS

The Board of directors:

- appoints the Chairman, the Chief Executive Officer (CEO) and, on the recommendation of the latter, the Chief Operating Officer(s) (COO);
- sets any limits to the powers of the Chief Executive Officer and of the Chief Operating Officer(s);
- examines the system of governance, which includes, in particular, a clear organisational structure with well defined, transparent and consistent sharing of responsibilities, efficient processes to identify, manage, monitor and report the risks to which the Company is or might be exposed to; it periodically assesses the efficiency of this governance system and ensures that corrective measures have been taken to remedy any failings;
- determines the orientations and controls their implementation by the actual managers of the monitoring measures in order to guarantee an effective and prudent management of the Company, including the segregation of duties in the organisation of the Company and the prevention of conflicts of interests;
- ensures the fulfilment of the obligations which are incumbent on it concerning internal control, and, in particular, examines, at least twice a year, the activity and the results of the internal control;
- approves the management report and the corporate governance report attached to it;
- carries out the controls and verifications which it deems appropriate;
- ensures that the Chief Executive Officer and/or Chief Operating Officer(s) implement a policy of non-discrimination and of diversity including gender balance in management bodies;
- ensures the implementation of process for preventing and detecting corruption and influence-peddling for which it receives all the information required for that purpose;
- examines and closes the financial statements and ensures their sincerity;
- reviews, at least once a year, the draft budgets and the drafts of the various statutory and regulatory reports which the Chief Executive Officer submits to it;
- prepares a suitability policy that defines the assessment of Members of the management body and of Key function holders (the "Policy on the suitability of Members of the management body and Key function holders"); the Board of directors (and its committees) apply this policy and revise it regularly to account in particular for any regulatory changes;
- gives its approval prior to the dismissal of the Heads of the following functions: Risk Management, Compliance, or the General Inspection.

1.4. RISK MANAGEMENT

The Board of directors:

- regularly examines, in connection with the strategy it has defined, the opportunities and risks, such as financial, legal, operational, social, and environmental risks, as well as the measures taken as a result;
- as such, approves and regularly reviews the strategies and policies governing the taking, management, monitoring and reduction of the risks to which the Company is or might be exposed to, including the risks caused by the economic environment. In particular, the Board of directors approves the global risk limits and puts into place a specific process organising its information and, as the case may be, the referral of the matter to it in the event these limits are exceeded.

1.5. COMMUNICATION

The Board of directors:

- ensures that the financial information disclosed to the shareholders and the markets is of high quality;
- controls the process of financial publication and communication, quality and reliability of the information intended to be published and communicated by the Company.

1.6. REMUNERATION

The Board of directors:

- allocates the directors' attendance fees;
- adopts and regularly reviews the general principles of the remuneration policy of the Group which relates, in particular, to the categories of staff including the risk takers, staff engaged in control functions and any employee who, given his overall income, is in the same remuneration bracket as those whose professional activities have an impact on the risk profile of the Group;
- decides, without prejudice to the powers of the Annual General Meeting pursuant to Articles L. 225-37-2 (*ex ante* vote on the remuneration policy) and L. 225-100 (*ex post* vote on the remuneration paid or allocated for the previous year) of the French Commercial Code, the remuneration of the managers who are corporate officers *(dirigeants sociaux)*, in particular their fixed and variable remuneration as well as any other means of remuneration or benefit in kind.

1.7. RESOLUTION

The Board of directors settles the preventive recovery plan of the institution, as well as the items necessary to establish the resolution plan communicated to the competent regulatory authorities.

ARTICLE 2. FUNCTIONING OF THE BOARD OF DIRECTORS

2.1. ORGANISATION OF THE MEETINGS

The Board of directors meets at least four times a year and as often as circumstances or BNP Paribas' interest requires this.

Notices of meetings may be communicated by the Secretary of the Board.

The Secretary of the Board prepares all of the documents necessary to the Board meetings and arranges to place all of the documentation at the disposal of the directors and other participants in the meetings.

An attendance register is kept, which is signed by the directors taking part in the meeting. It mentions the names of the directors considered as present.

The Board of directors' decisions are recorded in minutes by the Secretary of the Board which are entered into a special register, in accordance with the laws in force. The Secretary of the Board of directors is authorized to issue and certify copies or excerpts of the Board minutes. Each set of Board minutes must be approved at a subsequent Board meeting.

The decisions of the Board of directors are carried out either by the Chief Executive Officer, or a Chief Operating Officer, or by any special representative appointed by the Board of directors.

2.2. MEANS OF PARTICIPATION

Directors taking part in the meeting by videoconference (visioconference) or telecommunication means enabling their identification, guaranteeing their effective participation, transmitting at least the voices of the participants, and meeting, through their technical features, the needs of confidentiality, of continuous and simultaneous retransmission, with the exception of Board meetings closing out the financial statements and the annual report, shall be deemed to be present for the purpose of calculating both the quorum and the majority. The minutes state, as the case may be, the occurrence of any technical incidents if they disturbed the conduct of the meeting.

PART TWO – THE MEMBERS OF THE BOARD OF DIRECTORS

ARTICLE 3. COMPOSITION, INFORMATION AND SKILLS

3.1. CHAIRMAN OF THE BOARD OF DIRECTORS

3.1.1. Relations with the Company's other bodies and with parties outside the Company

In relations with the Company's other bodies and with parties outside the Company, the Chairman of the Board of directors alone has the power to act on behalf of the Board of directors and to express himself in its name, except in exceptional circumstances, and except where specific assignments or duties are entrusted by the Board of directors to another director.

The Chairman makes sure that he maintains a close and trusting relationship with Executive Management. He provides him with his assistance and his advice while respecting his executive responsibilities. He organises his activities so as to ensure his availability and put his experience at the Company's service. He contributes to promoting the values and image of the Company, both within the Group and externally.

Coordinating closely with Executive Management, he can represent the Group in its high level relationships, and particularly with major clients, public authorities and the institutions on national, European and international levels.

He ensures that the quality of relations with shareholders is maintained, in close coordination with the work of Executive Management in this area. He reports on this mission to the Board.

He ensures that principles of corporate governance are defined and implemented.

The Chairman is the custodian of the proper functioning of the Board of directors of BNP Paribas. As such:

- with the support of the corporate governance, ethics, nominations and CSR Committee, with the approval of the Board of directors and of the Annual General Shareholders' Meeting, where appropriate, he endeavours to build an efficient and balanced Board, and to manage replacement and succession plan processes related to the Board of directors and nominations on which it will have to opine;
- he can attend all committee meetings and can add any subject to the agenda of the latter which he considers to be relevant;
- he ensures that the directors have the documentation and information necessary to carry out their duties in a timely manner and in a clear and appropriate form.

3.1.2. Organisation of the work of the Board of directors

The Chairman organises and manages the work of the Board of directors in order to allow it to carry out all of its duties. He sets the timetable and agenda of Board meetings and convenes them.

He ensures that the work of the Board of directors is well organised, in a manner conducive to constructive discussion and decision-making. He directs the work of the Board of directors and coordinates its work with that of the specialised Committees.

He sees to it that the Board of directors devotes an appropriate amount of time to issues relating to the future of the Company and particularly its strategy.

The Chairman is kept regularly informed by the Chief Executive Officer and other members of the Executive Management of significant events and situations relating to the business of the Group, particularly those relating to: deployment of strategy, organisation, investment or disinvestment projects, financial transactions, risks, financial statements.

The Chief Executive Officer provides the Chairman with all information required under French law regarding the internal control report.

He may ask the Chief Executive Officer or any manager, and in particular, the heads of the control functions, for any information likely to assist the Board and its committees in the carrying out of their duties.

He may hear the Statutory Auditors in order to prepare the work of the Board of directors and of the financial statements' Committee.

3.2. DIRECTORS

They undertake to act in the corporate interest of BNP Paribas and to comply with all of the provisions of these Internal rules that are applicable to them, and more specifically the procedures of the Board of directors.

3.3. OTHER PARTICIPANTS

3.3.1. Non-voting director (censeurs)

The non-voting directors attend the meetings of the Board and of the specialised Committees in an advisory capacity.

3.3.2. Statutory Auditors

The Statutory Auditors attend the meetings of the Board and of the specialised Committees which examine or close the annual or interim financial statements and may attend the meetings of the Board and of the specialised committees when the Chairman of the Board considers it necessary.

3.3.3. Persons invited

The Board can decide to invite one or several persons to attend the meetings.

3.3.4. Representative of the Central Works Committee

The representative of the Central Works Committee attends the meetings of the Board in an advisory capacity.

3.3.5. Secretary of the Board

The Secretary of the Board is appointed by the Board and attends the meetings of the latter.

3.3.6. Heads of the control functions

If necessary, in the case of particular events affecting or likely to affect BNP Paribas, the heads of the control functions can report directly to the Board and, as the case may be, to its committees, to express their concerns without referring to the actual managers.

The individuals specified in point 3.3 are subject to the same rules of ethics, confidentiality and professional conduct as the directors.

3.4. ACCESS TO INFORMATION

3.4.1. Information and documentation

For the purpose of efficiently participating in the Board of directors' meetings and making enlightened decisions, each director may ask that the Chairman or the Chief Executive Officer communicates to him all documents and information necessary to perform his duties, if these documents are useful for making decisions and are related to the Board of directors' powers.

Requests are sent to the Secretary of the Board of directors who informs the Chairman thereof.

When the Secretary of the Board of directors considers this preferable, for reasons of convenience or confidentiality, the documents thus placed at the disposal of the directors as well as of any person attending the meetings of the Board are consulted through the Secretary of the Board or through the competent employee of the Group.

3.4.2. Systems

The placing at disposal of the directors or of any person attending the Board meetings of all of the documentation with a view to meetings of the Board, may be done by any means, including dematerialised. In this case, all the measures of protection considered necessary are taken to protect the confidentiality, the integrity and the availability of the information and each member of the Board or any person who has received the documentation is responsible not only for the systems and media thus placed at disposal but also for their access.

3.5. TRAINING, INDIVIDUAL AND COLLECTIVE SKILLS

The directors of BNP Paribas possess, both individually and collectively, the expertise, experience, skills, understanding and personal qualities necessary, notably in terms of professionalism and integrity, to properly perform their duties in connection with each of the significant activities of BNP Paribas and guaranteeing efficient governance and supervision.

The directors shall ensure that their knowledge is kept updated in compliance with the Policy on the suitability of Members of the management body and Key function holders.

The directors elected by the employees benefit from time devoted to training determined by the Board. At the end of the training, the training centre chosen by the Board must issue a certificate of regular attendance, which the director elected by the employees must remit to the Secretary of the Board.

ARTICLE 4. OBLIGATIONS

4.1. HOLDING AND KEEPING OF BNP PARIBAS SHARES

Every director appointed by the General Shareholders' Meeting must personally hold 1,000 shares. The director must hold all of the shares at the expiry of the period of payment period of the directors' attendance fees, corresponding to twelve months of directorship. At the expiry of this period, every director shall make sure to keep the minimum number of BNP Paribas' shares throughout his term of office.

The directors undertake not to engage in any individual hedging or insurance strategies to cover their risk on such shares.

4.2. ETHICS - CONFIDENTIALITY

4.2.1. Ethics

4.2.1.1. Availability and regular attendance

The members of the Board of directors shall devote the time and the effort necessary to carry out their duties and responsibilities, in compliance with the Policy on the suitability of Members of the management body and Key function holders.

The directors elected by the employees benefit from a preparation time determined by the Board.

4.2.1.2. Independence and loyalty

Every member of the Board of directors shall at all times maintain his or her independence of mind, in compliance with the Policy on the suitability of Members of the management body and Key function holders.

He shall act with loyalty towards the other directors, shareholders and BNP Paribas.

He shall refuse any benefit or service liable to compromise his independence.

4.2.1.3. Duty of vigilance

Every member of the Board of directors is bound by a duty of vigilance with respect to the keeping, use and, as the case may be, the return of the systems, documents and information placed at disposal.

4.2.2. Confidentiality

Any director and any person participating in the work of the Board is bound by an obligation of absolute confidentiality about the content of the discussions and decisions of the Board and of its committees as well as the information and documents which are presented therein or which are provided to them, in any form whatsoever.

Except as provided by law, he is prohibited from communicating to any person outside of the Board of directors any information that has not been made public by BNP Paribas.

4.3. ETHICAL CONDUCT – LIMITATION ON DIRECTORSHIPS - CONFLICTS OF INTERESTS – PERSONAL DECLARATIONS

4.3.1. Ethical conduct

If directors have any questions related to ethical conduct, they may consult the head of the Group Compliance Function.

The legislation relating to insider trading applies particularly to directors both in a personal capacity and when carrying out their duties within companies that hold shares in BNP Paribas. They are required, in particular, to respect the legal requirements governing the definition, communication and exploitation of privileged information, the principal provisions of which are communicated to them when they take directorship.

Directors can only deal in securities of BNP Paribas on a personal basis during the period of six-weeks beginning on the day after the publication of the quarterly and annual financial statements, or after the publication of a press release on the Company's running, unless they are in possession during that period of information that puts them in the position of an insider with respect to the stock exchange regulations.

Directors shall refrain from any transactions that could be considered as speculative, and in particular from leveraged purchases or short sales, or short-term trading.

The director as well as the persons with close connections with him are under the obligation to declare to the French Financial Markets Authority *(Autorité des Marchés Financiers – AMF)*, which ensures the publication thereof, and to BNP Paribas the transactions that they execute in BNP Paribas shares and the financial instruments related thereto.

4.3.2. Limitation on directorships

The director complies with the statutory and regulatory provisions which are applicable to him or her, or which are applicable to BNP Paribas, concerning limitation on directorships, as well as the Policy on the suitability of members of the Management body and Key function holders.

4.3.3. Conflicts of interests

The director complies with the applicable statutory and regulatory provisions regarding conflicts of interests – in particular the so-called "related-party agreements" *(conventions réglementées)* regime as well as with the Policy on the suitability of members of the Management body and Key function holders.

Whatever the circumstances, in the event of breach of the obligations with respect to conflict of interests by a director, the Chairman of the Board of directors shall take all the statutory measures necessary in order to remedy it. He can, furthermore, keep the relevant regulators informed of such acts.

4.3.4. Personal declarations

The director undertakes to inform the Secretary of the Board as soon as possible of any change in his personal situation (change of address, appointment, directorships, duties carried out, or criminal, civil, or administrative convictions, etc.).

In particular, and in compliance with the Policy on the suitability of Members of the management body and Key function holders, the director shall inform, as soon as possible, the Chairman of the Board of directors of any criminal or civil conviction, management prohibition, administrative or disciplinary sanction, or measure of exclusion from a professional organisation, as well as any proceedings liable to entail such sanctions against him or her, any dismissal for professional misconduct, or any dismissal from a directorship of which he or she may be the subject. Similarly, the director informs the Chairman of the Board of directors of any criminal or civil order entered against it, administrative or disciplinary sanction or measure of exclusion from a professional organisation, as well as of any Court-ordered reorganisation or liquidation measure of which a company of which he is the manager, shareholder or partner is the subject or would be liable to be the subject.

ARTICLE 5. REMUNERATION OF DIRECTORS AND NON-VOTING DIRECTORS *(CENSEURS)*

The overall amount of the directors' attendance fees is determined by the General Shareholders' Meeting.

The individual amount of the attendance fees is determined by the Board of directors pursuant to a proposal by the remuneration Committee. It comprises a predominant variable portion based on actual participation in meetings, regardless of the means. Directors residing abroad receive an increased amount, except where they may participate in meetings of the Board of directors by videoconference or telecommunications means.

Actual participation in the Committees entitles committee members to an additional attendance fee, the amount of which may differ depending on the Committees. Committee members receive this additional attendance fee for their participation in each different Committee. The Chairmen of Committees receive an increased additional fee.

The remuneration of the non-voting directors is determined by the Board of directors pursuant to a proposal of the Remuneration Committee.

PART THREE – THE BOARD OF DIRECTORS' SPECIALISED COMMITTEES

To facilitate the performance of their duties by BNP Paribas' directors, specialised committees are created within the Board of directors.

ARTICLE 6. COMMON PROVISIONS

6.1. COMPOSITION AND SKILLS

They consist of members of the Board of directors who do not carry out management duties within the Company. They include the required number of members who meet the criteria required to qualify as independent, as recommended by the Afep-Medef Code. The members of the committees have the knowledge and skills suited to carry out of the missions of the committees in which they participate.

The remunerations Committee includes at least one director representing the employees.

Their remits do not reduce or limit the powers of the Board of directors.

The Chairman of the Board of directors sees to it that the number, missions, composition, and functioning of the committees are adapted at all times to the statutory and regulatory provisions, to the Board of directors' needs and to the best corporate governance practices.

By decision of the Board, the internal control, Risk management and compliance Committee (CCIRC), the remunerations Committee (RemCo), the corporate Governance, ethics, nominations and CSR Committee (CGEN) may, in accordance with the provisions of Article L. 511-91 of the French Monetary and Financial Code *(Code Monétaire et Financier)* ensure their missions for the companies of the Group under the supervision of the regulator on a consolidated or sub-consolidated basis.

6.2. MEETINGS

The Committees shall meet as often as necessary.

6.3. MEANS PLACED AT THE DISPOSAL OF THE COMMITTEES

They may call upon outside experts when needed.

The Chairman of a Committee may ask to hear any officer within the Group, regarding issues falling within this Committee's jurisdiction, as defined in the present Internal rules.

The Secretary of the Board prepares all of the documents necessary to the meetings of the specialised Committees and organises the placing of the documentation at the disposal of the directors and other participants in the meetings.

This documentation can be placed at disposal by any means, including dematerialised. In this case, all the measures of protection considered necessary are taken for the purposes of protecting the confidentiality, integrity and the availability of the information and each member of the specialised Committee concerned or any person who has received the documentation is responsible not only for the systems and media and their provision but also for their access.

6.4. OPINIONS AND MINUTES

They express opinions intended for the Board of directors. The Chairmen of committees, or in case of their impediment another member of the same committee, present a verbal summary of their work at the next Board of directors' meeting.

Written reports of Committees' meetings are prepared by the Secretary of the Board and communicated, after approval at a subsequent meeting, to the directors who so request.

ARTICLE 7. THE FINANCIAL STATEMENTS COMMITTEE

7.1. MISSIONS

In accordance with the provisions of the French Commercial Code, the Committee ensures the monitoring of the issues concerning the preparation and verification of the accounting and financial information.

7.1.1. Monitoring of the process of preparation of the financial information

The Committee is tasked with analysing the quarterly, half-yearly and annual financial statements issued by the Company in connection with the closing of financial statements and obtaining further explanations of certain items prior to presentation of the financial statements to the Board of directors.

The Committee shall examine all matters relating to these accounts and financial statements: the choices of accounting principles and policies, provisions, analytical results, prudential standards, profitability indicators, and all other accounting matters that raise methodological issues or are liable to give rise to potential risks.

It makes, as the case may be, recommendations, in order to ensure integrity of the elaboration process of the financial information.

7.1.2. Monitoring of the efficiency of the internal control systems and of risk management concerning accounting and financial matters

The Committee shall analyse, at least twice a year, the summary of the operations and the results of the internal accounting and financial control, as well as those originate from controls on the elaboration process and the processing of accounting, financial and extra-financial information, based on the information communicated to it by the Executive Management. It shall be briefed of incidents revealed by the accounting and financial internal control, reported on the basis of the thresholds and criteria defined by the Board of directors and shall report on its findings to the Board of directors.

It is informed by the Chairman of the Board of directors of any possible failure to implement corrective measures decided within the framework of the accounting and financial internal control system that has been brought to his direct knowledge by the head of periodic control and reports on its findings to the Board of directors.

7.1.3. Monitoring of the statutory auditing of the annual financial statements and of the consolidated financial statements by the Statutory Auditors as well as of the independence of the Statutory Auditors

The Committee shall steer the procedure for selection of the Statutory Auditors, express an opinion on the amount of fees charged for conducting the legal auditing engagements and report to the Board of directors on the outcome of this selection process.

It shall review the Statutory Auditors' audit plan, together with their recommendations and their monitoring.

It shall be notified on a yearly basis of the amount and breakdown of the fees paid by the BNP Paribas Group to the Statutory Auditors and the networks to which they belong, calculated using a model approved by the Committee. It shall ensure that the amount or the portion of the audit firms or the networks' revenues that BNP Paribas represents is not likely to compromise the Statutory Auditors' independence.

Its prior approval shall be required for any engagement entailing total fees of over EUR 1 million (before tax). The Committee shall approve, *a posteriori*, all other engagements, based on submissions from the Group Finance. The Committee shall validate the Group Finance's fast-track approval and control procedure for all "non-audit" engagements entailing fees of over EUR 50,000. The Committee shall receive, on a yearly basis from the Group Finance, a report on all "non-audit" engagements carried out by the networks to which the Group's Statutory Auditors belong.

It receives from the Statutory Auditors a written report on their main observations concerning the weaknesses of internal control and reviews it, as well as most significant recommendations issued in the framework of their mission and reviews it. It takes notes of the most significant statements and recommendations issued by the internal audit in the framework of their missions regarding accounting and financial information.

Each Statutory Auditor shall report on a yearly basis to the Committee on its internal control system for guaranteeing its independence, and shall provide a written statement of its independence in auditing the Group.

The Committee accounts for the statements and conclusions of the *Haut Conseil des Commissaires aux comptes* (H3C) resulting from the controls provided by the H3C in the professional activity of Statutory Auditors.

At least twice a year, the Committee shall devote part of a meeting to a discussion with the team of Statutory Auditors, without any member of the company's Executive Management being present.

The Committee meets in the presence of the team of Statutory Auditors, to review quarterly, half-yearly and annual financial statements.

However, the Statutory Auditors shall not attend all or part of Committee meetings dealing with their fees or their re-appointment.

The Statutory Auditors shall not attend all or part of Committee meetings dealing with specific issues that concern a member of their staff.

Except in the event of exceptional circumstances, the files containing the quarterly, half-yearly and annual results and financial statements shall be sent to Committee members at least three days prior to the Committee meetings.

Where questions of interpretation of accounting principles arise in connection with quarterly, half-yearly and annual results, and involve choices with a significant impact, the Statutory Auditors and Finance Group shall submit, on a quarterly basis, a memorandum to the Committee analysing the nature and significance of the issues at play, presenting the pros and cons of the various possible solutions and explaining the rationale for the choices ultimately made.

They present, at least twice a year, a note on the works on certification of the financial statements. Based on it, the Committee reports to the Board on the results of this mission and on the way this mission has contributed to the integrity of the financial information and on his own role in it.

7.2. CHAIRMAN'S REPORT

The Committee shall review that part of the draft of the Chairman's report on internal control procedures relating to the preparation and processing of accounting and financial information.

7.3. HEARINGS

With regard to all issues falling within its jurisdiction, the Committee may, at its initiative, hear the heads of finances and accounting of the Group, as well as the head of Asset/liability management.

The Committee may ask to hear the head of Finances Group with regard to any issue within its jurisdiction, for which he may be held liable, or the Company's management may be held liable, or that could call into question the quality of accounting and financial information disclosed by the Company.

ARTICLE 8. THE INTERNAL CONTROL, RISK MANAGEMENT AND COMPLIANCE COMMITTEE

8.1. MISSIONS

8.1.1. Missions concerning the global risk strategy

The Committee advises the Board of directors on the adequacy of the global strategy of the Company and the overall current and future risk appetite. It assists the Board of directors when the latter verifies the implementation of this strategy by the actual managers and by the head of risk management.

For this purpose, the Committee examines the key orientations of the Group's risk policy, including social and environmental orientations, based on measurements of the risk and profitability of the operations reported to it, in accordance with the regulations in force, as well as any specific issues related to these matters and methods.

In the event that a global risk limit is exceeded, a procedure to refer the matter to the Board of directors is provided for: the Executive Management informs the Chairman of the Committee, who can decide to convene the Committee or to request the convening of the Board of directors.

8.1.2. Missions concerning the examination of the prices of the products and services proposed to customers

In the framework of its mission and according to the terms it shall define, the Committee examines whether the prices of the products and services proposed to customers are compatible with the risk strategy. Where prices do not properly reflect the risks, it presents to the Board of directors an action plan to remedy this.

8.1.3. Missions concerning remuneration

Without prejudice to the missions of the remunerations Committee, the Risk committee examines whether the incentives provided for by the policy and the remuneration practices of the Company are compatible with its situation with respect to the risks to which it is exposed, its capital, its liquidity and the probability and the spreading over time of the expected profits.

To carry out this mission, the Chairman of the Committee shall attend the Remunerations Committee's meeting and presents to it the position upheld.

8.1.4. Missions concerning internal control and compliance

The Committee also reviews all compliance-related issues, particularly those in the areas of reputation risk or professional ethics.

The Committee analyses the risk measurement and monitoring report. Twice a year it examines the internal control operations and findings (excluding accounting and financial internal control, which is the responsibility of the Financial Statements Committee) based on the information provided to it by Executive Management and the reports presented to it by the heads of permanent control, compliance and periodic controls. It reviews the Company's exchanges of correspondence with the Secretariat General of the Prudential Control and Resolution Authority (*Autorité de Contrôle Prudentiel et de Résolution* – ACPR).

The Committee is briefed on incidents revealed by internal control that are reported on the basis of the thresholds and criteria defined by the Board of directors and reports on its findings to the Board of directors.

It analyses the status of recommendations made by the General Inspection unit that were not implemented. It is informed by the Chairman of the Board of directors of any possible failure to implement corrective measures decided within the framework of the internal control, of which it would have been informed directly by the head of periodic control and reports on its findings to the Board of directors.

8.2. HEARINGS

It proceeds with the hearing, excluding the presence of the Executive Management, of the heads of the Group control functions (General Inspection, Compliance, Risk and Legal).

It presents the Board of directors with its assessment concerning the methods and procedures employed.

It expresses its opinion concerning the way these functions are organised within the Group and is kept informed of their work programme.

8.3. ACCESS TO THE INFORMATION

The Committee has all the information about the situation of the Company with respect to risks. It may, if this is necessary, use the services of the head of risk management or of outside experts.

8.4. MEETINGS COMMON TO THE FINANCIAL STATEMENTS COMMITTEE AND THE INTERNAL CONTROL, RISK MANAGEMENT AND COMPLIANCE COMMITTEE

The financial statements Committee and the internal control, risk management and compliance Committee shall meet at the request of the Chairman of the Internal control, risk management and compliance Committee, or at the request of the Chairman of the financial statements Committee or at the request of the Chairman of the Board of directors.

In that context, the members of these Committees:

- shall be briefed of the mission plan of the General Inspection and of the audit plan of the Statutory Auditors and shall prepare the work of the Board of directors in assessing the risk policies and management systems;
- deal with common subjects concerning the risks and financial impacts policy (including provisioning). They carry out, in particular, a systematic review of the risks that can in the future have a significant impact on the financial statements.

This meeting shall be chaired by the Chairman of the financial statements Committee.

ARTICLE 9. THE CORPORATE GOVERNANCE, ETHICS, NOMINATIONS AND CSR COMMITTEE

9.1. MISSIONS CONCERNING CORPORATE GOVERNANCE

The Committee is tasked with monitoring corporate governance issues. Its role is to help the Board of directors to adapt corporate governance practices within BNP Paribas and to assess its functioning.

It ensures the follows up on a regular basis of the evolution in the governance disciplines at the global, European and national levels. At least once a year, it presents a summary thereon to the Board of directors. It selects measures that are suitable for the Group and which are likely to bring its procedures, organisation and conduct in line with best practice in this area.

It examines the draft report on corporate governance and all other documents required by applicable laws and regulations.

The Committee is in charge of the follow up of questions related to the social and environmental responsibility ("CSR"). For this purpose, it handles more specifically the Group's contribution to sustainable economic development, in particular by an ethical financing of the economy, by promoting the development and the commitment of the employees, by the protection of the environment and the fight against climate change, as well as the positive impact of the Group in the society.

9.2. CODE OF CONDUCT

The Committee carries out regular monitoring of the update of BNP Paribas Group's Code of conduct.

9.3. MISSIONS CONCERNING THE IDENTIFICATION OF, SELECTION OF, AND SUCCESSION PLAN FOR DIRECTORS, COMMITTEE MEMBERS, AND NON-VOTING DIRECTORS (CENSEURS)

For the identification of, selection of, and succession plan for the directors, the Committee applies the principles and procedure described in the Policy on the suitability of Members of the management body and Key function holders. The Committee regularly reviews this policy and proposes any amendments it deems advisable to the Board of directors.

The Committee sets an objective to achieve with respect to gender balance on the Board of directors. It draws up a policy aimed at achieving this objective. This objective and this policy, once set, are approved by the Board of directors.

As the case may be, the Committee proposes to the Board of directors the appointment of the non-voting directors.

9.4. MISSIONS CONCERNING THE ASSESSMENT OF THE BOARD OF DIRECTORS

The Committee assesses periodically, and at least once a year, the balance and diversity of the Board in compliance with the Policy on the suitability of Members of the management body and Key function holders.

Furthermore, an assessment of the Board of directors is made by a firm of external expert advisors every three years.

9.5. MISSIONS CONCERNING THE SELECTION OF, APPOINTMENT OF, AND SUCCESSION PLAN FOR THE CHAIRMAN, MEMBERS OF EXECUTIVE MANAGEMENT, AND KEY FUNCTION HOLDERS

The Committee periodically examines the Policy on the suitability of Members of the management body and Key function holders regarding the selection of, appointment of, and succession plan for the executive officers, the Chief Operating Officer(s), the Chairman, and the Key function holders as defined in this Policy, and makes recommendations in the matter.

The Committee contributes to the selection and appointment of, as well as the establishment of succession plans for, the Chairman and members of the Executive Management, pursuant to the Policy on the suitability of Members of the management body and Key function holders.

With regard to the key function holders, it ensures that the Policy on the suitability of members of the Management body and Key function holders is applied by Executive Management.

9.6. MISSIONS CONCERNING THE ASSESSMENT OF THE CHAIRMAN, CHIEF EXECUTIVE OFFICER, AND CHIEF OPERATING OFFICER(S)

The Committee assesses the action of the Chairman.

It makes an assessment of the performance of the Chief Executive Officer and of the Chief Operating Officer(s) in the light of the strategic directions of the business established by the Board of directors and taking into consideration their capacities for anticipation, decision, organisation and exemplarity.

9.7. MISSIONS CONCERNING THE INDEPENDENCE OF THE DIRECTORS

The Committee is tasked with assessing the independence of the directors, within the meaning of the Afep-Medef Code, and reporting its findings to the Board of directors.

9.8. MISSIONS CONCERNING THE GENERAL BALANCE OF THE BOARD OF DIRECTORS

The Committee ensures that the Board of directors is not dominated by one person or, a small group of persons in a manner that is detrimental to the interests of the Company. For this purpose, it applies the Policy on the suitability of Members of the management body and Key function holders.

ARTICLE 10. THE REMUNERATION COMMITTEE

The Committee prepares the decisions that the Board of directors approves concerning remuneration, in particular that which has an effect on risk and the management of risks.

The Committee makes an annual examination:

- of the principles of the remuneration policy of the Company;
- of the remuneration, allowances and benefits of any kind granted to the corporate officers of the Company;
- of the remuneration policies of the categories of staff, including the executive managers, risk takers, and staff engaged in control functions and any employee, who given his overall income, is in the same remuneration bracket as those whose professional activities have a material impact on the risk profile of the Company or of the Group.

The Committee directly controls the remuneration of the head of risk management and of the head of compliance.

Within the framework of the missions described above, the Committee prepares the work of the Board of directors on the principles of the remuneration policies, in particular concerning Group staff whose professional activities have a material impact on the Group's risk profile, in accordance with the regulations in force.

It is tasked with studying all issues related to the personal status of the corporate officers, and in particular the remuneration, the amount of retirement benefits and the allotment of subscription or purchase options to the Company's shares, as well as the provisions governing the departure of the members of the Company's management or representational bodies.

It examines the conditions, the amount and the distribution of the subscription or purchase stock option plans. Similarly, it examines the conditions for the allotment of free shares.

With the Chairman, it is also within its remit to assist the Chief Executive Officer with any matter relating to the remuneration of senior executives that the latter might submit to it.

GUIDELINES ON THE ASSESSMENT OF THE SUITABILITY OF MEMBERS OF THE MANAGEMENT BODY AND KEY FUNCTION HOLDERS

I. Background and definitions

a. Background

The purpose of the Policy on the suitability of Members of the management body and Key function holders is, while complying with the legal and regulatory provisions applicable to the Company, to specify and detail the procedures for implementing the provisions of the Internal rules and of the regulations applicable to BNP Paris in the French Monetary and Financial Code (hereinafter "**CoMoFi**"), the European Banking Authority ("**EBA**") Guidelines on the assessment of the suitability of Members of the management body and key function holders (the "**Fit and Proper Guidelines**") published on 26 September 2017, and on Internal Governance, from the comply or explain *process* (defined below).

Pursuant to these provisions, these guidelines cover the following topics:

II. Identification of, selection of, and succession plan for Members of the management body and key function holders:

- **a.** Identification of, selection of, and succession plan for directors,
- **b.** Identification of, selection of, and succession plan for the Chief Executive Officer and Chief Operating Officer(s),
- **c.** Identification of, selection of, and succession plan for Key function holders;

III. Independence of mind and management of conflicts of interest of the members of the management body:

- **a.** General principles,
- **b.** Cases of conflicts of interests,
- **c.** Management of conflicts of interests;

IV. Compliance with the rules on limitation on directorships and on availability of the Members of the management body:

- **a.** Compliance with rules when appointing a member of the management body,
- **b.** Compliance with rules while holding directorship as a Members of the management body;

V. Good repute, honesty, and integrity of the Members of the management body;

VI. Diversity of the Members of the management body and collective competence of the Board of directors;

VII. Induction and training of the Members of the management body.

These guidelines are approved by the Board of directors. Updates shall also be submitted for approval to the Board of directors.

b. Definitions

Members of the management body mean the directors, the Chief Executive Officer, and the Chief Operating Officer(s).

Key function holders means, for the purposes of the Fit and Proper Guidelines, the Chief Financial Officer, the Head of Compliance, the Head of Risk and the Head of the General Inspection, the Head of Legal, the Head of Human Resources, and the individuals to whom the Company has decided to confer the title of Deputy Chief Operating Officers.

Fit and Proper means the assessment conducted by BNP Paribas on the collective suitability of the Board and of the relevant individuals with regard to the following criteria:

- knowledge, skills and experience;
- good repute, honesty, and integrity;
- independence of mind;
- compliance with the rules on limitation on directorships and on availability.

Comply or explain process means the procedure in the Single Supervisory Mechanism by virtue of which the European Central Bank ("**ECB**") and the competent national authorities announce their intention to comply, fully, partially, or not at all, with the guidelines issued by that authority.

Company means BNP Paribas.

CGEN means the Governance, Ethics, Nominations and CSR Committee of BNP Paribas.

SCA means the Secretariat of the Board of directors of BNP Paribas.

II. Identification of, selection of, and succession plan for Members of the management body and Key function holders

a. Identification of, selection of, and succession plan for directors

The CGEN is tasked with the identification of the persons that are likely to be appointed as directors, regardless of their role on the Board of directors, to establish and to maintain at all times a list of these persons, which will be periodically monitored by the CGEN, without precisely determining the circumstances requiring their nomination to the Board of directors.

Identification by the CGEN of the persons likely to be appointed as directors

The CGEN shall identify and recommend to the Board of directors candidates suitable for the non-executive directorship of director, with a view to proposing their candidacy to the General Meeting. In the determination of the potential candidates, the CGEN assesses the balance of skills, experience, diversity, as well as the integrity and the capacity of understanding the stakes and the risks, both personal and collective, of the members of the Board. It ensures, furthermore, that the candidates are able to act objectively, critically and independently, notably with respect to other directorships they hold, that they have the courage necessary to express their thoughts and their judgements, sufficient availability to have a strong commitment in their duties and the objectivity indispensable for their directorship and, lastly, the desire to protect the interests of the Company and ensure its proper running.

The CGEN specifies the missions and the qualifications necessary for the duties to be carried out within the Board of directors and calculates the time to be devoted to such duties.

For the purposes of identifying the candidate, the CGEN,

- on one hand, mandates, if it wishes so, one or several specialised agencies in the research for independent directors with the meaning of the provisions provided in Afep-Medef Code; this or these specialised agencies are selected further to a tender organised in coordination with the SCA;
- on the other hand gathers inputs on this from other Board members.

Upon receipt of a proposal, the CGEN conducts a careful examination of the provisions of these guidelines as well as on the following criteria based on both personal and collective skills:

- knowledge and skill in requested areas, based on experience and the ability to understand the issues and risks of key activities for the Bank, including social and environmental issues, enabling directors to make informed and effective decisions;
- courage, in particular to express opinions and make judgments, enabling directors to remain objective and independent;
- availability, i.e. sufficient time for the director to dedicate to his directorship and related training, and the assiduity, which allow for the necessary detachment and promote directors' commitment and sense of responsibility regarding the exercise of their directorship;
- loyalty, which fosters the director's commitment to the Company and to their duties within the Board, which collectively represents the shareholders;
- director's proper understanding of the company's culture and ethics;
- good repute and propriety: a person should not be considered of good repute and meeting the propriety criterion if his or her personal or business conduct gives rise to any material doubt about his or her ability to ensure his or her directorship as independent director.

The CGEN ensures the regular updating of the list of persons that are likely to be selected, and, once a year, reports to the Board the work performed in order to identify the persons that are likely to be appointed directors so that the Board can deliberate on it.

As appropriate, the CGEN shall identify those individuals likely to be selected for the non-executive directorship of Chairman in consideration of the criteria set out above.

Selection by the Board of directors of the persons likely to become members of the Board

When the Board has to decide the appointment of a new member, the CGEN decides upon the submission of the candidacy to the Board in order, if the Board decides so, to propose such candidacy to the General Meeting. First, it shall communicate to the Chairman of the Board the name of the person who is likely to be appointed setting out the reasons for its proposal. The Chairman of the Board of directors contacts the relevant person and, in the case of an agreement with this person, asked the SCA to review the situation of the person in accordance with the above provisions. The candidate chosen is received by the Chairman of the CGEN and the Chairman of the Board.

A selection for the non-executive directorship of Chairman of the Board of directors is submitted to the Chairman of CGEN so that this latter may contact the relevant candidate.

If the review and interview regarding the duties of both director and Chairman of the Board of directors are deemed to be satisfactory, the CGEN can then propose to the Board of directors to adopt the proposal for the submission of the candidacy.

The SCA can ask the candidates for any document required for its review, which it will retain pursuant to legal and regulatory provisions on personal data.

For specialised committees, the CGEN makes recommendations to the Board of directors on the appointment of the members in cooperation with the Chairman of the relevant Committee, and of the Chairmen of the Committees when they are to be renewed.

Succession plan for directors and review of the composition of the Board

The CGEN is responsible for examining the provisions allowing for the succession of the directors as well as, where applicable, the Chairman.

Once a year, the SCA, under the responsibility of the CGEN, reviews the composition of the Board of directors in accordance with the provisions relating to the identification of persons likely to become members of the Board of directors. The CGEN presents to the Board of directors the outcome of such review, which is subject to Board's deliberation.

b. Identification of, selection of, and succession plan for the Chief Executive Officer and Chief Operating Officer(s)

The Board of directors appoints the Chief Executive Officer and, on the recommendation of the latter, the Chief Operating Officer(s), and sets any limits to their powers.

For this purpose, acting jointly with the Chairman, the CGEN puts forward recommendations for the selection of the Chief Executive Officer for consideration by the Board, and, acting on recommendation of the Chief Executive Officer, it puts forward recommendations for the selection of the Chief Operating Officer(s).

To identify the candidate, the CGEN conducts a careful examination of his or her candidacy in consideration of the provisions of this policy as well as the following criteria:

- knowledge and skill in requested areas, based on experience and ability to understand the issues and risks of key activities for the Bank, including social and environmental issues, enabling them to make informed and effective decisions;
- courage, in particular to express opinions and make judgements, enabling directors to remain objective and independent;
- availability, i.e. the sufficient time which the Chief Executive Officer and Chief Operating Officer(s) must dedicate to their duties and to the relevant training;
- loyalty, which fosters the commitment of the Chief Executive Officer and the Chief Operating Officer(s) to the Company and its shareholders;
- good repute and propriety: a person shall not be considered of good repute or meeting the propriety criterion if his or her personal or business conduct gives rise to any material doubt about his or her suitability as Chief Executive Officer or Chief Operating Officer, as the case may be.

The SCA can ask the candidate or the Company, as the case may be, for any document required for its review, which it shall retain pursuant to the legal and regulatory provisions on personal data.

It is also responsible for examining the provisions allowing the succession of the Chief Executive Officer and Chief Operating Officer(s).

c. Identification and appointment of the Key function holders

The CGEN ensures that in the identification and appointment of the Key function holders by Executive Management, with the support of the Company's Human Resources, as the case may be, the following are considered:

- skills, qualification, and experience;
- and good repute, honesty, and integrity.

III. Independence of mind and management of conflicts of interest of the members of the management body

In consideration of the so-called "related-party agreements" *(conventions réglementées)* regime in Articles L. 225-38 et seq. of the French Commercial Code, provisions regarding independence of mind and conflicts of interest set out in Section 9 of the Fit and Proper Guidelines and Principle 3 of the Guidelines on Corporate governance principles for banks, published in July 2015 by the Basel Committee on Banking Supervision, and with the objective to embrace the best practices observed in the governance area, the aim of this section is to (i) recall the general principles applied to ensure the independence of mind of every Member of the management body, (ii) define the situations of conflicts of interest to which directors may face in light of the various activities that the Group conducts and which could be in competition with the interests of the concerned director, shall it be directly or indirectly, and (iii) provide details, in case such conflict of interest occurs, concerning the necessary measures to be adopted in order to take the situation into account and handle it in an appropriate manner.

a. General principles

Every Member of the management body shall at all times maintain his or her independence of mind, analysis, assessment, decision, and action so as to be able to issue opinions and make decisions in an informed, judicious and objective manner. For this purpose, the Member of the management body shall respect both the legal and regulatory provisions applicable to conflicts of interest - specifically the so-called "related-party" agreements - and the provisions below on the measures to be adopted in recognizing conflicts of interest and managing them appropriately.

More specifically, the Member of the management body shall refuse any benefit or service liable to compromise their independence, and undertake to avoid any conflict of interest (as described below).

Each member of the Board of directors shall freely express his or her positions, eventually minority positions, about the subjects discussed in the meetings of the Board or specialised committee.

It is recalled that any conflict of interest may question the fact that a director qualifies as an independent director according to the provisions of the Afep-Medef Code.

b. Cases of conflicts of interests

Besides the so-called "*conventions réglementées*" regime provided for by articles L. 225-38 and *subseq*. of the French Commercial Code, the following situations may give rise to conflicts of interest:

a) each agreement entered into directly, or through an intermediary person[(1)], between a company that BNP Paribas controls within the meaning of Article L. 233-16 of the French Commercial Code and one of the members of the Company's management body;

b) each agreement to which one of the Members of the Company's management body is indirectly interested, meaning that without being directly party to the said agreement entered into by one of the companies controlled by the Company within the meaning of Article L. 233-16 of the French Commercial Code, the member of the management body benefits in a way or another from the agreement;

c) each agreement entered into between one of the companies controlled by the Company, within the meaning of Article L. 233-16 of the French Commercial Code, and a company owned by a member of the Company's management body or to which such director is also an owner, general partner, manager, director, member of the supervisory board or, generally, in a senior manager of this company;

d) each situation where Members of the management body are or might be, in relation with the exercise of his or her non-executive directorship, the recipient of privileged information (i) concerning a company in which he or she is an executive director within the meaning of c) or in which he or she exercises a function or holds interests whatever, or (ii) concerning the Company or one of the companies under its control within the meaning of Article L. 233-16 of the French Commercial Code which may be interests concerning the activity of a company in which he or she is an executive director within the meaning of c) or in which he or she exercises a function or holds interests whatever they may be;

e) each situation where the Member of the management body could take part to a Board meeting to which would be interested any person with whom he or she has family or professional links, or tight relations;

f) the undertaking of a new directorship whether in a listed or unlisted entity, French or foreign, not belonging to a group of which he is a manager, or any participation in the specialised Committee of a corporate body or any other new directorship[(2)];

g) each currently valid commitment made under directorship previously held in France or abroad (e.g. a non-competition clause);

h) more generally, each situation that may constitute a conflict of interest between the member of the management body and the Company or one of its subsidiaries within the meaning of Article L.233-16 of the French Commercial Code.

c. Management of conflicts of interests

Situations covered by the "related-party agreements" regime

The Members of the management body acknowledge having read and understood the related-party agreement regime and the obligations resulting from such regime.

Other situations

If one of the situations described in a) through e) or g) or h) above should occur, the member of the management body shall immediately inform the Chairman of the Board of directors, who shall in turn inform the CGEN so that this latter, based on the analysis of the presented situation, may give an opinion which may consist of one or more measures described in the following paragraph. This opinion is then submitted to the Board of directors and if, followed by the said Board, is notified by the Chairman of the Board, to the concerned director. The decision of the Board of directors will be included in the minutes of the meeting.

More specifically, if one of the situations described in a) through e) or g) or h) above should occur during a Board of directors meeting or one of its Committees, and without prejudice to the application of the preceding paragraph, the Board of directors or the Committee, as the case may be, shall immediately determine the measures to be taken, which may take different forms including the fact the concerned director or Committee would not participate to the debate or the votes, would not receive the information on the issue that gives or may give rise to a conflict of interest, or even would have to leave the meeting of the Board or the Committee during the discussion of the concerned issue. The minutes of the Board or the Committee includes the measures adopted.

If the situation covered in f) above should occur, he or she shall inform the Chairman of the Board of directors of his or her intention to accept (i) a new directorship, whether in a listed or unlisted, French or foreign entity that does not belong to a group of which he or she is an executive director, or (ii) each participation in the specialised Committees of a corporate body, or (iii) any other new directorship, such that the Board of directors, on the recommendation of the CGEN, may decide on the compatibility of such an appointment with the non-executive directorship of a Members of the management body in the Company. If necessary, the provisions on limitation on directorships and on the availability of Members of the management body set forth below shall be applied mutatis mutandis.

In any case, if the Board considers that the relevant Member of the management body is no longer able to perform his or her duties therein because of a conflict of interest, he or she shall resign.

More generally, in the event of a breach of obligations with respect to conflicts of interest by a Members of the management body, the Chairman of the Board of directors shall take all legal measures required to remedy it. He or she may, furthermore, keep the relevant regulators informed of such acts.

(1) The interposition of an intermediary corresponds to a situation in which the member of the management body is the ultimate real beneficiary of the agreement between one of the companies that BNP Paribas controls and the co-contracting party of that controlled company.

(2) This includes those of a political nature.

IV. Compliance with rules on limitation on directorships and on availability of the Members of the management body

The Member of the management body complies with legal and regulatory provisions, specifically those set out in Articles L.511-52 and R.511-17 of the CoMoFi (the "**CoMoFi Provisions**") and in the Fit and Proper Guidelines, which are applicable to him or her or applicable to the Company in matters of limitation on directorships and of availability as well as those in the Afep-Medef Corporate Governance Code.

a. Compliance with rules when appointing a member of the management body

Once a candidate is chosen by the CGEN and prior to submitting it to the Board of directors, the SCA, under the responsibility of the Chairman of the Board of directors:

a) contacts the candidate in order to request the list of directorships as well as any other functions he or she may hold, and how much time is spent on them each year;

b) ensures that the candidate is in compliance with the Provisions of the CoMoFi regarding the limitation on directorships;

c) ensures that the candidate has the time required for the duties and training he or she would perform for the directorship in question;

d) and checks that these directorships and other functions are suitable with the position of a Member of the management body, in accordance with the above provisions on independence of mind and management of conflicts of interest.

The candidate shall certify that the list of directorships and functions is complete and provide on request of the SCA any document (company bylaws, extracts from trade registers and equivalent etc.), certificate, statement, etc. that the SCA deems useful to have.

The SCA then analyses the directorships declared by the candidate so as to ensure that the Provisions of the CoMoFi are complied with. It records the written documents on which the analysis and the conclusions were based, in accordance with personal data laws and regulations. As part of this review, the SCA may carry out any searches it deems useful.

At the outcome of the SCA's review,

a) either the candidate is in compliance with the Provisions of the CoMoFi and has the time required to serve as a director: the SCA shall report to the Chairman of the Board of directors, who shall inform the Chairman of the CGEN. The CGEN shall then propose the candidate to the Board of directors which shall take a decision on his appointment or his co-option, as the case may be;

b) or the candidate is not in compliance with the Provisions of the CoMoFi or does not have the time required to serve as a director: the SCA shall inform the Chairman of the Board, who shall in turn notify the Chairman of the CGEN, so that the measures for remedying this situation can be reviewed with the candidate. If the candidate is willing to take the necessary arrangements prior to his/her nomination or his/her co-option, the SCA states this in minutes which will in turn be submitted to the Board of directors which will decide, his/her nomination or his/her co-option, as the case may be.

If the candidate is not willing or cannot implement the necessary steps, the SCA established minutes to the attention of the CGEN, which acts the end of the selection process.

b. Compliance with rules while holding directorship as a Member of the management body

At all times, the Members of the management body shall comply with the rules on limitation on directorships and dedicate the time and effort required to carrying out their duties and responsibilities. They accept the discipline involved in working together in the respect of each other's opinions and they exercise their sense of responsibilities towards shareholders and the other stakeholders of the Group.

In addition, directors shall actively and regularly participate in meetings of the Board of directors and of the committees, and shall attend the Annual General Shareholders' Meeting. Furthermore, the directors elected by the employees, benefit from preparation time determined by the Board.

To this end, every member of the management body shall inform the Chairman of the Board of directors of his or her intention to accept (i) a new directorship, whether in a listed or unlisted, French or foreign entity, not belonging to a group of which he or she is an executive officer, or (ii) any participation in the specialised committees of a corporate body, or (iii) any new directorship, in France or abroad, such that the Board of directors, on the recommendation of the Corporate Governance, Ethics, Nominations and CSR Committee may decide on the compatibility of such an appointment with the non-executive directorship of director in the Company.

In this case, the SCA shall follow the analysis and verification procedure provided for the appointment of a Member of the management body.

At the end of the analysis referred to above, one of two situations may arise:

a) either the Member of the management body accepting this new directorship complies with the Provisions of the CoMoFi, in which case the SCA informs the Chairman of the Board of directors, which in turn informs the CGEN. The CGEN then ensures that this new directorship complies specifically with the conflicts of interest rules on set out above;

b) or the Member of the management body, by accepting this new directorship, is no longer in compliance with the Provisions of the CoMoFi, in which case the SCA shall inform the Chairman of the Board of directors, which shall report it to the Chairman of the CGEN, so that the measures for complying with the CoMoFi Provisions can be reviewed with the Member of the management body.

Whatever the case, if he or she no longer has the time to perform his or her duties, the SCA shall so inform the Chairman of the Board of directors, which shall report it to the Chairman of the CGEN so that the measures for remedying the situation can be reviewed with the Member of the management body.

If the Member of the management body is willing to maintain his or her directorship in the Company, he or she shall either not accept the proposed directorship, or resign from a directorship he or she already holds. The SCA shall include this in minutes that shall then be submitted to the Board of directors.

If the Member of the management body decides to accept this new directorship without resigning from any directorship he or she already holds, the Member of the management body shall then tender his or her letter of resignation as Member of the management body. The SCA shall mention this in a report to be addressed to the CGEN which acts this resignation, with the effective date to be decided on by the Board of directors. Any Member of the management body who considers him- or herself unable to continue on the Board of directors, or on the Committees of which he or she is a member shall resign.

At least once a year, the SCA asks the Members of the management body to update the form known as the "EBA Form", under which are listed all the directorships held by each member of the management body, and to which is appended their availability table.

This update shall permit the SCA to ensure that all Members of the management body are in compliance with the Provisions of the CoMoFi and on availability on an ongoing basis.

V. Good repute, honesty, and integrity of the Members of the management body

At all times, the members of the management body shall meet the requirements of good repute and show honesty and integrity.

Candidates and members of the management body undertake to immediately notify the Chairman of the Board of directors and the SCA of:

- **a)** any conviction (including on appeal, in criminal, civil, or administrative proceedings);
- **b)** any disciplinary measure;
- **c)** any prior refusal of validation by competent banking or financial authorities in France or abroad;
- **d)** any refusal, withdrawal, revocation, or prohibition on management of any registration, authorisation, membership, or licence to conduct a business or profession;
- **e)** any sanction by public authorities or professional organisations, or investigations or enforcement proceedings ongoing in France or abroad;
- **f)** any dismissal for professional misconduct or any dismissal from a directorship of which he or she may be the subject;
- **g)** any situation mentioned in a) through f) above concerning a company of which he or she is an executive officer, shareholder, or partner that is or might be the subject.

The SCA shall retain the written evidence and documents on which the analysis and the conclusions of the CGEN were based, in accordance with personal data laws and regulations. As part of this review, and at the request of the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, the SCA may carry out any searches it deems useful, including questioning the relevant person.

If the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, is notified of the occurrence of one of the aforementioned cases, he or she shall inform the CGEN so that this latter, based on the analysis of the reported situation, can issue an opinion as to the good repute of the Member of the management body and decide whether to ask him or her to resign. This opinion is then submitted to the Board of directors and if, followed by the said Board, is notified by the Chairman of the Board, to the concerned director. The decision of the Board of directors will be included in the minutes of the meeting.

In addition, every Member of the management board undertakes to act with loyalty and integrity toward the Members of the management board, the shareholders, and the Company alike. Failing this, the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, may refer the matter to the CGEN so that this latter can issue an opinion as to the loyalty and integrity of the Member of the management body and may decide to ask him or her to resign.

VI. Diversity of the Members of the management body and collective competence of the Board of directors

The CGEN shall set the objectives to achieve with respect to gender balance on the Board of directors, age diversity, professional qualifications and experience, and nationality among the Members of the management body, so as to ensure that at all times they have the skills necessary to understand the risks, issues, including social and environmental issues, and potential developments in the Company.

For this purpose, the CGEN periodically assesses and at least once a year, the structure, the size, the composition and the effectiveness of the Board of directors with respect to the missions which are entrusted to it, and makes any useful recommendations to the Board.

VII. Induction and training of the Members of the management body

The Members of the Company's management body shall possess, both individually and collectively, the expertise, experience, skills, understanding, and personal qualities necessary, specifically in terms of professionalism and integrity, to properly perform their duties in connection with each of the significant activities of the Company, guaranteeing effective governance and supervision.

The Members of the management body shall maintain their knowledge in the following fields: finance and banking, risk management, regulations applicable to the Company, and, more broadly, any field related to the development and strategy of the Company.

The Company shall dedicate the human and financial resources required for the training of the Members of the management body. With this aim, annual training courses are administered by the managers of the topics presented, and strategy seminars are held.

In addition to the training courses mentioned above, any director may request additional training. For this purpose, he or she shall initiate a dialogue with the Chairman and the SCA, who shall determine the arrangements for the requested training.

The directors elected by the employees benefit from time devoted to training determined by the Board. At the end of the training, the training centre chosen by the Board must issue a certificate of regular attendance, which the director elected by the employees must remit to the Secretary of the Board.

The Board of directors shall ensure that new directors meet with the key function holders.

2.1.3 REMUNERATION

REMUNERATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

The legal provisions of the so-called "Sapin 2" law provide for *ex ante* approval every year by the Annual General Meeting of the remuneration policy for executive corporate officers.

Further, the remuneration of executive corporate officers is the subject of an *ex post* vote on the payments made in application of the principles set out in the aforementioned remuneration policy. The Annual General Meeting then approves the total remuneration and the benefits in kind paid or granted with respect to the previous year. The variable components of remuneration with respect to the previous year can only be paid after the remuneration has been approved by the Annual General Meeting.

Remuneration policy for executive corporate officers submitted for shareholders' *ex ante* approval, in accordance with article L.225-37-2 of the French Commercial Code, at the Annual General Meeting on 23 May 2019

In this report, the Board of directors provides details of the fixed and variable components of total remuneration and benefits in kind, attributable to the Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer for their corporate offices within BNP Paribas SA.

The elements of the remuneration policy presented below are the subject of resolutions submitted for the approval of the Shareholders' Annual General Meeting voting under the quorum and majority conditions required for Ordinary Annual General Meetings. If the Annual General Meeting does not approve these resolutions, the principles and criteria provided for in the previous remuneration policy, having already been approved by the Annual General Meeting of 24 May 2018, will continue to apply.

With regard to the Chief Executive Officer and the Chief Operating Officer, payment of the variable components of their remuneration granted for the previous year will be subject to *ex post* approval by the Ordinary Annual General Meeting of the components of remuneration of the corporate officer in question under the conditions provided for by article L.225-100 of the French Commercial Code. This does not affect the Chairman of the Board of directors since he does not receive any variable remuneration.

The remuneration policy for the executive corporate officers complies with applicable legislation, the Afep-Medef Code and the BNP Paribas Responsibility Charter. The remuneration paid to the executive corporate officers is determined by the Board of directors and is based on the proposals of the Remuneration Committee. This Committee is comprised of two independent Directors and one Director elected by employees.

The remuneration of executive corporate officers takes account of these principles in the following objectives:

- alignment with the Bank's social interest with that of its shareholders:
  - consistency with a medium to long-term outlook, especially in terms of the growth of the Bank's value, good risk management and the relative performance of its share;
  - integration of extra-financial assessment criteria;
  - taking into account the CSR dimension in the determination of compensation;
  - guaranteeing sufficient variability in the amounts allocated to reflect changes in the Bank's results without weighing too heavily on fixed expenses;
- the transparency of compensation:
  - all components (fixed, annual variable, multi-annual variable) are used in the overall assessment of the remuneration,
  - balance between the components of remuneration, which must contribute to the general interest of the Bank and reflect best market practices and legal and regulatory constraints,
  - the rules must be stable, strict and intelligible;
- remuneration that is sufficiently attractive to facilitate the selection of profiles that are particularly competent in the Group's business areas.

I. Remuneration of the Chairman of the Board of directors

The Chairman does not receive any annual or multi-annual variable remuneration.

The Chairman's fixed remuneration amounts to EUR 950,000 gross.

The absence of variable remuneration reflects the independence of the Chairman with respect to the Executive Management.

Should a new Chairman be appointed, on the proposal of the Remuneration Committee, the Board of directors will set the fixed remuneration in line with the new Chairman's profile and experience.

II. Remuneration of Executive Management

Remuneration includes:

- a fixed component;
- an annual variable component;
- a conditional long-term incentive plan (LTIP), which forms the multi-annual variable component.

The levels of these different components are determined using established market benchmarks.

Remuneration takes into account the cap on total variable remuneration in relation to fixed remuneration (including awards under long-term incentive plans) in accordance with article L.511-78 of the French Monetary and Financial Code, applicable specifically to credit institutions.

In accordance with paragraph 2 of said article, the Shareholders' Annual General Meeting of BNP Paribas SA of 24 May 2018 decided to reset this cap at twice the amount of fixed remuneration.

2

For the purposes of calculating the aforementioned ratio, a discount rate may in addition be applied to no more than 25% of the total variable remuneration inasmuch as the payment is made in the form of instruments deferred for at least 5 years, in accordance with article L.511-79 of the French Monetary and Financial Code.

1. Fixed remuneration

The Chief Executive Officer's annual fixed remuneration is set at EUR 1,562,000 gross.

The Chief Operating Officer's annual fixed remuneration amounted to EUR 1,000,000 gross.

Should a new Chief Executive or a new Chief Operating Officer be appointed, on the proposal of the Remuneration Committee, the Board of directors will set their fixed remuneration according to their profiles and experience. Annual and multi-annual variable remuneration components will be set in line with the principles appearing in this report.

2. Annual variable remuneration

The variable component is intended to reflect the effective contribution of executive corporate officers to the success of BNP Paribas in respect of their functions as executive managers of an international financial services Group.

General principles

The variable remuneration of members of the Executive Management is determined from a target remuneration equal to 100% of their annual fixed remuneration for the Chief Executive Officer and the Chief Operating Officer.

It varies in accordance with criteria representative of the Group's results, CSR-linked criteria and the qualitative assessment by the Board of directors.

Yearly variable remuneration includes "malus" and "clawback" arrangement, as well as a cancellation clause in the event of a bank resolution measure, in accordance with the same terms and conditions as those described below for the LTIP (see 3 below).

Criteria linked to the Group's financial criteria

Criteria linked to the Group's financial performance accounts for 75% of the target variable remuneration and enables the corresponding portion of the remuneration to be calculated in proportion to the change in numerical indicators.

If objectives based on quantitative criteria are exceeded (or not achieved), the fraction of the target remuneration in question changes proportionally within the limits of the cap mentioned below.

The quantitative criteria apply to the Group's overall performance, based on two criteria that are given equal weighting:

- ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of target variable remuneration);
- percentage achievement of the Group's budgeted gross operating income (37.5% of the target variable remuneration).

Criteria linked to the Group's CSR performance

In order to strengthen the incorporation of the CSR strategy in the determination of Executive Management's remuneration, the Board of directors decided to now allocate 40% of the qualitative criteria used to determine the target variable remuneration as presented to the 2018 Annual General Meeting to account for the Group's CSR dimension.

Thus, the Board of directors decided to set the portion of the target variable remuneration linked to the Group's CSR performance at 10%. With respect to the previous remuneration policy applicable up to and including the 2018 performance year, the assessment of CSR performance was included in the qualitative criteria.

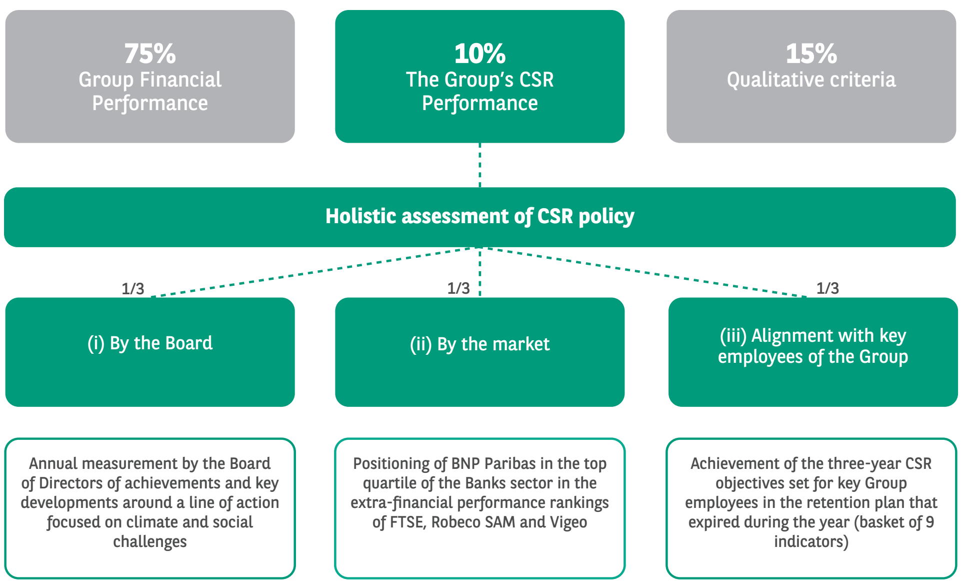
The allocation of this portion of the annual variable remuneration is based on multi-criteria measurement based on a holistic approach of actions undertaken by the BNP Paribas Group outside the Company with respect to social, societal and environmental issues.

With this in mind, this remuneration structure includes three weighted criteria, each at 3.33%:

(i) Assessment of the Board of directors of highlights of the year, primarily with regard to climatic and social challenges;

(ii) publications of extra-financial rating agencies measuring the quality of the BNP Paribas' CSR positioning relative to its peers;

(iii) an alignment with the CSR objectives included in the remuneration due to retention plans granted to the Group's key employees.



Qualitative criteria

The portion of the variable remuneration linked to the Board of directors' qualitative assessment is 15% of the target variable remuneration (versus 25% up to and including 2018 performance).

The performance of this qualitative assessment by the Board of directors is considered essential, especially in view of the reinforcement of its responsibilities for monitoring and control provided by the French Monetary and Financial Code since 2014 (thereby implementing CRD 4).

In addition to the Bank's strategy, which it must approve, the Board of directors must also assess the performance of Executive Management based on their capacities for anticipation, decision-making, leadership and exemplary behaviour.

To do this, the Board assesses the qualitative aspect of annual variable remuneration, regarding the implementation of the Bank's strategic guidelines, in particular its transformation plan and its human, organisational, technical and CSR dimensions in the general context of the year under consideration.

SUMMARY OF CRITERIA FOR SETTING ANNUAL VARIABLE REMUNERATION

Criteria applicable	% of fixed remuneration		
	Reminder: 2018 measurements	Measures starting in 2019	
Criteria linked to the Group's financial criteria	37.50%	37.50%	Change in earnings per share
	37.50%	37.50%	Achievement of target gross operating income
Criteria linked to the Group's CSR performance	N/A	10.00%	Multicriteria assessment of the actions taken by BNP Paribas Group with respect to social, societal and environmental issues.
Qualitative criteria	25.00%(*)	15.00%	Assessment with regard to implementation of the Bank's strategic guidelines, particularly the human, organisational and technical dimensions of its transformation plan, and taking into account the general context of the year under consideration.

(*) Up to and including the 2018 performance year, the assessment of the CSR performance was included in the qualitative criteria.

Ceiling

The Board of directors ensures that annual variable remuneration is in line with the Group's results.

In any case,

- each of the two criteria linked to the Group's financial performance is capped at 130% of its target weight and cannot therefore lead to the award of an annual variable remuneration greater than 48.75% of the fixed remuneration;
- the criteria linked to the Group's CSR performance and qualitative criteria are capped at 100% of their target weight and cannot therefore lead to the award of an annual variable remuneration greater than 10% and 15% respectively of the fixed remuneration;

In total, the amount of annual variable remuneration awarded for each of the executive corporate officers is capped at 120% of their fixed remuneration.

Terms and conditions of payment

The payment terms for variable remuneration of BNP Paribas Group's executive corporate officers, in accordance with the provisions of the French Monetary and Financial Code and the European Banking Authority's Guidelines on remuneration policy, are:

- 60% of annual variable remuneration is deferred over five years, at the rate of one-fifth per year;
- regarding the non-deferred portion of the variable remuneration:
  - half will be paid in cash in May of the year of the award, subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.225-100 of the French Commercial Code; and less Directors' fees received, where applicable, within the Group for entities other than BNP Paribas SA,
  - and half will be paid in cash, indexed to BNP Paribas share performance, at the end of a one-year holding period starting on the award date (award date is the date of the Board of directors' decision), i.e. in practice, in March of the year following the year in which the remuneration is awarded;
- the deferred portion of the variable remuneration will be paid on an annual basis in five instalments over five years, the first instalment only being paid at the end of a deferred period of one year from the award date of the variable remuneration, provided that the Group's ROE before tax for the year preceding the payment is greater than 5%. Each instalment will be paid:
  - half in cash in March every year,
  - and half in cash, indexed to BNP Paribas share performance, in March of the following year, at the end of a one-year holding period.

3. Conditional Long-Term Incentive Plan (LTIP) covering a five-year period

To align the interests of executive corporate officers with the medium to long-term performance of the BNP Paribas Group without compromising risk management, in 2011, the Board introduced a conditional long-term incentive plan over five years (LTIP).

The LTIP, which amounts to the target annual variable remuneration awarded in respect of the previous year, is split into two equal parts: one to reward an increase in the intrinsic value of the share, and the other potential outperformance relative to peers.

First half of the award amount: intrinsic share performance

The first half of the award amount is dependent on the change in share[1] price given that no payment will be made for 50% of the award amount if the BNP Paribas share price does not increase by at least 5% from the date of the award by the Board of directors to the end of a five-year period from the award date.

If the share price increases by at least 5% during this period, a factor is applied to the initial amount, resulting in the amount being increased or reduced, in line with the table below.

Change in the BNP Paribas share price over 5 years	Factor applied to the first half of the award
Strictly under 5%	0 (No payment)
Equal to or higher than 5% and under 10%	40%
Equal to or higher than 10% and under 20%	80%
Equal to or higher than 20% and under 33%	120%
Equal to or higher than 33% and under 50%	130%
Equal to or higher than 50% and under 75%	150%
Equal or higher than 75%	175%

Thus, the first half of the award amount will only be paid in full at the end of the five-year period if the share price increases by more than 20% in the five years. The first half of the award will, in any event, always be less than or equal to the change in the share price and cannot, under any circumstances, exceed 175% of the award amount, assuming that the share price has increased by more than 75% at the end of the five-year period.

Second half of the award: outperformance of the BNP Paribas share relative to peers

Fulfilment of this condition is assessed by measuring the performance of the BNP Paribas share price relative to the "D EURO STOXX Banks" index of main euro zone banks.

It only takes into account outperformance of the BNP Paribas share relative to the average index measured over the 12 months prior to the award date, compared with the average for this same index for a period of 12 months prior to payment. The second half of the target amount under the LTIP will only be paid in full if the share price outperforms the index by at least 10%.

Relative performance of the BNP Paribas share in relation to the performance of the EURO STOXX Banks index	Effect on the second half of the award amount
Lower or equal to 0 points	100% reduction
0 to 5 points included	50% reduction
5 to 10 points included	20% reduction
10 points higher	Full rate

The amount determined by applying each of the conditions over the plan's five-year period is the remuneration paid under the LTIP.

Ceiling

According to the provisions of article L.511-78 of the French Monetary and Financial Code relating to the cap on the variable component as a percentage of the fixed component, total variable remuneration awarded, including amounts awarded under the LTIP, may not be more than twice the fixed remuneration, in accordance with the decision of the Shareholders' Annual General Meeting on 24 May 2018. To calculate the ratio, a discount rate may in addition be applied to no more than 25% of the total variable remuneration inasmuch as the payment is made in the form of instruments deferred for at least five years.

Payment of LTIP

In application of the factor mentioned above, and in line with the change in the BNP Paribas share price, the first half of the LTIP award may not exceed 175% of the initial award amount. Payment of the second half of the award may not, under any circumstances, exceed the total award amount.

Thus, under no circumstances can payments under the LTIP exceed 137.5% of their award value.

Continued employment requirement

LTIP rules require continued employment throughout the entire duration of the plan. Departure from the Group would result in the LTIP not being paid. Nonetheless, in the event of retirement or death after the end of the first year of the plan, payments would be made provided that performance conditions are met and subject to assessment by the Board of directors.

(1) The initial and final amounts used to measure the performance of the share price over five years are as follows:

- *the initial amount is the average of the opening price of the BNP Paribas share in the rolling 12-month period preceding the award date;*
- *the final amount is the average of the opening price of the BNP Paribas share in the rolling 12-month period preceding the payment date.*

Malus and Claw-back clauses

The LTIP provides for "malus" and "claw-back" arrangements. Accordingly, should the beneficiary adopt a behaviour or perform acts which do not comply with BNP Paribas' requirements as defined, in particular, as regard compliance with the code of conduct, applicable Internal rules and regulations, assessment and management of risks applicable to Group employees, the Board of directors may decide not only not to proceed with the payment of the set amount whether the employee still works for the Company or not, but may also request reimbursement for all or part of the sums paid under previous plans over the past five years.

Moreover, this rule provides that in the event of the implementation of a bank resolution measure under the French Monetary and Financial Code, the LTIP rights shall be definitively cancelled.

The Board of directors reserves the right to reduce awards under the LTIP.

III. Extraordinary remuneration

No extraordinary remuneration may be paid to the Chairman of the Board of directors, the Chief Executive Officer or the Chief Operating Officer.

IV. Benefits in kind

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer have a company car and a mobile phone.

V. Stock option or share purchase subscription plans

The Group's corporate officers do not benefit from any stock option or share purchase subscription plans.

VI. Performance shares

The Group's corporate officers do not benefit from any performance or free shares.

VII. Post-employment benefits

1. Payments and benefits due or likely to become due upon termination or change of duties

Executive corporate officers do not receive any contractual remuneration for termination of their term of office.

2. Post employment benefits

The Chairman of the Board of directors and the Chief Executive Officer do not receive post-employment benefits in the event of retirement.

The Chief Operating Officer is entitled to the standard retirement benefits awarded to all BNP Paribas SA employees pursuant to his initial employment contract.

3. Top-up pension plan

Executive corporate officers do not receive supplemental defined-benefit pension plans.

They only benefit from the defined-contribution top-up pension plan (article 83 of the French General Tax Code) set up for all BNP Paribas SA employees.

4. Welfare benefit plans

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer are entitled to the same flexible welfare benefits (death and disability cover, as well as the common healthcare benefit scheme) as all BNP Paribas SA employees and corporate officers.

They also receive death and disability insurance, which covers all employees of BNP Paribas SA.

The Chief Executive Officer and the Chief Operating Officer are also entitled to the supplementary plan set up for members of the Group's Executive Committee, which pays out additional capital of EUR 1.10 million in the event of work-related death or total and permanent disability. The employer contribution under this scheme is recognised as a benefit in kind.

5. Non-compete agreement

Please note, for information purposes, that the Chief Executive Officer signed a non-compete agreement with BNP Paribas SA on 25 February 2016. This agreement was approved by the Annual General Meeting of 26 May 2016 pursuant to the provisions of article L.225-38 of the French Commercial Code.

Under this agreement, if he ceases to hold any role or position in BNP Paribas, Mr. Jean-Laurent Bonnafé undertakes, for a period of 12 months, not to take any role whatsoever, either directly or indirectly, for a credit institution, investment or insurance firm whose securities are traded on a regulated market in France or abroad, or in France for a credit institution, investment or insurance firm whose securities are not traded on a regulated market.

Under this agreement, the Chief Executive Officer will receive a payment equal to 1.2 times the total of his fixed and variable remuneration (excluding multi-annual variable remuneration) received during the year prior to his departure. One-twelfth of the payment would be paid each month.

In accordance with the Afep-Medef Code which stipulates that the payment of a non-compete payment must be excluded if the person concerned claimed his pension rights or has exceeded the age of 65 and the stipulations of said non-compete agreement, the Board of directors and the Chief Executive Officer have agreed to fully comply with this provision.

VIII. Loans, advances and guarantees granted to the Group's executive corporate officers

BNP Paribas corporate officers and their spouses may be granted loans.

These loans, representing normal transactions, are granted on an arm's length basis.

Remuneration of executive corporate officers paid or awarded for 2018, in accordance with the remuneration policy approved by the Annual General Meeting on 24 May 2018

The information below shows gross remuneration amounts awarded, before tax and social security deductions.

I. Remuneration of the Chairman of the Board of directors

In accordance with the remuneration policy, the fixed remuneration paid to Jean Lemierre in his capacity as Chairman amounted to EUR 950,000 in 2018.

The Chairman's remuneration is unchanged from 2017.

II. Remuneration of Executive Management

1. Fixed remuneration

In euros	Fixed remuneration paid in 2018	Comments
Jean-Laurent Bonnafé	1,562,000	Most recent increase in fixed remuneration dated 25 February 2016 effective as of 1 January 2016
Philippe Bordenave	1,000,000	Most recent increase in fixed remuneration dated 25 February 2016 effective as of 1 January 2016

2. Annual variable remuneration

Assessment of the achievement of the targets set for 2018

At its meeting of 5 February 2019, the Board of directors assessed the achievement of the objectives set in accordance with the remuneration policy.

Group performance criteria (quantitative)

The Board of directors reviewed the achievement of the quantitative portion of the annual variable remuneration in terms of the criteria provided for in the remuneration policy.

As regards the criterion of ratio of net earnings per share to net earnings per share for the previous year, its measure was equal to 35.52% of the target variable remuneration for 2018.

As regards the criterion of achievement of the Group's budgeted gross operating income, its measure was equal to 33.61% of the target variable remuneration for 2018.

Personal criteria (qualitative)

The Board of directors assessed the quantitative portion of the annual variable remuneration in terms of the application of the criteria provided for in the remuneration policy.

For 2018, the Board determined that Mr Jean-Laurent Bonnafé had principally achieved the following:

- decisive role in managing the Bank and customer relations;
- as part of the 2017-2020 strategic plan, solid operational results and robust asset and liability management in a volatile market environment;
- acceleration of the Group's digital transformation with significant advances on key initiatives such as the customer journey and process automation;
- Rotation of Group assets in particular in North America (First Hawaiian Bank) and in Eastern Europe (acquisition of the "core" banking activities of Raiffeisen Bank Polska);
- Strengthening company commitments to environmental, social and societal issues:
  - promotion of projects with a positive environmental impact,
  - launch of Climateseed, a voluntary carbon offsetting platform intended to maximise the Company's positive impact on the environment,
  - commitment to social entrepreneurship,
  - enhancement of the Code of conduct with additional measures on the whistleblowing system, respect for colleagues and support for victims of harassment,
  - considerable personal involvement in the promotion of gender equality (Commitment made to the UN as a Thematic Champion of its He4She movement),
  - creation of a community of Group customers based on sustainable development (Sustainable Future Forums),
  - commitment to set up a global social framework and the consolidation of fundamental labour rights;

  and for Philippe Bordenave, in line with the outcomes assessed for Jean-Laurent Bonnafé:
- solid operational results and robust asset and liability management as part of the 2017-2020 Development and Transformation Plan and support for the plan especially the financial, cost control and technological innovation aspects;
- the implementation of systems related to regulatory reforms;
- the active involvement in issues relating to improving the Group's information systems;
- fulfilment of the commitments of Group CSR Policy;
- and personal involvement in the reviews performed by the SSM.

Summary

After taking into account both quantitative and qualitative criteria, and evolution of the Group's operating results, the Board of directors, on the proposal of the Remuneration Committee, set the variable remuneration awarded in respect of 2018 at:

- EUR 1,470,245 for Jean-Laurent Bonnafé (representing 94% of his target variable remuneration);
- EUR 941,258 for Philippe Bordenave (representing 94% of his target variable remuneration).

The result in respect of each criterion is set out in the following table:

In euros		Qualitative criteria	Quantitative criteria		Variable remuneration set by the Board	Reminder of target variable remuneration
			Group EPS[2]	Group GOI[3]		
Jean-Laurent Bonnafé	Weighting[1]	25.00%	37.50%	37.50%		
	Measurement[1]	25.00%	35.52%	33.61%	1,470,245	1,562,000
Philippe Bordenave	Weighting[1]	25.00%	37.50%	37.50%		
	Measurement[1]	25.00%	35.52%	33.61%	941,258	1,000,000

(1) As a percentage of target variable remuneration.
(2) Ratio of earnings per share (EPS) for the year to earnings per share for the previous year.
(3) Percentage achievement of target gross operating income (GOI).

Terms and conditions of payment

a) The payment terms for variable remuneration of BNP Paribas Group executive corporate officers in respect of 2018, in accordance with the provisions of the French Monetary and Financial Code and the EBA's 21 December 2015 Guidelines on remuneration policy are:

- 60% of variable remuneration is deferred over five years, at the rate of one-fifth per year;
- half of the non-deferred portion of the variable remuneration is paid in May 2019, subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.225-100 of the French Commercial Code, less Directors' fees received, where applicable, within the Group in 2018 for entities other than BNP Paribas SA; and half in March 2020, indexed to the performance of the BNP Paribas share;
- the deferred portion of the variable remuneration will be paid in fifths starting in 2020. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share since the award. The last payment in respect of 2018 will be made in March 2025.

b) In addition, the annual payment of the deferred variable remuneration is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%.

The Board found that this performance condition was met in 2018; accordingly, deferred remuneration payable in 2019 in respect of previous plans will be paid out.

3. Conditional Long-Term Incentive Plan (LTIP) covering a five-year period

LTIP amounts awarded in 2019

In accordance with the remuneration policy and on the proposal of the Remuneration Committee, the Board of directors set the LTIP amounts to be awarded in 2019.

The amount awarded under the LTIP is equal to the target annual variable remuneration for 2018.

LTIP awarded on 5 February 2019 *(amounts in euros)*	Total awarded(*)	Fair value of the amount awarded(**)
Jean-Laurent Bonnafé	1,562,000	282,644
Philippe Bordenave	1,000,000	180,950

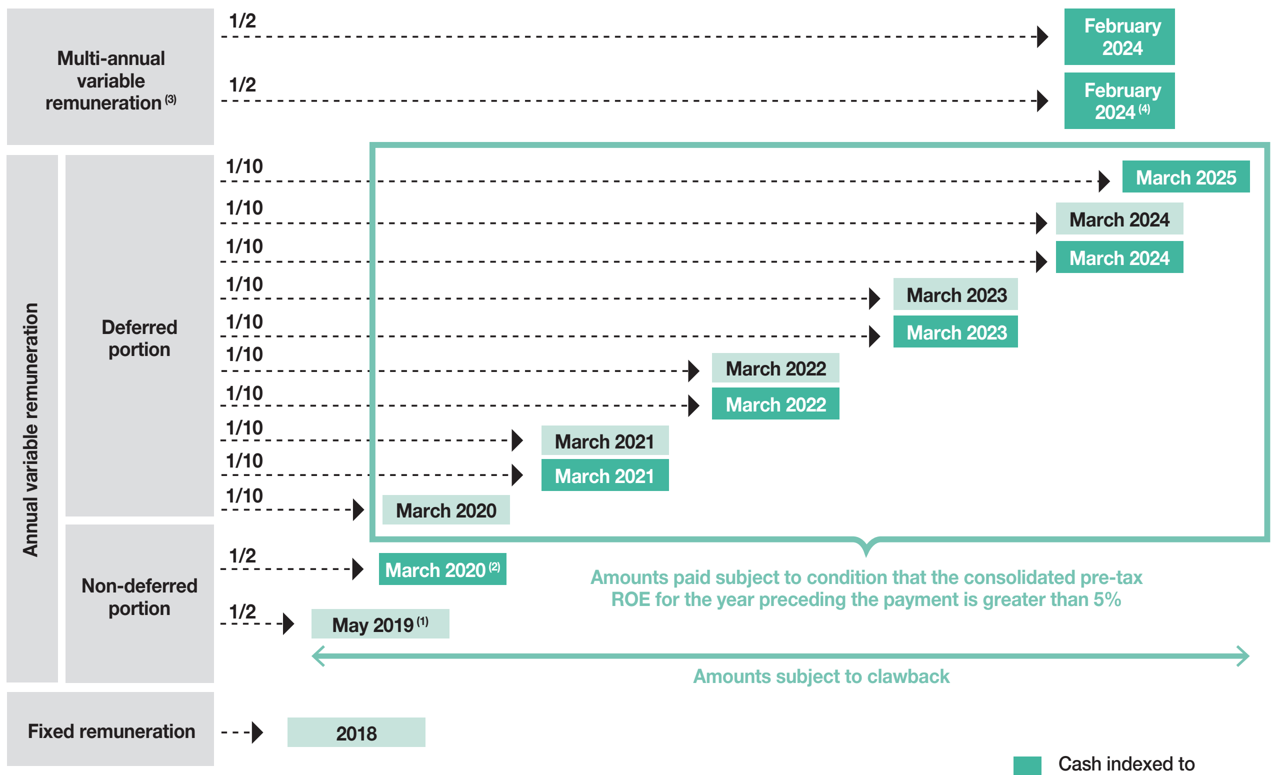
(*) See explanation above.
(**) Fair value in accordance with IFRS of 18.10% of the amount awarded. The calculation is carried out by an independent expert.

4. Summary of the remuneration of executive corporate officers at 31 December 2018

The cap on total variable remuneration provided for by article L.511-78 of the French Monetary and Financial Code was not exceeded. Pursuant to article L.511-79 of the French Monetary and Financial Code, a discount rate may in addition be applied to no more than 25% of total variable remuneration inasmuch as the payment is made in the form of instruments deferred for at least 5 years.

After applying the discount rate to the variable remuneration amounts awarded in the form of instruments deferred for five years (53.30% in accordance with applicable regulations (EBA guidelines) on application of the notional discount rate for variable remunerations, published on 27 March 2014), the ratio between total variable remuneration and fixed remuneration is 1.71 for the Chief Executive Officer and the Chief Operating Officer for 2018.

Breakdown over time of the payment of remuneration in respect of 2018



(1) Award in March 2019 and payment deferred until May 2019 subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.225-100 of the French Commercial Code.
(2) Payment at the end of a one-year holding period starting on the date of the annual variable remuneration award.
(3) The LTIP is a 5-year plan, payment will be made at the end of the five-year period.
(4) Cash indexed to the relative performance of the BNP Paribas share relative to the performance of the EURO STOXX Banks index.

Total remuneration awarded in respect of 2018 and comparison with 2017

In euros	Jean-Laurent Bonnafé		Philippe Bordenave	
	2017	2018	2017	2018
Fixed remuneration amount	1,562,000	1,562,000	1,000,000	1,000,000
Annual variable remuneration awarded	1,576,758	1,470,245	1,009,448	941,258
Sub-total	**3,138,758**	**3,032,245**	**2,009,448**	**1,941,258**
LTIP amount (fair value)(*)	479,065	282,644	306,700	180,950
TOTAL	**3,617,823**	**3,314,889**	**2,316,148**	**2,122,208**

(*) This is an estimated value on the award date. The final amount will be known on the date of payment.

III. Top-up pension plan

Jean Lemierre, Jean-Laurent Bonnafé and Philippe Bordenave are not covered by any defined-benefit top-up pension plans.

The executive corporate officers benefit solely from the defined-contribution top-up pension plan set up for all BNP Paribas SA employees, in accordance with article 83 of the French General Tax Code. The amount of contributions paid by the Company in 2018 was EUR 1,708 per beneficiary for the whole year.

IV. Welfare benefit plans

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer are entitled to the same flexible welfare benefits (death and disability cover, as well as the common healthcare benefit scheme) as all BNP Paribas SA employees and corporate officers.

They also receive death and disability insurance, which covers all employees of BNP Paribas SA.

The total amount of contributions paid by BNP Paribas for welfare benefit plans and health cover amounted to EUR 3,217 per beneficiary for the full year.

The Chief Executive Officer and the Chief Operating Officer are also entitled to the supplementary plan set up for members of the Group's Executive Committee, which pays out additional capital of EUR 1.10 million in the event of work-related death or total and permanent disability. The employer contribution under this scheme is recognised as a benefit in kind.

BNP Paribas SA's annual employer contribution was EUR 1,460 per beneficiary for 2018.

V. Holding of shares resulting from the exercise of stock options

The Board of directors has decided that the minimum number of shares that Jean Lemierre, Jean-Laurent Bonnafé and Philippe Bordenave shall be required to hold for the duration of their terms of office shall be 10,000, 80,000 and 30,000 shares, respectively. The three interested parties have complied with this obligation, through the direct ownership of shares or units in the Company Savings Plan fully invested in BNP Paribas shares.

VI. Quantitative information on the remuneration of executive corporate officers

The table below shows the gross remuneration awarded in respect of the year, including Directors' fees and benefits in kind, for each executive corporate officer.

➤ SUMMARY TABLE OF THE REMUNERATION AWARDED TO EACH EXECUTIVE CORPORATE OFFICER

In euros		2017 Total awarded	2018 Total awarded
Jean LEMIERRE Chairman of the Board of directors	Fixed remuneration	950,000	950,000
	Annual variable remuneration	None	None
	Long-term compensation	None	None
	Value of stock options granted during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**950,000**	**950,000**
	Extraordinary remuneration	None	None
	Directors' s fees	62,344	63,169
	Benefits in kind(1)	3,632	3,632
	TOTAL	**1,015,976**	**1,016,801**
Jean-Laurent BONNAFÉ Chief Executive Officer	Fixed remuneration	1,562,000	1,562,000
	Annual variable remuneration	1,576,758	1,470,245
	Long-term compensation(2)	479,065	282,644
	Value of stock options granted during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**3,617,823**	**3,314,889**
	Extraordinary remuneration	None	None
	Directors' s fees	62,344	59,924
	Benefits in kind(1)	6,127	6,507
	TOTAL	**3,686,294**	**3,381,320**
Philippe BORDENAVE Chief Operating Officer	Fixed remuneration	1,000,000	1,000,000
	Annual variable remuneration	1,009,448	941,258
	Long-term compensation(2)	306,700	180,950
	Value of stock options granted during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**2,316,148**	**2,122,208**
	Extraordinary remuneration	None	None
	Directors' s fees	None	None
	Benefits in kind(1)	3,953	3,953
	TOTAL	**2,320,101**	**2,126,161**

(1) The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer have a company car and a mobile phone. The Chief Executive Officer and Chief Operating Officer receive Executive Committee professional life insurance, for which the Company's contribution is recognised as a benefit in kind.

(2) Value of amount awarded subject to performance conditions.

The two tables below show the gross remuneration **paid in 2018**, including Directors' fees and benefits in kind, for each corporate officer.

SUMMARY TABLE OF THE REMUNERATION PAID TO EACH EXECUTIVE CORPORATE OFFICER

In euros		2017 Total paid	2018 Total paid
Jean LEMIERRE Chairman of the Board of directors	Fixed remuneration	950,000	950,000
	Annual variable remuneration	None	None
	Long-term compensation	None	None
	Extraordinary remuneration	None	None
	Directors' fees	62,344	63,169
	Benefits in kind(1)	3,632	3,632
	TOTAL	**1,015,976**	**1,016,801**
Jean-Laurent BONNAFÉ Chief Executive Officer	Fixed remuneration	1,562,000	1,562,000
	Annual variable remuneration	1,468,378	1,511,228
	of which annual variable remuneration in respect of 2017	*None*	*315,352*
	of which annual variable remuneration in respect of 2016	*330,200*	*490,177*
	of which annual variable remuneration in respect of 2015	*509,857*	*452,647*
	of which annual variable remuneration in respect of 2014	*282,460*	*253,052*
	of which annual variable remuneration in respect of 2013	*345,861*	*None*
	Long-term compensation	1,354,585	2,217,600(2)
	Extraordinary remuneration	None	None
	Directors' fees	62,344	59,924
	Benefits in kind(1)	6,127	6,507
	TOTAL	**4,453,434**	**5,357,259**
Philippe BORDENAVE Chief Operating Officer	Fixed remuneration	1,000,000	1,000,000
	Annual variable remuneration	837,128	914,819
	of which annual variable remuneration in respect of 2017	*None*	*201,890*
	of which annual variable remuneration in respect of 2016	*211,400*	*313,813*
	of which annual variable remuneration in respect of 2015	*326,783*	*290,119*
	of which annual variable remuneration in respect of 2014	*121,591*	*108,997*
	of which annual variable remuneration in respect of 2013	*177,354*	*None*
	Long-term compensation	842,194	1,135,200(3)
	Extraordinary remuneration	None	None
	Directors' fees	None	None
	Benefits in kind(1)	3,953	3,953
	TOTAL	**2,683,275**	**3,053,972**

The average tax and social contribution rate on this remuneration was 39% in 2018 (43% in 2017).

(1) The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer have a company car and a mobile phone. The Chief Executive Officer and Chief Operating Officer receive Executive Committee professional life insurance, for which the Company's contribution is recognised as a benefit in kind.

(2) The payment in 2018 under multi-annual variable remuneration corresponds to the amount of LTIP awarded in 2013 following the application of performance conditions, ie for Jean-Laurent Bonnafé 132% of the variable remuneration amount of EUR 1,680,000 awarded in 2013 (to be compared with the amount paid in 2017 as a result of a measurement of performance conditions of 117% applied to the amount of variable remuneration of EUR 1,157,765 awarded in 2012).

(3) The payment in 2018 under multi-annual variable remuneration corresponds to the amount of LTIP awarded in 2013 following the application of performance conditions, ie for Philippe Bordenave 132% of the variable remuneration amount of EUR 860,000 awarded in 2013 (to be compared with the amount paid in 2017 as a result of a measurement of performance conditions of 117% applied to the amount of variable remuneration of EUR 719,824 awarded in 2012).
As a reminder the amount awarded is subject to the application of two cumulative performance conditions over a period of five years from the date of grant. Thus, the relative performance condition (evolution of the value of the BNP Paribas share compared to that of the EURO STOXX Banks) led to 88% of the amount allocated being maintained. The application of the performance condition related to the change in the value of the BNP Paribas share led to the application of a 150% revaluation coefficient, applied to 88% of the amount allocated.

SUMMARY OF REMUNERATION IN RESPECT OF THEIR PREVIOUS PAID EMPLOYMENT[1]

In euros		2017 Total paid	2018 Total paid
Jean LEMIERRE Chairman of the Board of directors	Fixed remuneration	None	None
	Annual variable remuneration	20,655	None
	of which annual variable remuneration in respect of 2016	*None*	*None*
	of which annual variable remuneration in respect of 2015	*None*	*None*
	of which annual variable remuneration in respect of 2014	*None*	*None*
	of which annual variable remuneration in respect of 2013	*20,655*	*None*
	of which annual variable remuneration in respect of 2012	*None*	*None*
	Multi-annual variable remuneration[2]	318,500	279,607
	Extraordinary remuneration	None	None
	Directors' fees	None	None
	Benefits in kind	None	None
	TOTAL	**339,155**	**279,607**

(1) Only Mr Jean Lemierre received remuneration in 2018 in respect of previous activity as an employee.
(2) These amounts correspond to payments under the Group retention plans awarded in 2014 and 2015.

SHARE SUBSCRIPTION OR PURCHASE OPTIONS GRANTED DURING THE YEAR TO EACH EXECUTIVE CORPORATE OFFICER BY THE ISSUER AND BY ANY COMPANY OF THE GROUP

	Number and date of plan	Type of options (purchase or subscription)	Valuation of options according to the method adopted for the consolidated financial statements	number of options granted during the period	Exercise price	Exercise period
Jean LEMIERRE						None
Jean-Laurent BONNAFÉ						None
Philippe BORDENAVE						None

➤ SHARE SUBSCRIPTION OR PURCHASE OPTIONS EXERCISED DURING THE YEAR BY EACH EXECUTIVE CORPORATE OFFICER

	Number and date of plan	Number of options exercised during the period	Exercise price
Jean LEMIERRE	Plan 8 of 5 March 2010	13,300	51.2
Jean-Laurent BONNAFÉ			None
Philippe BORDENAVE	Plan 8 of 5 March 2010	24,900	51.2

➤ PERFORMANCE SHARES GRANTED DURING THE YEAR TO EACH EXECUTIVE CORPORATE OFFICER BY THE ISSUER AND BY ANY GROUP COMPANY

	Number and date of plan	Number of shares granted during the period	Valuation of performance shares according to the method adopted for the consolidated financial statements	Vesting date	Date of availability	Performance conditions
Jean LEMIERRE						None
Jean-Laurent BONNAFÉ						None
Philippe BORDENAVE						None

➤ PERFORMANCE SHARES THAT BECAME AVAILABLE DURING THE YEAR FOR EACH EXECUTIVE CORPORATE OFFICER

	Number and date of plan	Number of shares vesting during the period	Vesting conditions
Jean LEMIERRE			
Jean-Laurent BONNAFÉ		None	
Philippe BORDENAVE			

➤ HISTORY OF SHARE PURCHASE OR SUBSCRIPTION OPTION AWARDS

	Plan 8	Plan 9
Date of Annual General Meeting	21/05/2008	21/05/2008
Date of Board of directors 'meeting	05/03/2010	04/03/2011
Total number of shares that can be subscribed or purchased[1] **of which the number that can be subscribed or purchased by:**	2,423,700	2,296,820
corporate officers	38,200	28,640
Jean LEMIERRE	13,300	9,980
Jean-Laurent BONNAFÉ	-	-
Philippe BORDENAVE	24,900	18,660
Starting point for exercising options	05/03/2014	04/03/2015
Expiration date	02/03/2018	04/03/2019
Subscription or purchase price[1]	51.2	56.45
Adjusted price at 31/12/2018[2]	NONE	67.74
Methods of exercising (when the plan includes several tranches)	*60% of the grant is conditional and is divided into 4 equal tranches subject to performance conditions. The exercise price may be adjusted upward according to the level of achievement of the performance conditions applicable to each tranche.*	*100% of the grant is conditional and divided into 4 equal tranches subject to performance conditions. The exercise price may be adjusted upward according to the level of achievement of the performance conditions applicable to each tranche.*
Number of shares subscribed au 31/12/2018	38,200	-
Cumulative number of lapsed or cancelled share subscription or purchase options	-	-
Remaining share subscription or purchase options at close of year (31/12/2018)	-	28,640

(1) The number of options and the exercise price in these plans has been adjusted for the detachment of pre-emptive subscription rights on 30 September 2009, in accordance with the regulations in force. The exercise prices in these plans do not comprise any discount.

(2) The performance conditions were not met in full for 1/4 of the stock subscription or purchase options awarded.

➤ HISTORY OF PERFORMANCE SHARE AWARDS

Performance share information	
Date of Annual General Meeting	
Date of Board of directors' meeting	
Total number of shares awarded, including the number awarded to:	
Corporate officers	
Jean LEMIERRE	
Jean-Laurent BONNAFÉ	
Philippe BORDENAVE	None
Date of acquisition of the shares	
End date of holding period	
Performance conditions	
Number of shares vested at 31/12/2018	
Cumulative number of lapsed and cancelled shares	
Remaining performance shares at the end of the year (31/12/2018)	

VALUATION[1] OF THE LONG-TERM VARIABLE REMUNERATION PLANS (LTIP) AT THE AWARD DATE AND AT 31 DECEMBER 2018

Award date of the plan	29/04/2014		04/02/2015		04/02/2016		06/02/2017[2]		05/02/2018 [2]		05/02/2019 [2]
Maturity date of the plan		29/04/2019		04/02/2020		04/02/2021		06/02/2022		05/02/2023	05/02/2024
Valuation[1]	At the award date of the plan	At 31/12/2018	At the award date of the plan	At 31/12/2018	At the award date of the plan	At 31/12/2018	At the award date of the plan	At 31/12/2018	At the award date of the plan	At 31/12/2018	At the date of grant of the plan
Jean LEMIERRE	-	-	-	-	-	-	-	-	-	-	-
Jean-Laurent BONNAFÉ	449,668	-	331,200	20,160	339,885	108,030	775,767	326,458	479,065	226,881	282,644
Philippe BORDENAVE	230,526	-	168,360	10,248	217,875	69,250	496,650	209,000	306,700	145,250	180,950
TOTAL	**680,194**	**-**	**499,560**	**30,408**	**557,760**	**177,280**	**1,272,417**	**535,458**	**785,765**	**372,131**	**463,594**

(1) *Valuation according to the method adopted for the consolidated financial statements.*
(2) *The Board of directors modified the performance conditions starting with the LTIP 2017 to more specifically take into account the potential outperformance of the BNP Paribas share compared to its European peers and its intrinsic performance (see detail in section 3 Long-Term Variable Remuneration Plan).*

ASSUMPTIONS USED TO VALUE THE LTIP IN ACCORDANCE WITH THE METHOD ADOPTED FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Valuation at award date		
Award date of the plan	05/02/2018	05/02/2019
Opening BNP Paribas share price	€65.39	€40.04
Opening level of the EURO STOXX Banks index	€137.88	€89.07
Zero-coupon rate	Euribor	Euribor
Volatility of the BNP Paribas share price	20.67%	21.35%
Volatility of the EURO STOXX Banks index	20.76%	21.20%
Correlation between the BNP Paribas share and the EURO STOXX Banks index	86.59%	89.07%
Financial model used	Monte-Carlo	Monte-Carlo
Fair value of the plan at award date(*)	**30.67%**	**18.10%**

(*) *As a percentage of the amount awarded.*

Valuation on closing date	Initial value of the share at the award date	Fair value at date of award(3)	Valuation at closing date 31/12/2017	Valuation at closing date 31/12/2018
Closing price of BNP Paribas shares			€62.25	€39,475
Closing level of the EURO STOXX Banks index			€130.48	€87.04
Zero-coupon rate			Euribor	Euribor
Volatility of the BNP Paribas share price			21.44%	25.25%
Volatility of the EURO STOXX Banks index			20.92%	24.72%
Correlation between the BNP Paribas share and the EURO STOXX Banks index			87.50%	88.93%
Financial model used			Monte-Carlo	Monte-Carlo
Fair value of the plan awarded on 29 April 2014	**€55.11(1)**	**28.46%**	**46.96%**	**0.00%(3)**
Fair value of the plan awarded on 4 February 2015	**€51.76(1)**	**27.60%**	**59.78%**	**1.68%(3)**
Fair value of the plan awarded on 4 February 2016	**€54.07(1)**	**17.43%**	**46.56%**	**5.54%(3)**
Fair value of the plan awarded on 6 February 2017	**€48.35(2)**	**49.67%**	**49.66%**	**20.90%(3)**
Fair value of the plan awarded on 5 February 2018	**€63.99(2)**	**30.67%**	**N/A**	**14.53%(3)**

(1) The initial amount is the higher of the average opening price of the BNP Paribas share in the rolling 12-month period prior to the award date, and the opening BNP Paribas share price on the award date.
(2) The initial value is the average of the opening price of the BNP Paribas share for the rolling 12-month period preceding the date of grant.
(3) As a percentage of the amount awarded.

➤ DETAILED CONTRACTUAL SITUATION OF THE GROUP'S CORPORATE OFFICERS

Executive corporate officers At 31 December 2018	Employment contract		Top-up pension plan		Payments or benefits due or likely to become due upon termination or change in functions		Payment relating to a non-compete clause relating to non-complete agreements	
	Yes	No	Yes	No	Yes	No	Yes	No
Jean LEMIERRE Chairman of the Board of directors		✓(1)	✓(2)			✓		✓
Jean-Laurent BONNAFÉ Chief Executive Officer		✓(3)	✓(2)			✓	✓(4)	
Philippe BORDENAVE Chief Operating Officer	✓(5)		✓(2)			✓		✓

(1) Waiver of employment contract with effect from 1 December 2014 in accordance with Afep-Medef Code.
(2) Jean Lemierre, Jean-Laurent Bonnafé and Philippe Bordenave are only entitled to the defined-contribution pension plan set up for all BNP Paribas SA employees and corporate officers, in accordance with article 83 of the French General Tax Code.
(3) Waiver of employment contract with effect from 1 July 2012.
(4) See section regarding Non-Compete Agreement.
(5) Employment contract suspended.

EX POST SHAREHOLDER VOTE ON THE INDIVIDUAL REMUNERATION OF EXECUTIVE CORPORATE OFFICERS PURSUANT TO ARTICLE L.225-100 OF THE FRENCH COMMERCIAL CODE

The components of remuneration paid or awarded in respect of 2018 to each executive corporate officer, subject to a vote of the shareholders are as follows:

➤ COMPONENTS OF REMUNERATION PAID OR AWARDED FOR THE FINANCIAL YEAR TO MR JEAN LEMIERRE SUBJECT TO THE SHAREHOLDERS' VOTE (AMOUNTS IN EUROS)

	2018	Comments
Jean LEMIERRE - Chairman of the Board of directors		
Fixed remuneration due with respect to the year	950,000	The remuneration paid to Jean Lemierre is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. His fixed remuneration has not changed since December 2014.
Annual variable remuneration awarded in respect of the year	None	Mr Jean Lemierre is not entitled to multi-annual variable remuneration. The absence of variable remuneration reflects the independence of the Chairman with respect to the Executive Management.
Long-term compensation	None	Mr Jean Lemierre is not entitled to multi-annual variable remuneration. The absence of variable remuneration reflects the independence of the Chairman with respect to the Executive Management.
Directors' fees	63,169	Mr Jean Lemierre does not receive any Directors' fees from any Group companies other than BNP Paribas SA
Extraordinary remuneration	None	
Stock options awarded during the period	None	No options were granted to Mr Jean Lemierre during the year.
Performance shares awarded during the year	None	No performance shares were granted to Mr Jean Lemierre during the year.
Sign-on bonuses or severance payments	None	Mr Jean Lemierre received no sign-on bonuses or severance payments.
Top-up pension plan defined-benefit	None	Mr Jean Lemierre is not entitled to any supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,708	Mr Jean Lemierre benefits from the defined-contribution plan set up for all BNP Paribas SA employees, in accordance with pension plans article 83 of the French General Tax Code. The amount of contributions paid by the Company under the plan to Mr Jean Lemierre in 2018 was EUR 1,708.
Collective welfare benefit and healthcare plan	3,217	Mr Jean Lemierre benefits from the disability, invalidity and death, and healthcare insurance plans offered to employees and corporate officers of BNP Paribas SA. He also benefits from death and disability insurance covering all employees of BNP Paribas SA. This amount is the total received.
Benefits in kind	3,632	Mr Jean Lemierre has a company car and a mobile phone.
TOTAL	**1,021,726**	

COMPONENTS OF REMUNERATION PAID OR AWARDED TO MR JEAN-LAURENT BONNAFÉ FOR THE YEAR SUBJECT TO A VOTE BY SHAREHOLDERS (AMOUNTS IN EUROS)

	2018	Comments
Jean-Laurent BONNAFÉ - Chief Executive Officer		
Fixed remuneration due with respect to the year	1,562,000	The remuneration paid to Jean-Laurent Bonnafé is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. The most recent increase in fixed remuneration is dated 25 February, 2016 effective as of 1 January, 2016.
Annual variable remuneration granted for the year ended[1]	1,470,245	The variable remuneration of Mr Jean-Laurent Bonnafé changes on the basis of criteria representative of Group results and his managerial performance. It is expressed as a percentage of a target variable remuneration corresponding to 100% of fixed remuneration for the year. The quantitative criteria apply to the Group's overall performance. They are as follows: ■ ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of target variable remuneration); ■ percentage achievement of the Group's budgeted gross operating income (37.5% of the target variable remuneration). After taking into account both quantitative and qualitative criteria, and the evolution of the Group's results, the Board of directors set the annual variable remuneration of Jean-Laurent Bonnafé for 2018 at EUR 1,470,245 i.e. 94% of the target; ■ Half of the non-deferred portion of the variable remuneration will be paid in May 2019, less the Directors' fees received, where applicable, within the Group in 2018 for the Group's entities other than BNP Paribas SA; and half in March 2020, indexed to the performance of the BNP Paribas share; ■ the deferred portion of the variable remuneration will be paid in fifths as of 2020. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The annual payment of the deferred variable remuneration is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%.
Conditional long-term remuneration plan (fully deferred for a period of five years)	282,644	The fair value of the LTIP awarded to Mr Jean-Laurent BONNAFÉ on 5 February 2019 with respect to 2018 amounted to EUR 282,644. The term of the LTIP is five years. The two conditions of the LTIP, one rewarding an increase in the intrinsic value of the share, and the second - the potential outperformance relative to peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Directors' fees	59,924	Mr Jean-Laurent Bonnafé receives Directors' fees for his term of office as a Director of BNP Paribas SA.
Extraordinary remuneration	None	
Stock options awarded during the period	None	No stock options were awarded to Mr Jean-Laurent Bonnafé for the year.
Performance shares awarded during the year	None	No performance shares were awarded to Mr Jean-Laurent Bonnafé for the year.
Sign-on bonuses and severance payments	None	

	2018	Comments
Payments relating to non-complete agreements	None	Under the non-compete clause signed on 25 February 2016, and subject to the conditions detailed below, Jean-Laurent Bonnafé would receive remuneration equal to 1.2 times the sum of his fixed and variable remuneration (excluding multi-annual variable remuneration) received during the year prior to his leaving the Group. One-twelfth of the indemnity would be paid each month. Under this agreement, if he ceases to hold any role or position in BNP Paribas, Jean-Laurent Bonnafé undertakes, for a period of 12 months, not to take any role whatsoever, either directly or indirectly, for a credit institution, investment or insurance firm whose securities are traded on a regulated market in France or abroad, or in France for a credit institution, investment or insurance firm whose securities are not traded on a regulated market. In accordance with the Afep-Medef Code which stipulates that the payment of a non-compete payment must be excluded if the person concerned claimed his pension rights or has exceeded the age of 65 and the stipulations of said non-compete agreement, the Board of directors and the Executive Management confirmed that they comply with this provision.
Top-up pension plan with defined benefits	None	Mr Jean-Laurent Bonnafé does not benefit from any supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,708	Mr Jean-Laurent Bonnafé benefits from the defined-contribution plan set up for all BNP Paribas SA employees, in accordance with article 83 of the French General Tax Code. The amount of contributions paid by the Company under the plan to Mr Jean-Laurent BONNAFÉ in 2018 was EUR 1,708.
Welfare benefit and healthcare plans	3,217	Mr Jean-Laurent Bonnafé benefits from the disability, invalidity and death and healthcare insurance plans offered to employees and corporate officers of BNP Paribas SA. He also benefits from death and disability insurance covering all employees of BNP Paribas SA.
Benefits in kind	6,507	Mr Jean-Laurent Bonnafé has a company car and a mobile phone. This amount also includes the employer contribution under the Executive Committee professional life insurance contract.
TOTAL	**3,386,245**	

(1) Payment subject to the approval of the Annual General Meeting of 23 May 2019 pursuant to article L.225-100 of the French Commercial Code.

COMPONENTS OF REMUNERATION PAID OR AWARDED TO MR PHILIPPE BOREDENAVE FOR THE YEAR SUBJECT TO A VOTE BY SHAREHOLDERS (AMOUNTS IN EUROS)

	2018	Comments
Philippe BORDENAVE, Chief Operating Officer		
Fixed remuneration due with respect to the year	1,000,000	The remuneration paid to Mr Philippe Bordenave is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. The most recent increase in fixed remuneration is dated 25 February, 2016 effective as of 1 January, 2016.
Annual variable remuneration awarded in respect of the year(1)	941,258	The variable remuneration of Philippe Bordenave changes on the basis of criteria representative of Group results ■ and his managerial performance. It is expressed as a percentage of a target variable remuneration corresponding to 100% of fixed remuneration for the year. The quantitative criteria apply to the Group's overall performance. They are as follows: ■ ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of target variable remuneration); percentage achievement of the Group's budgeted gross operating income (37.5% of the target variable remuneration). ■ After taking into account the quantitative and qualitative criteria, and the evolution of the Group's results, the Board of directors set the annual variable remuneration of Philippe Bordenave for 2018 at EUR 941,258 i.e. 94% of the target; ■ half of the non-deferred portion of the variable remuneration will be paid in May 2019, less Directors' fees received, where applicable, within the Group in 2018 for Group entities other than BNP Paribas SA, and half in March 2020, indexed to the performance of the BNP Paribas share; the deferred portion of the variable remuneration will be paid in fifths as of 2020. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The annual payment of the deferred variable remuneration is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%.
Conditional long-term remuneration programme (fully deferred for a period of five years)	180,950	The fair value of the LTIP awarded to Mr Philippe Bordenave on 5 February 2019 with respect to 2018 amounts to EUR 180,950. The term of the LTIP is five years. The two conditions of the LTIP, one recognising an increase in the intrinsic value of the BNP Paribas share and the other recognising the potential outperformance of its peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Directors' fees	None	Mr Philippe Bordenave does not receive Directors' fees from any of the Group's companies.
Extraordinary remuneration	None	
Stock options awarded during the period	None	No options were granted to Mr Philippe Bordenave during the year.
Performance shares awarded during the year	None	No performance shares were granted to Mr Philippe Bordenave during the year.
Sign-on bonuses or severance payments	None	Mr Philippe Bordenave receives no sign-on bonuses or severance payments.
Top-up pension plan defined-benefit	None	Mr Philippe Bordenave benefits from no supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,708	The corporate officers benefit from the defined-contribution plan (article 83 of the French General Tax Code) set up for all employees of BNP Paribas SA. The amount of contributions paid by the Company under the plan in 2018 to Mr Philippe Bordenave was EUR 1,708.
Collective welfare benefit and healthcare plan	3,217	Mr Philippe Bordenave benefits from the disability, invalidity and death and healthcare insurance plans offered to employees and corporate officers of BNP Paribas SA. He also benefits from death and disability insurance covering all employees of BNP Paribas SA.
Benefits in kind	3,953	Mr Philippe Bordenave has a company car and a mobile phone. This amount also includes the employer contribution under the Executive Committee professional life insurance contract.
TOTAL	**2,131,086**	

(1) Payment subject to the approval of the Annual General Meeting of 23 May 2019 pursuant to article L.225-100 of the French Commercial Code.

REMUNERATION AND BENEFITS AWARDED TO THE GROUP'S NON-EXECUTIVE CORPORATE OFFICERS

Directors' fees and other remuneration received by non-executive corporate officers

With the exception of Directors elected by employees, only the Directors' fees detailed below were paid to non-executive corporate officers.

Directors' fees received by non-executive corporate officers	Amount paid in 2017	Amount paid in 2018
ASCHENBROICH Jacques(1)	21,850	77,772
De CHALENDAR Pierre André	95,944	111,195
COHEN Monique	91,185	128,718
DE PLOEY Wouter	89,729	97,891
EPAILLARD Hugues(2)	None	63,548
GIBSON-BRANDON Rajna(3)	None	1,893
GUILLOU Marion	104,295	103,732
KESSLER Denis	93,905	100,162
LEPETIT Jean-François(4)	73,415	None
MISSON Nicole(5)	101,673	17,144
PARISOT Laurence(6)	124,397	73,878
SCHWARZER Daniela	85,844	100,811
TILMANT Michel	117,405	121,904
VERRIER Sandrine	80,698	71,606
WICKER-MIURIN Fields	94,973	106,652
TOTAL	**1,175,312**	**1,176,907**

(1) *Term of office began on 23 May 2017.*
(2) *Term of office began on 16 February 2018.*
(3) *Term of office began on 28 November 2018.*
(4) *Term of office ended on 23 May 2017.*
(5) *Term of office ended on 15 February 2018.*
(6) *Term of office ended on 25 September 2018.*

Remuneration and benefits awarded to Directors elected by employees

Total remuneration paid in 2018 to Directors elected by employees amounted to EUR 108,077 (EUR 85,685 in 2017), excluding Directors' fees related to their office. Directors' fees paid in 2018 to employee-elected Directors amounted to EUR 152,298 (EUR 182,371 in 2017). These sums were paid directly to the trade union bodies of the Directors concerned.

Directors elected by employees are entitled to the same death/disability benefits and the same *Garantie Vie Professionnelle Accidents* benefits as all BNP Paribas SA employees, as well as medical benefits. The total amount of premiums paid into these schemes by BNP Paribas in 2018 on behalf of employee-elected Directors was EUR 1,658 (EUR 1,478 in 2017).

The Directors elected by employees belong to the defined-contribution pension plan (article 83 of the French General Tax Code) set up for all BNP Paribas SA employees. The total amount of contributions paid by BNP Paribas to the scheme in 2018 on behalf of these corporate officers was EUR 1,204 (EUR 729 in 2017). They are also entitled to top-up banking industry pensions under the industry-wide agreement that entered into force on 1 January 1994.

SUMMARY OF TRANSACTIONS REPORTED ON BNP PARIBAS STOCK

The following table lists the transactions in BNP Paribas stock carried out in 2018 by the corporate officers covered by article L.621-18-2 of the French Monetary and Financial Code and which must be disclosed pursuant to articles 223–22 A to 223-26 of the General Regulation of the AMF.

Full name Function	Transactions carried out	Type of financial instrument	Nature of the transaction	Number of transactions	Amount of transactions *(in euros)*
ASCHENBROICH Jacques	On a personal basis	BNP Paribas Shares	Purchase	1	56,750
DE PLOEY Wouter	On a personal basis	BNP Paribas Shares	Purchase	1	32,085

2.1.4 OTHER INFORMATION

1 INFORMATION ON SHARE SUBSCRIPTION OR PURCHASE OPTIONS AND PERFORMANCE SHARES

The following table lists for 2018 the BNP Paribas employees other than corporate officers granted the largest numbers of financial instruments, as well as the largest numbers of financial instruments transferred or exercised by them in 2018.

	Number of options granted/exercised	Weighted average price (in euros)	Date of grant
Options granted in 2018			
(Sum of the 10 largest grants)	-	-	-
Options exercised in 2018	130,034	51.2	05/03/2010
(Sum of the 10 largest exercised)	23,570	56.45	04/03/2011

	Number of shares awarded/transferred	Date of grant
Performance shares granted in 2018 (Sum of the 10 largest grants)	-	-
Performance shares transferred in 2018	156	04/03/2011
(Sum of the 10 largest transfers)	635	06/03/2012

2 LOANS, ADVANCES AND GUARANTEES GRANTED TO THE GROUP'S CORPORATE OFFICERS

At 31 December 2018, total outstanding loans granted directly or indirectly to corporate officers amounted to EUR 7,094,958 (EUR 6,881,664 at 31 December 2017). This represents the total amount of loans granted to BNP Paribas' corporate officers and their spouses. These loans representing normal transactions were carried out on an arm's length basis.

3 TABLE OF DELEGATIONS

Resolutions of Shareholders' General Meetings valid for 2018

The following delegations to increase or reduce the share capital have been granted to the Board of Directors under resolutions approved by Shareholders' General Meetings and were valid during 2018:

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2018
Annual General Meeting of 23 May 2017 (5th resolution)	Authorisation given to the Board of directors to set up a share buyback programme for the Company up to a maximum of 10% of the shares comprising the share capital. Said acquisitions of shares at a price not exceeding EUR 73 per share (previously EUR 62) would be intended to fulfil several objectives including: ■ obligations arising from the issue of securities giving access to capital, stock option programmes, the award of free shares, the award or sale of shares to employees in connection with the employee profit-sharing scheme or company savings plans, and all forms of share grants to employees and/or officers of BNP Paris and the companies controlled exclusively by BNP as defined in article L.233-16 of the French Commercial Code; ■ cancelling shares in accordance with conditions set by the Shareholders' Combined General Meeting of 23 May 2017 (17th resolution); ■ for the purposes of holding and subsequently remitting them in exchange or payment for external growth transactions, mergers, spin-offs or asset contributions; ■ in connection with a market-making agreement complying with the Code of Ethics recognised by the AMF (French Securities Regulator); ■ in order to carry out investment services for which BNP Paribas is authorised or to hedge them; ■ This authorisation was granted for a period of 18 months and replaces that granted by the 5th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	Under the market-making agreement, 365,267 shares with a par value of EUR 2 were acquired and 348,402 shares with a par value of EUR 2 were sold between 1 January 2018 and 24 May 2018.
Annual General Meeting of 26 May 2016 (16th resolution)	Capital increase, with preferential subscription rights maintained, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 1.2 billion (i.e. 600 million shares). This authorisation was given for a period of 26 months and replaces that granted by the 16th resolution of the Shareholders' Combined General Meeting of 14 May 2014.	This authorisation was not used during the period.
Annual General Meeting of 26 May 2016 (17th resolution)	Capital increase, without preferential subscription rights, through the issue of ordinary shares and share equivalents giving access immediately. or in the future to shares to be issued. The nominal amount of capital increases that may be carried out, immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 240 million (i.e. 120 million shares). This authorisation was given for a period of 26 months and replaces that granted by the 17th resolution of the Shareholders' Combined General Meeting of 14 May 2014.	This authorisation was not used during the period.
Annual General Meeting of 26 May 2016 (18th resolution)	Capital increase, without preferential subscription rights, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued intended to remunerate contributions of securities up to 10% of the share capital. The nominal amount of capital increases that may be carried out, on one or more occasions pursuant to this delegation, may not exceed 10% of the share capital of BNP Paribas as at the date of the decision of the Board of directors. This delegation was given for a period of 26 months and replaces that granted by the 19th resolution of the Shareholders' Combined General Meeting of 14 May 2014.	This authorisation was not used during the period.
Annual General Meeting of 26 May 2016 (19th resolution)	Overall limit on authorisations to issue shares without preferential subscription rights for existing shareholders. The maximum overall amount for all issues without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 240 million for shares by virtue of the authorisations granted under the 17th and 18th resolutions of the Shareholders' Combined General Meeting of 26 May 2016.	Not applicable.
Annual General Meeting of 26 May 2016 (20th resolution)	Capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium. Authorisation was given to increase the share capital up to a maximum amount of EUR 1.2 billion on one or more occasions, by capitalising all or part of the reserves, profits or additional paid-in capital, merger or contribution premiums, successively or simultaneously, through the issuance and award of free shares, through an increase in the par value of existing shares, or through a combination of these two methods. This authorisation was granted for a period of 26 months and replaces that granted by the 21st resolution of the Shareholders' Combined General Meeting of 14 May 2014.	This authorisation was not used during the period.

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2018
Annual General Meeting of 26 May 2016 (21st resolution)	Overall limit on authorisations to issue shares with or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 1.2 billion for shares by virtue of the authorisations granted under the 16th to 18th resolutions of this Shareholders' Combined General Meeting of 26 May 2016.	Not applicable
Annual General Meeting of 26 May 2016 (22nd resolution)	Authorisation granted to the Board of directors to carry out transactions reserved for members of the BNP Paribas Group's Company Savings Plan in the form of new share issues and/or sales of reserved shares. Authorisation was given to increase the share capital within the limit of a maximum nominal amount of EUR 46 million on one or more occasions by issuing ordinary shares (without preferential subscription rights for existing shareholders), reserved for members of the BNP Paribas Group's Company Savings Plan, or by selling of shares. This authorisation was granted for a period of 26 months and replaces that granted by the 23rd resolution of the Shareholders' Combined General Meeting of 14 May 2014.	This authorisation was not used during the period.
Annual General Meeting of 23 May 2017 (17th resolution)	Authorisation granted to the Board of directors to reduce share capital by cancelling shares. Authorisation is given to cancel, on one or more occasions, through reduction of the share capital, all or some of the shares that BNP Paris holds and that it could hold, up to a maximum of 10% of the total number of shares constituting the share capital existing as at the date of the transaction, for a period of 24 months. Delegation of all powers to carry out this reduction in share capital, and to allocate the difference between the value of the cancelled shares and their nominal value to capital premium and retained earnings, including the legal reserve up to 10% of the share capital that is cancelled. This authorisation was granted for a period of 18 months and replaces that granted by the 23rd resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period.
Annual General Meeting of 24 May 2018 (5th resolution)	Authorisation given to the Board of directors to set up a share buyback programme for the Company up to a maximum of 10% of the shares comprising the share capital. Said acquisitions of shares, at a price not exceeding EUR 73 per share (previously EUR 73), would be intended to fulfil several objectives including: ■ fulfilling obligations arising from the issue of securities giving access to capital, stock option programmes, the award of free shares, the award or selling of shares to employees in connection with the employee profit-sharing scheme or company savings plans, and all forms of share grants to employees and/or officers of BNP Paris and the companies controlled exclusively by BNP as defined in article L.233-16 of the French Commercial Code; ■ cancelling shares in accordance with conditions set by the Shareholders' Combined General Meeting of 24 May 2018 (26th resolution); ■ holding and subsequently remitting them in exchange or payment for external growth transactions, mergers, spin-offs or asset contributions; ■ holding them in connection with a market-making agreement complying with the Code of Ethics recognised by the AMF (French Securities Regulator); and carrying out investment services for which BNP Paribas is authorised or to hedge them. This authorisation was granted for a period of 18 months and replaces that granted by the 5th resolution of the Shareholders' Combined General Meeting of 23 May 2017.	Under the market-making agreement, 148,301 shares with a par value of EUR 2 were acquired and 245,666 shares with a par value of EUR 2 were sold between 25 May 2018 and 31 December 2018
Annual General Meeting of 24 May 2018 (19th resolution)	Capital increase, with preferential subscription rights maintained, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 1 billion (i.e. 500 million shares). This authorisation was granted for a period of 26 months and replaces that granted by the 16th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period.
Annual General Meeting of 24 May 2018 (20th resolution)	Capital increase, without preferential subscription rights, by issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out, immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 240 million (i.e. 120 million shares). This authorisation was granted for a period of 26 months and replaces that granted by the 17th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period.

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2018
Annual General Meeting of 24 May 2018 (21st resolution)	Capital increase, without preferential subscription rights, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued intended to remunerate contributions of securities up to 10% of the share capital. The nominal amount of capital increases that may be carried out on one or more occasions, by virtue of this authorisation, may not exceed 10% of the share capital of BNP Paribas as at the date of the decision of the Board of Directors. This delegation was given for a period of 26 months and replaces that granted by the 18th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period.
Annual General Meeting of 24 May 2018 (22nd resolution)	Overall limit on authorisations to issue shares without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 240 million for shares by virtue of the authorisations granted under the 20th and 21st resolutions of this Shareholders' Combined General Meeting of 24 May 2018.	Not applicable
Annual General Meeting of 24 May 2018 (23rd resolution)	Capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium. Authorisation was given to increase the share capital up to a maximum amount of EUR 1 billion on one or more occasions, by capitalising all or part of the reserves, profits or additional paid-in capital, merger or contribution premiums, successively or simultaneously, through the issuance and award of free shares, through an increase in the par value of existing shares, or through a combination of these two methods. This authorisation was granted for a period of 26 months and replaces that granted by the 21st resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period.
Annual General Meeting of 24 May 2018 (24th resolution)	Overall limit on authorisations to issue shares with or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 1 billion for shares by virtue of the authorisations granted under the 19th to 21st resolutions of this Shareholders' Combined General Meeting of 24 May 2018.	Not applicable
Annual General Meeting of 24 May 2018 (25th resolution)	Authorisation granted to the Board of directors to carry out transactions reserved for members of the BNP Paribas Group's Company Savings Plan in the form of new share issues and/or sales of reserved shares. Authorisation was given to increase the share capital within the limit of a maximum nominal amount of EUR 46 million on one or more occasions by issuing ordinary shares (without preferential subscription rights for existing shareholders), reserved for members of the BNP Paribas Group's Company Savings Plan, or by selling of shares. This authorisation was granted for a period of 26 months and replaces that granted by the 22nd resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period.
Annual General Meeting of 24 May 2018 (26th resolution)	Authorisation granted to the Board of directors to reduce share capital by cancelling shares. Authorisation is given to cancel, on one or more occasions, through reduction of the share capital, all or some of the shares that BNP Paris holds and that it could hold, up to a maximum of 10% of the total number of shares constituting the share capital existing as at the date of the transaction, for a period of 24 months. Delegation of all powers to carry out this reduction in share capital, and allocate the difference between the purchase price of the cancelled shares and their nominal value to share premium and retained earnings, including the legal reserve up to 10% of annual share capital. That authorisation was granted for a period of 18 months and replaces that granted by the 17th resolution of the Shareholders' Combined General Meeting of 23 May 2017.	This authorisation was not used during the period.

4. ITEMS LIKELY TO HAVE AN IMPACT IN THE EVENT OF A PUBLIC TENDER OR EXCHANGE OFFER (ARTICLE L.225-37-5 OF THE FRENCH COMMERCIAL CODE)

Among the items referred to in a rticle L. 225-37-5 of the French Commercial Code, there is no element likely to have an impact in the event of a public takeover or exchange offer.

2.2 Statutory Auditors' report, prepared in accordance with article L.225-235 of the French Commercial Code, on the Board of directors' report on corporate governance

The observations required by article L.225-235 of the French Commercial Code are included in the Statutory Auditors' report on the financial statements (chapter 6.6).

2.3 The Executive Committee

At 5 February 2019 the BNP Paribas Executive Committee had the following members:

- **Jean-Laurent Bonnafé**, Director and Chief Executive Officer;
- **Philippe Bordenave**, Chief Operating Officer;
- **Jacques d'Estais**, Deputy Chief Operating Officer; International Financial Services;
- **Michel Konczaty**, Deputy Chief Operating Officer;
- **Thierry Laborde**, Deputy Chief Operating Officer; Domestic Markets;
- **Yann Gérardin**, Deputy Chief Operating Officer; Corporate and Institutional Banking;
- **Marguerite Berard**, Head of French Retail Banking(*);
- **Marie-Claire Capobianco**, Director of Growth and Corporates in France(**);
- **Laurent David,** Head of BNP Paribas Personal Finance;
- **Stefaan Decraene**, Head of International Retail Banking;
- **Renaud Dumora**, Chief Executive Officer of BNP Paribas Cardif;
- **Maxime Jadot**, Head of BNP Paribas Fortis;
- **Nathalie Hartmann**, Head of the Group Compliance Function;
- **Yves Martrenchar**, Head of Group Human Resources;
- **Andrea Munari**, Country Head for Italy, and Director and Chief Executive Officer of BNL;
- **Alain Papiasse**, Chairman of Corporate and Institutional Banking;
- **Eric Raynaud**, Head of the Asia Pacific region;
- **Frank Roncey**, Head of Group Risk Management;
- **Antoine Sire**, Head of Corporate Engagement;
- **Thierry Varène**, Global Head for Large Clients; Chairman of Corporate Clients Financing and Advisory EMEA.

The Executive Committee of BNP Paribas has had a permanent Secretariat since November 2007.

(*) Appointed on 1 January 2019.

(**) Change of function on 1 January 2019.

2.4 Internal Control

The following information relating to internal control has been provided by the Group's Executive Management. The Chief Executive Officer shall be responsible for the organisation and procedures of internal control and for all information required by French law regarding the internal control report. This document is based on the information provided by the Compliance, Risk, Finance, Legal and General Inspection Functions. It has been approved by the Board of directors.

BNP PARIBAS' INTERNAL CONTROL STANDARDS

The principles and procedures for the internal control of banking activities in France and abroad are at the heart of banking and financial regulations and are subject to numerous legislative and regulatory provisions.

The main text applicable to BNP Paribas is the Ministerial Order of 3 November 2014. This text sets out the conditions for the implementation and monitoring of internal control in credit institutions and investment firms, in compliance with the European Directive CRD 4. In particular, it specifies the principles relating to internal transaction control systems and procedures, organisation of accounting and information processing, risk and result measurement systems, risk monitoring and control systems, and the information and documentation system for internal control. article 258 of the Order provides for the drafting for the Board of directors of an annual regulatory report on the conditions under which internal control is implemented.

This Order requires BNP Paribas to have an internal control system (hereinafter Internal control) comprising specific departments and persons responsible for permanent control (including the Compliance and Risk Functions) and periodic control. This system must also take into account, as appropriate, the general regulation of the AMF, the regulations applicable to foreign branches and subsidiaries and to specialised activities such as portfolio management and insurance, and the recommendations of leading international bodies dealing with issues related to the prudential regulation of international banks, first and foremost the Basel Committee, the Financial Stability Board, the European Authorities, the European Securities and Markets Authority, the European Central Bank and the French *Autorité de contrôle prudentiel et de résolution*.

DEFINITION, OBJECTIVES AND STANDARDS OF INTERNAL CONTROL

The BNP Paribas Group's Executive Management has implemented an internal control system whose main purpose is to ensure overall control of the risks and to provide reasonable assurance that the Company's objectives in this respect are achieved.

BNP Paribas' internal control charter (reworked and updated in 2017) specifies the framework of this system and constitutes BNP Paribas' basic internal control framework. Widely distributed within the Group and accessible to all its employees, this charter firstly recalls the objectives of internal control, which aims to ensure:

- a sound and prudent risk management approach, aligned with BNP Paribas' values and code of conduct in conjunction with the policies outlined in its corporate social responsibility framework;
- operational security of BNP Paribas' internal operations;
- the relevance and reliability of accounting and financial information;
- compliance with laws, regulations and internal policies.

Its implementation requires, in particular, that a culture of high-level risk and ethics be promoted to all employees and in BNP Paribas' relations with third parties, clients, intermediaries or suppliers as well its shareholders.

The charter then sets out the rules governing the organisation, responsibility and scope of operations of the various internal control entities and establishes the principle according to which the control functions (Compliance, Legal, Risk and General Inspection in particular) execute these controls independently.

SCOPE OF INTERNAL CONTROL

The BNP Paribas Group's internal control is overarching:

- it covers all types of risks to which the Group may be exposed (credit and counterparty risk, market risk, liquidity risk, interest rate risk in the banking book, underwriting risk with respect to insurance, operational risk, risk of non-compliance, equity risk, etc.);
- it is applied at the Group level and at the level of directly or indirectly controlled entities, irrespective of their line of business and irrespective of whether they are consolidation status. For other entities (in particular, legal entities subject to significant influence), the Group's representatives on the corporate bodies of these entities are strongly encouraged to promote the same standards of internal control;
- it also covers the use of outsourced services, in accordance with principles defined by regulation.

FUNDAMENTAL PRINCIPLES OF INTERNAL CONTROL

BNP Paribas' internal control system is based on its values and the code of conduct as well as the principles of the following additional actions:

- clearly identified responsibilities: internal control is the responsibility of every employee, irrespective of their seniority or responsibilities. The exercise of a managerial function carries the additional responsibility of ensuring the proper implementation of the internal control system within the scope subject to regulation. In this framework, the necessary responsibilities and delegations must be clearly identified and communicated to all stakeholders;

- a structured risk identification, assessment and management system (involving, among others, a decision-making system, delegation, organisational principles, controls, reporting and alert mechanism, etc.);
- control and oversight that is independent of risk: the heads of the operational activities have the ultimate responsibility for those risks created by their activities, and as such, the foremost responsibility of implementing and operating a system that identifies, assesses and manages risk. The internal control system provides for mandatory intervention, and as early as possible, of Functions exercising independent control under a second level of control. This intervention takes the following forms:
  - defining the overall normative framework for risk identification, assessment and management,
  - defining cases where a second prior review by a function exercising a second-level control shared with the operational entity is necessary for decision-making,
  - independent controls, called second-level controls, carried out by said function on the system implemented by the heads of the operational activities and on their operation (result of the risk identification and assessment process, relevance and conformity of the risk control systems and in particular, compliance with the limits set);
- separation of duties: it is a key element of the risk control system. It consists of assigning certain operational tasks that contribute to the performance of a single process to stakeholders at various hierarchical levels or to separate these tasks by other means, in particular by electronic means. Thus, for example, tasks related to transaction initiation, confirmation, accounting, settlement and accounts reconciliation must be performed by different parties;
- proportionality of risks: the internal control system must be implemented under an approach and with an intensity that is proportionate to the risks involved. This proportionality is determined based on one or more criteria:
  - risk intensity as identified in the context of assessment programmes ("Risk ID", RCSA, etc.),
  - amount of allocated capital and/or ratios in terms of solvency and liquidity,
  - criticality of activities with regard to systemic issues,
  - regulatory conditions governing the exercise of business activities, size of business activities carried out,
  - customer type and distribution channels,
  - complexity of the products designed or marketed and/or services provided,
  - complexity of the processes carried out and/or the level of use of outsourcing with internal/external entities of the Group,
  - sensitivity of the environment where the activities are located,
  - legal form and/or presence of minority shareholders;
- appropriate governance: the internal control system is subject to governance involving the different stakeholders and covering the various aspects of internal control, both organisational and monitoring and oversight; the internal control committees are a key instrument in this system; the system is part of the decision-making processes managed through a system of delegations in the management reporting lines. They may involve the input of a third party belonging to another reporting line, whenever the systems defined by the Operational Entities and/or the functions exercising a second-level control so provide. The escalation process allows for disagreements between the operational entities and functions exercising second-level control, especially those related to decision-making, to be escalated to the higher hierarchical and possibly functional levels, to which the two parties report, and at the end, when these disputes cannot be resolved in this way, to arbitration conducted by the Group's Executive Officers. This process is implemented in accordance with the powers conferred to the Group Risk Officer, who may exercise his right of veto under the conditions set out in the Risk charter;
- a requirement for formalisation and traceability: Internal Control relies on the instructions of Executive Officers, written policies and procedures and audit trails. As such, the controls, their results, their implementation and the feedback from the entities to the higher levels of the Group's governance are documented and traceable;
- a duty of transparency: all Group employees, irrespective of their position, have a duty to communicate, in a transparent manner, that is, spontaneously and promptly, to a higher level within the organisation to which they belong:
  - any information required for a proper analysis of the situation of the entity in which the employee operates, and which may impact the risks or the reputation of the entity or the Group,
  - any question that the employee could not resolve independently in the exercise of his duties,
  - any anomaly of which he becomes aware.

  In addition, he has a duty to alert, under the protection of confidentiality, as provided for by the Group code of conduct and exercised within the framework of the whistleblowing system established by Compliance;
- a human resources management taking into account internal control objectives: the internal control objectives to be considered in employee career management and remuneration (including: as part of the employee evaluation process, training, recruitment for key positions, and in determining remuneration);
- continuous adaptation of the system in response to changes: the internal control system must be actively managed by its various stakeholders. This adjustment in response to changes of any kind that the Group must face must be done according to a periodic cycle defined in advance but also continuously as soon as events so justify.

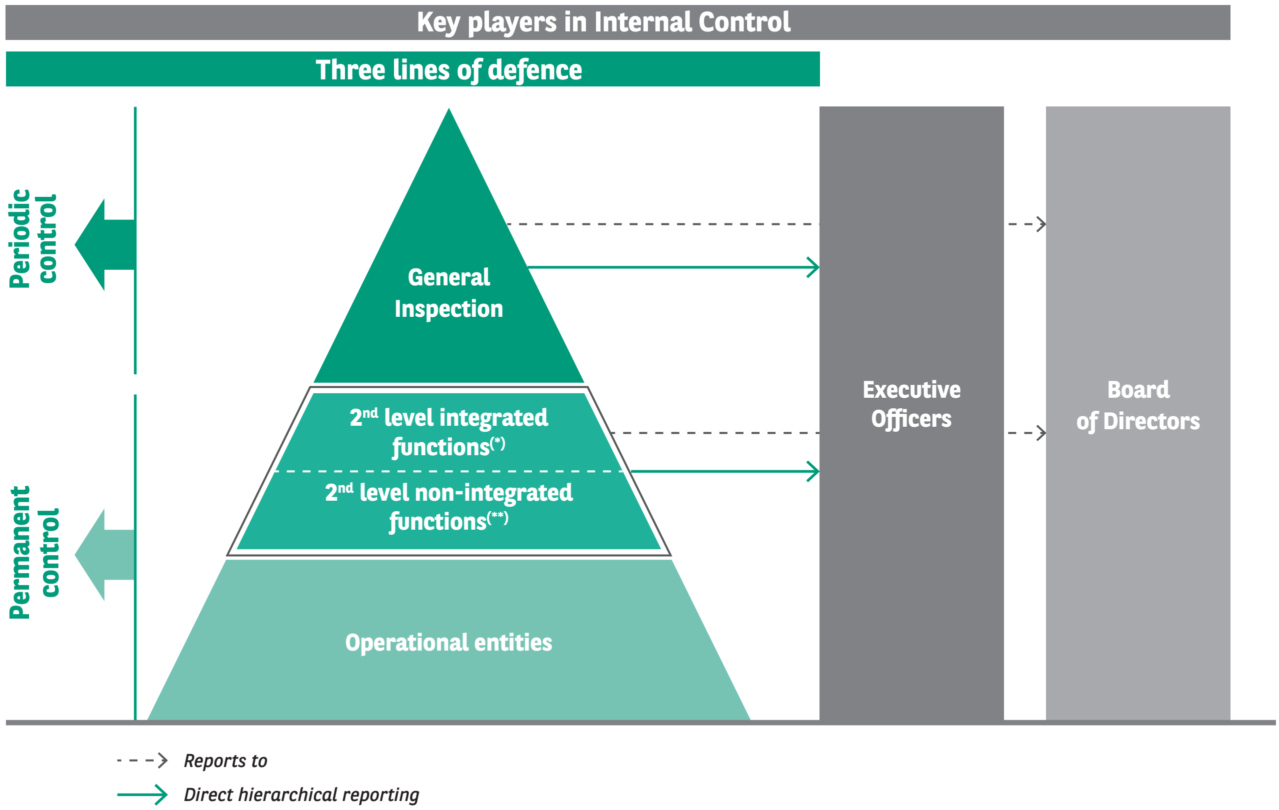
Compliance with these principles is verified on a regular basis, in particular through assignments carried out by the periodic control teams (General Inspection).

ORGANISATION OF INTERNAL CONTROL

BNP Paribas Group's internal control system is organised around three lines of defence, under the responsibility of Executive Officers and under the oversight of the Board of directors.

Permanent control is the ongoing implementation the risk management system and is provided by the first two lines of defence. Periodic control, provided by the third line of defence, is an audit and assessment function that is performed according to a clean audit cycle.

The functions exercising the second and third lines of defence are so-called Functions exercising independent control. They report directly to the Executive Officers and with respect to Compliance, Legal, Risk and General Inspection, they report on the performance of their duties to the Board of directors.



(*) Compliance, Legal, Risk.

(**) Group Tax Department and Group Finance under its responsibility as part of the organisation and oversight of the control system for risks related to accounting and financial information.

KEY PLAYERS IN INTERNAL CONTROL

- The operational entities are the first line of defence: the operational entities are primarily responsible for managing their risks and are the front-line in permanent control. They act within the framework defined by the Group's Executive Officers and reviewed by its Board of directors, transcribed in the form of policies and procedures and to the extent necessary, tailored by the corporate bodies of the Group's entities.
- The risk control system operated by the first line of defence forms what is called the first-level control system. It is implemented by employees and/or their reporting line and/or control teams that do not operate the processes under their control.

  The operational entities cover:

  - all Operating divisions and Business Lines, whether these concern profit-centre entities and their associated support functions, or all entities of Domestic Markets, International Financial Services and Corporate & Institutional Banking;
  - all cross-divisional Functions, including the control functions for the processes that they operate directly and not under the responsibility of the second line of defence;
  - all the Territories, attached to an operating division.
- The Functions exercising second-level control (second line of defence):
  - functions exercising second-level control are responsible, under the delegation given by the Executive Officers, for the organisation and functioning of the risk control system and its compliance with laws and regulations on a range of areas (subjects and/or processes), as defined in their responsibility charter;
  - as such, in their field of expertise and, where appropriate, after having consulted the operational entities, they define the general normative framework in which the risk management under their responsibility is to be carried out, the methods of their intervention (thresholds, delegations, escalation, etc.), implement this system in those aspects that concern them and for which they are responsible, in their area of expertise, for first-level and second-level permanent control. They challenge and provide an independent view of risk identification and assessment *vis-à-vis* operational entities. They also contribute to spreading a culture of risk and ethics within the Group;
  - those responsible for these functions provide the Executive Officers and Board of directors with a reasoned opinion on the level of risk control, current or potential, in particular regarding the "Risk Appetite Statement" as defined and propose any actions for improvement that they deem necessary;

- the Head of a Function performing a second level control performs this mission by relying on teams that can be placed:
  - either under its direct or indirect hierarchical responsibility, where the Function is then called integrated. It thus has full authority over its budget and the management of its human resources,
  - or under its direct or indirect functional responsibility (so-called non-integrated Function) subject to joint decision-making with the reporting line manager for Human Resources and budget.

The three integrated Functions exercising second-level control are:

- Risk, in charge of organising and overseeing the overall system for controlling those risks to which the BNP Paribas Group is exposed, particularly credit risk and counterparty risk, market risk, funding and liquidity risk, interest rate and exchange rate risk in the banking book, insurance risk and operational risk. The Head of Risk is also the Head of Permanent Control, responsible for the consistency and proper functioning of the permanent control system within the BNP Paribas Group;
- Compliance, responsible for organising and overseeing the non-compliance risk control system. As such, it contributes to the permanent control of compliance with laws and regulations, professional and ethical standards and the guidelines of the Board of directors and the instructions of the Executive Management;
- Legal, responsible for organising and overseeing the legal risk control system, exercises its responsibility to prevent and manage legal risks through its advisory and control roles. It exercises this control by (i) monitoring the implementation of legal opinions issued for the purpose of avoiding or mitigating the effects of a major legal risk and (ii) first and second level control exerted on the legal processes. The missions entrusted to this function are performed independently of the business activities and support functions. The function is integrated hierarchically under the sole authority of its Department head, *i.e.* "Group General Counsel," who reports to the Chief Executive Officer.

The heads of these functions may be heard by the Board or any of its specialised committees, directly, possibly without the presence of Executive Officers, or at their request.

The two non-integrated functions exercising a second-level control are:

- Group Tax Department, as part of the organisation of the Group's tax risk control system and its contribution to its implementation;
- Group Finance, under its responsibility in defining and implementing the risk control system related to accounting and financial information.

The appointment of the Heads of the Compliance, Finance and Risk Functions falls within the framework defined by the European Banking Authority.

- General Inspection (third line of defence): the General Inspection is responsible for periodic control, performs the Internal Audit Function and contributes to the protection of the Group by independently acting as its third line of defence on all Group entities and in all areas. It includes:
  - centrally based inspectors who carry out their duties throughout the Group;
  - auditors distributed in the geographical or business line platforms (called "hubs").

  The Inspector General, responsible for periodic controls, reports to the Chief Executive Officer.
- Executive Officers: the Chief Executive Officer and the Chief Operating Officer ensure the effective management of the Company for regulatory and legal purposes. In practice, the Executive Officers make key decisions through specialised committees that allow them to rely on experts with a deep understanding of the issues to be addressed.

  Executive Directors are responsible for the internal control system as a whole. As such and notwithstanding the powers of the Board of directors, the Executive Officers:
  - decide on the key policies and procedures serving as the basis for this system;
  - directly oversee the functions exercising independent control and provide them with the means to allow them to fulfil their responsibilities effectively;
  - define the Group's risk-taking policies, validate the most important decisions in this area and, if necessary, make the final decisions in the context of the escalation process. This process is implemented in accordance with the powers conferred to the Group Risk Officer, who may exercise his right of veto under the conditions set out in the Risk charter,
  - periodically evaluate and monitor the effectiveness of the internal control policies, systems and procedures and to implement the appropriate measures to remedy any deficiencies;
  - receive the main reports on internal control within the Group;
  - report to the Board of directors or its relevant committees on the operation of this system.
- The Board of directors: the Board of directors exercises directly or through specialised committees (Financial Statements Committee, Internal Control, Risk Management and Compliance Committee, Corporate Governance, Ethics, Nominations and CSR Committee, etc.) key responsibilities in terms of internal control. Among others, the Board of directors:
  - determines, on the proposal of the Executive Officers, the strategy and guidelines of the internal control activity and ensures their implementation;
  - reviews the internal control activity and results at least twice per year;
  - regularly reviews, assesses and verifies the effectiveness of the governance system, including in particular, clearly defined responsibilities, and internal control, including in particular risk reporting procedures, and taking appropriate measures to remedy any failings uncovered;
  - validates the "Risk Appetite Statement", approve and periodically review the strategies and policies for taking up, managing, monitoring and controlling risks and approves their overall limits.

The organisation of the Board of directors and its specialised committees is defined through its Internal rules. The Heads of General Inspection and the integrated functions exercising second-level control have the right to be heard, possibly without the presence of Executive Officers, by the Board of directors or one of its specialised committees.

Finally, among the specialised committees, the Internal Control, Risk Management and Compliance Committee (CCIRC) is essential in the Group's internal control system. Indeed, it assumes the following responsibilities:

- analyses reports on internal control and on risk measurement and monitoring, reports on the activities of the General Inspection, and significant correspondence with the main regulators;
- examines the strategic directions of the risk policy;
- reports to the Board of directors.

COORDINATION OF INTERNAL CONTROL

At the consolidated level, the coordination of internal control is ensured by the Group Supervisory & Control Committee, which is responsible, in particular, for ensuring consistency and coordination in the internal control system. It meets on a bi-monthly basis and brings together the Executive Officers, the Deputy Chief Executive Officer and the Heads of the integrated Functions. The Deputy Chief Operating Officers overseeing an operating division have standing invitations to attend.

In those entities and territories that are significant for the Group, their Executive Officers are responsible for arranging this coordination, generally within the framework of the Internal Control Committees.

PROCEDURES

The procedures are one of the key elements of the permanent control system alongside the identification and assessment of risks, controls, reporting and monitoring of the control system.

Written guidelines are distributed throughout the Group and provide the organisation and procedures to be applied as well as the controls to be applied. These procedures constitute the basic framework for internal control. The Risk Function, as part of the oversight of the permanent control system, regularly monitors the completeness of the procedures' guidelines. The Group's cross-functional procedures framework (levels 1 and 2) is regularly updated through contributions from all divisions and functions. Regarding the control framework, investigations into the status of the system are included in the semi-Annual Report on permanent control.

Among the Group's cross-functional procedures, applicable in all entities, risk control is critically important in:

- the procedures that govern the process for approving exceptional transactions, new products and new activities;
- the procedure for approving credit and market transactions;
- the procedures in terms of compliance with embargoes and anti-money laundering.

These processes rely primarily on committees (Exceptional Transactions Committees, New Activities and Products Committees, Credit Committees, etc.) mainly covering, on the one hand, operational and related functions such as IT and Operations, and on the other, the control functions (Risk, Compliance, Finance, and Legal and Tax Functions), which take a "second-look" on transactions. In the event of a dispute, they are submitted to a higher level of the organisation. Leading this process are the committees (Credit, Market Risk, Risk Policy Committees, etc.) chaired by members of the Executive Management.

2018 HIGHLIGHTS

2018 was marked in particular by the following topics: the continued implementation of the remediation plans on financial security, the "conduct" and operational risk, the "Know Your Customer" programme (KYC) with the continued significant reinforcement of Compliance means, and implementation of large programmes on compliance with MiFID regulations and French anti-corruption law.

Cyber threats remained at a high level in 2018, which mobilised the teams concerned throughout the Group to continue strengthening the Group's protection, detection and control system.

COMPLIANCE

Integrated globally since 2015, Compliance brings together all Group employees reporting to the function.

Compliance is organised based on its guiding principles (independence; integration and decentralisation of the function; dialogue with the business lines; a culture of excellence) through three operating areas, two regions, five fields of expertise and three cross-functional activities.

All Compliance Officers in the various operational areas, regions, business lines and territories, fields of expertise and Group functions report directly to the Compliance Function.

The Group Compliance headcount again increased significantly to 4,186 full-time equivalents (FTEs) at the end of 2018, an increase of 11% compared to 2017. The Compliance Function continued to oversee the implementation of remediation plans initiated as part of its agreements with the authorities in France and the United States regarding international financial and foreign exchange sanctions. Several other projects are underway in order to better align the organisation with the many challenges now faced (new regulatory requirements, complex transactions, etc.) by the Compliance Function. This is the case in particular in the areas of financial security (anti-money laundering, fight against corruption and terrorist financing, international financial sanctions), market integrity, the implementation of the French Banking Act and the US Volcker Rule, as well as laws concerning the tax status of customers, Professional Ethics, the code of conduct and the strengthening of mechanisms to protect customer interests.

In 2018, for example, the Compliance Function's activity resulted in the following developments:

- in terms of financial security, as part of its transformation programme, the Bank strengthened the Anti-Money Laundering/Combatting the Financing of Terrorism (AML/CFT) system by updating several key elements of its regulatory framework. The operational implementation of the new standards for transaction monitoring and AML/CFT alert management defined in 2017 continued throughout the Group, the effective implementation of which is expected by the end of 2019 in most of the entities concerned;
- as regards the system relating to international financial sanctions and verification of the Group's compliance with the commitments made to the French and US authorities, the third annual audit of the independent consultant of the Fed and the ACPR took place between June and November 2018. The review of the independent consultant of the Department of Financial Services of New York ("DFS"), which covered the customer data screening tools and processes, the list management processes and tools, and BNP Paribas New York's new Anti-Money Laundering/Terrorist Financing Tool also took place in 2018;
- moreover, the system to ensure the Group's compliance with the payment transparency (FATF recommendation 16) was strengthened in 2018 and the Group's country risk assessment model was reviewed and strengthened during the year;
- the BNP Paribas corruption prevention and management system overhauled following the publication of the so-called "Sapin 2" law of 9 December 2015 on transparency, anti-corruption and modernising the economy. This system is now based on an anti-corruption code of conduct incorporated into BNP Paribas SA's internal regulations, governance, corruption risk mapping, policies, procedures and tools used to control identified risks, internal alert systems, and finally, controls and reports. The measures undertaken enabled the existing system to be strengthened in 2018 to comply with new recommendations from the *Agence Française Anti-Corruption* (French Anti-Corruption Agency - AFA). Anti-Corruption Contacts were appointed at all operational levels of BNP Paribas and the Central team was expanded, the whistleblowing system and the corruption risk mapping were completed and an online awareness training on corruption risks was launched for all employees. These measures will be completed in 2019, notably by strengthening the operational accounting controls and the 1st and 2nd level controls of the anti-corruption system;
- the "Whistleblowing" procedure was revised to meet the new regulatory requirements. Consolidation of the whistleblowing system continued by strengthening whistleblower protection, formalising the methodological framework for alert processing, and improving feedback;
- the implementation of the target permanent compliance control system continued in 2018, with, notably, deployment of the generic market integrity control plan and the finalisation of the target permanent control program for Compliance. Efforts to strengthen the permanent control system will continue in 2019 in close collaboration with the Risk Function to ensure convergence of the approaches, methodologies and tools used;
- the continued improvement of the market abuse detection system in terms of governance, supervision and tools;
- compliance with the BMR ("Benchmark Regulation") for all business undertaken by BNP Paribas as an administrator, contributor or user of benchmarks, and compliance with the principles of the IOSCO;
- compliance with the FX code of the Bank for International Settlements;
- the publication of all policies, guidelines and technical guides in relation to MiFID II;
- the implementation of major new European regulations MiFID II, IDD and PRIIPs continued as part of the global governance adapted to coordinate the actions of the local Compliance teams in all the countries and business lines concerned;
- the continued implementation of new applicable regulations (including French banking law, the US "Volcker Rule", the US FATCA law (Foreign Account Tax Compliance Act), standard AEOI (Automatic Exchange of Information) of reporting promoted by the OECD on tax clients) and deployment of the corresponding periodic certification process.

In the area of "Know Your Client", or KYC, all business lines continued to implement the Group's policies and to improve operational efficiency. These projects are regularly monitored by the Executive Management. At the same time, Compliance conducts an adaptive standards maintenance program to take into account emerging risks and regulatory changes, and to develop the risk approach.

In terms of training, a large-scale initiative continued throughout the Group (online training) with a view to raising awareness among all employees concerned about the importance and main features of international financial sanctions. Thus, at 31 December 2018, more than 90% of the employees concerned had taken online training on international sanctions and embargoes, anti-money laundering and financing of terrorism training.

A number of projects will be continued and finalised in 2019: the strengthening of the "Conduct" supervisory framework within the Group, but also the industrialisation and automation of processes to focus on a closer and more effective management of non-compliance risks.

LEGAL

In 2018, the Legal Function continued to strengthen its legal risk management system, in particular through:

- Improving governance:
  - strengthening the system for anticipating legal risks by the effective implementation of a Legal Risk Anticipation Department;
  - structuring a Legal Risk Oversight team to develop the permanent control system in the Legal COO;
  - strengthening coordination with the General Inspection, Risk and Compliance Functions, particularly by contributing to a common operational risk governance ("Group Operational Risk Committee");
  - review of the target operating model for the regulatory monitoring applicable to all the functions involved in the monitoring process.

- The Legal Function has had a number of achievements in terms of legal risk management, notably:
  - definition of a taxonomy of legal risks and a specific methodology for assessing legal risks and the control environment;
  - roll-out of a mandatory module for training and raising employee awareness of competition law;
  - roll-out of a mandatory employee awareness module on personal data protection in the context of the European General Data Protection Regulation, which came into force on 25 May 2018;
  - implementation of a Legal digital expertise plan focusing on the increasing importance of digital legal expertise, the key point of which was the development of a skills centre for training corporate lawyers on the legal issues relating to digitalisation to support the Group in its transformation plan and to understand these new issues. This skills centre was developed in collaboration with Assas University and an international law firm, and has already trained 60 lawyers. This plan is supported by a new cross-functional governance of IT and Intellectual Property issues within Legal;
  - the implementation of a "Knowledge Management" programme for Legal, whose first achievements included the mapping of Legal knowledge, a collection of best practices, a methodology to ensure the transmission of "at risk" expertise and the creation of a digital directory of lawyers based on their legal knowledge and expertise.
- Several projects will be completed during 2019, including:
  - implementation of the "Quality & Lean" programme to optimise the Legal Function and improve the quality of its services, steered by the Group General Counsel;
  - roll-out of second-level controls on legal processes in accordance with the "Target operating model" defined by the RISK ORC Function for operational risks;
  - roll-out of controls on legal risks in the operational activities of the business lines;
  - implementation of a standard contracts management procedure;
  - definition of a mission letter for the Territory legal officers and the Business line legal officers;
  - roll-out of the legal risk assessment exercise and the control environment;
  - commissioning of a reporting and legal risk consolidation application across the Group.

RISK AND PERMANENT CONTROL

In 2018, the Risk Function completed the strengthening of its vertical organisational integration through a number of different projects and by creating and/or restructuring certain departments.

The new operational risk management model was rolled out in the Group's entities. This model is based on a hybrid and complementary structure with, on the one hand, decentralised teams within the businesses, under the responsibility of the Risk Officers of these businesses, working closely with the processes, operational staff and systems and on the other, a central structure with a steering and coordination role providing support to the local teams on subjects requiring specific expertise (for example: fraud prevention or the management of risks related to the supply of products and services by third parties).

In this context, the headcount of the Group RISK ORC and RISK ORC ICT core teams (set up in 2017 and responsible for matters relating to technological risks and data protection) was increased to be able to carry out these missions.

The implementation of this system received special attention in 2018, to make any adjustments needed to ensure its uniformity and efficiency.

A significant part of the body of operational risk procedures (in particular the collection of operational risk incidents and the Risk and Controls Self Assessment methodology) was revised to incorporate the impact of the new model presented above.

The RISK ORC ICT teams continued to work on the general improvement of the technological risk management system. This resulted, *inter alia*, in:

- a review of the Risk Appetite Statement parameters on cyber and IT matters;
- a "CIS 20" campaign (based on the 20 key controls defined by the international Center for Internet Security standard) to assess the Group's risk profile;
- the preparation and dissemination of additional instructions on how to manage issues such as intrusions or incidents;
- the issue of global recommendations or recommendations to certain entities to raise our level of protection

Furthermore, personal data protection was also a major focus of attention in 2018, with the entry into force of the General Data Protection Regulation (Regulation no. 2016/679) on 25 May 2018. Together with the players involved, Risk worked on strengthening the system around data confidentiality. In particular, the Data Protection Officer network is now incorporated into Risk and the associated governance has been set up across the Group.

2018 was also marked by sustained regulatory activity, notably with:

- the exercise of stress testing conducted by the European Banking Authority;
- the first application of IFRS 9;
- developments concerning the framework around non-performing loans and more generally on aspects related to the quality of bank assets.

Work related to this activity involved teams from Group Finance, Risk and ALM Treasury.

Moreover, in 2018 Risk was given responsibility for the second line of defence on environmental, social and governance (ESG) risks. This project led to the formalisation of guiding principles to evolve the framework, processes and governance of credit committees in order to include an ESG risk analysis on the Group's non-financial corporate clients. The mission entrusted to Risk will begin in January 2019, while continuing with the necessary adjustments throughout 2019, as well as the training of the first and second lines on these risks for effective implementation.

The Risk Function continued to evolve its organisation to provide optimal support for the Group's transformation. This is reflected in particular by increased industrialisation, particularly with the development of shared operational platforms in Lisbon and Mumbai. Risk also contributed to the end-to-end review of customer processes in order to optimise them, whilst ensuring that the control system was at the highest level. Moreover, initiatives were launched with innovative companies ("fintechs") to incorporate new technologies into our credit granting and monitoring processes.

In 2019, the main projects of the Risk Function will be:

- the delivery and first phase roll-out of the new operational risk information system in the business lines and functions, and the support of operational entities as part of this roll-out;
- work on finalising the implementation of the "Third Party Risk Management" system;
- strengthening the system around business continuity and crisis management, especially for aspects relating to technological risks;
- continued deployment of Risk's mission as the second line of defence for ESG risk management;
- supporting the transformation of the Group's business by evolving its own processes and integrating new relevant technologies to further advance the Group's risk management system;
- the implementation of new sites and/or projects enabling the Group to fully meet the expectations of its regulators and supervisory authorities.

Risk management related to climate change

Since the November 2015 Paris Agreement, the BNP Paribas Group has taken a number of steps to integrate climate change risk management and to support energy transition in line with the 2°C trajectory.

The Group has strengthened its sectoral policy on coal so that it no longer finances the extraction of coal, whether via mining projects or via specialised coal mining companies without a diversification strategy, as well as coal-based power plant projects.

It has also adopted a new sectoral policy on unconventional hydrocarbons. This concerns players whose main activity is the exploration, production, distribution, marketing or trading of shale gas and/or oil or bituminous sands. Projects primarily dedicated to the transportation and export of these hydrocarbons are no longer financed. In addition, the Group excludes all financing for exploration or gas or oil production projects in the Arctic.

Furthermore, the criteria relating to greenhouse gas emissions have been strengthened in sectoral policies and in specific credit policies.

Each year, the Group also calculates its financed energy mix. Further information is contained in Commitment 3 described in chapter 7 of the Registration document Indicators to this effect have been included in the Risk Appetite Statement of BNP Paribas.

Other work is underway to identify the transition risks to which the Group is exposed over a larger number of industrial sectors, to measure the financed emissions (scope 3), and to compare them to the 2°C trajectory.

In terms of physical risks, the Group works internally and also with external organisations to develop tools and methodologies to better assess exposure of its loan and investment portfolio to this type of risk.

More generally, the Group has taken steps to complete the climate risk management system, in order to comply with the recommendations of the TCFD (Task force on Climate-related Financial Disclosure). To this end, it has notably joined the initiative of banks under the auspices of UNEP FI to implement these recommendations in order to establish a common methodology for stress tests of climate change risks (transition risks and physical risks). The first methodologies were published in April 2018 (for transition risks) and July 2018 (for physical risks).

Further information on risk management related to climate change is contained in Commitment 3 described in chapter 7 of the Registration document.

PERIODIC CONTROL

In 2018, General Inspection intensified implementation of Risk Assessment, stemming from the "RedesIGn" programme and carried out for the first time in 2017. During the 2018 financial year, all audit units (AUs) were reviewed again, capitalising on the achievements of the previous year: following certain methodological evolutions, the assessments covered more types of risks by AU; cross-functional analyses by Business lines / Channels were strengthened to improve consistency controls. In the end, the overall residual risk profile appeared broadly stable in 2018 compared to 2017.

More than 900 missions were completed in 2018, or 96% of the goal for the year. Due to the methodological evolutions resulting from RedesIGn and the Risk Assessment of 2017, the missions conducted in 2018 were targeted and focused on:

- the AUs with the highest residual risk or with a specific regulatory audit cycle;
- the new AUs, including those created to cover near-shoring platforms;
- those whose past audit coverage was found to be inadequate and needed to be completed.

General Inspection enhanced its steering system by producing a multi-year audit plan in 2018. The aim of this plan was to organise coverage of the entire auditable scope with reasonable frequency, i.e. according to the criticality of the AUs. The duration of the audit cycle cannot exceed 5 years in any case. By convention, 2018 was considered as the first year of the five-year cycle. The goal was therefore to cover the entire scope by 2022 at the latest.

To do this, the exercise relied on the mapping of approximately 2,800 audit units. The following updates were made for each of these units:

- its Risk Assessment: that is, the assessment of Inherent Risk, the quality of the GRC (Governance, Risk Management, Internal Control), and, lastly, the Residual Risk;
- the date of the last mission to sufficiently cover it;
- the audit frequency for each AU, which depends on the rating of the Residual Risk: the higher the Residual Risk, the shorter the frequency. If the AU is accompanied by a specific regulatory audit cycle, the applicable cycle is the shortest period between the regulatory cycle and that resulting from the Risk Assessment.

All the AUs were placed in order of priority by combining these different elements;

This exercise enabled a timetable up to 2022 to be drawn up for all the AUs. This will be updated annually to take account of developments in the mapping, Risk Assessment and effective coverage by the missions.

In pursuit of its transformation program, in 2018 General Inspection emphasised data management, with the set up of a permanent team tasked with equipping the missions with the new Data Analytics technologies in order to expand the samples analysed and to evolve methods in an increasingly digital environment.

The initiative was structured around a central team, with members in each of the hubs to form a community across the Group. The use of Data Analytics methodologies and tools provides significant potential to improve operational efficiency: automation of processing, analysis of comprehensive data sets through increased processing capabilities, etc.

The first objective was to build a library of cases able to be used in future missions. Cases were determined according to different criteria:

- expected impacts in terms of efficiency and audit quality gains;
- complexity of processing through the number of data sources or the technicality of the tools.

The first 6 cases were developed in 2018. This process will continue in 2019.

General Inspection's capacity to fulfil all its missions was based in part on the continued growth of its headcount, which reached 1,394 FTEs at 31 December 2018 (+8% in one year; +36% since the end of 2014) and on investments in training, with over 13,800 days being provided. Finally, the policy of promoting professional qualifications was continued, with a number of auditors certified also rising. In the same vein, General Inspection developed a tool intended for all inspectors and auditors to check their knowledge of its methodological principles. Implemented in 2018, this investment will be renewed annually.

2019 will continue along the same lines as the previous year, with further work being undertaken on the nature and content of the performance of the missions. General Inspection will also improve its expertise in the auditing of models through the ramp-up of a dedicated team.

INTERNAL CONTROL EMPLOYEES

At year-end 2018, the various internal control functions were supported by the following headcount numbers (FTE = Full Time Equivalents, year-end):

	2014	2015	2016	2017	2018[1]	Change 2017/2018
Compliance	1,732	2,715	3,387	3,770	4,186	+11%
Legal	1,331	1,650	1,754	1,752	1,841	+5%
Risk	2,451	2,635	5,163	5,232	5,321	+2%
Periodic control	1,027	1,104	1,236	1,296	1,394	+8%
TOTAL	**6,541**	**8,104**	**11,540**	**12,050**	**12,742**	**+6%**

(1) Internal audit employees in 2018 do not include FHB (First Hawaiian Bank).

INTERNAL CONTROL PROCEDURES RELATING TO PREPARING AND PROCESSING ACCOUNTING AND FINANCIAL INFORMATION

ROLES AND RESPONSIBILITIES FOR PREPARING AND PROCESSING ACCOUNTING AND FINANCIAL INFORMATION

Under the authority of the Chief Operating Officer, the Finance Function is responsible for preparing and processing accounting and financial information. It also has an independent control mission which aims to ensure control of the risk related to this information. The missions, implemented with the contribution of all those working within the function, which are defined in a specific charter. These consist of:

- defining accounting policies and standards as well as management information principles and standards;
- preparing accounting information and ensuring their regulatory reporting;
- producing information used in solvency and liquidity ratios calculating the ratios themselves and preparing the regulatory reporting of them;
- preparing management information (realised and projected in accordance with various scenarios) and providing the necessary support for economic management;
- managing the risk associated with accounting and financial information (results, balance sheet, solvency and liquidity) by defining and implementing a permanent operational control system;
- handling the Group's financial communication, ensuring that it is of good quality and well-perceived by the markets;
- managing the Group's financial structure;
- overseeing the architecture, design and deployment of the financial information systems (results, balance sheet, solvency, liquidity);
- defining and leading the organisation of the Finance Function;
- determining the organisation and operational processing of activities related to the Finance Function;
- exercising a duty to alert Executive Management.

All of its missions, whether carried out directly or with other functions and the ALMT, requires those involved to be fully competent in their particular areas, or, in other words, to understand and check the information they produce and to comply with the required standards and time limits. Particular attention is paid to compliance, quality and integrity of the information used and data protection. Under the authority of the Group CFO, the governance of the system as a whole relies on three basic principles : decentralising the Finance Function, separating the accounting and management information channels, and giving either operational areas (division/business line) or geographical areas (legal entities) responsibility for finance. In practice, the responsibility of the Finance Function is carried out as follows :

- the Finance Function in each entity produces accounting and financial information and carries out the controls to ensure its reliability. The entity's Finance Department sends the information produced to the division/business line to which it is operationally attached;
- the divisions/business lines carry out a business analysis and check the data produced by the entities and improve its quality, for instance by reconciling, at their level, the accounting and management data;
- centrally, Group Finance prepares the reporting instructions distributed to all divisions/business lines and consolidated entities in order to ensure that the data is homogeneous and complies with the Group's rules. It gathers all the accounting and management information produced by the entities and approved by the divisions/business lines and assembles and consolidates these data for use by Executive Management or for communication to third parties.

PRODUCING ACCOUNTING AND FINANCIAL INFORMATION

Accounting policies and rules

The local financial statements for each entity are prepared following the accounting standards prevailing in the country where the entity carries on business, while the Group consolidated financial statements are prepared under IFRS (International Financial Reporting Standards) as adopted by the European Union.

Within Group Finance, the "Group Accounting Policies" Department defines the IFRS-based accounting principles to be applied to the Group as a whole. It monitors changes to regulations and interprets them as necessary by issuing new principles. A manual of the Group's IFRS accounting principles is available for the divisions/business lines and entities on the internal network communication tools ("intranet") of BNP Paribas. It is regularly updated to reflect regulatory changes.

In addition, the "Group Accounting Policies" Department also responds to requests from the divisions/business lines or accounting entities for specific accounting studies, particularly when a new financial product or transaction is designed or recorded in the accounts.

Lastly, another department within Group Finance is dedicated to the preparation of management principles and standards that take into account the needs identified by the management channel. These principles and standards can also be accessed using internal network tools (intranet).

The regulations relating to solvency fall under the RISK Function (with the contribution of the Finance Function), while regulations on liquidity fall under the ALMT (with the contribution of the Finance and RISK Functions).

Data processing system

The data processing system is structured around two distinct channels :

- **the accounting channel:** this is more specifically responsible for preparing the financial and analytical accounting of the entities and for preparing the Group's consolidated financial statements in accordance with accounting policies and standards. It also produces related information on solvency and liquidity, ensuring that it is consistent with the accounting at each level. The channel certifies the reliability of the information produced by applying internal certification procedures (described below).

Moreover, as part of the Single Channel programme, systems for generating accounting refunds were enhanced with specific credit risk and liquidity data in addition to the accounting and analytical data already present. This development, coupled with the implementation of a shared reporting platform, currently being rolled out, will ultimately facilitate the achievement of financial and regulatory reporting requirements;

- **the management channel:** this channel prepares the management information (especially that from the divisions/business lines compiled from the data per entity) that is relevant to the economic management of activities, complying with the established internal principles and standards. It ensures the consistency of the management data with the accounting data, at every level. This channel is responsible for the preparation of solvency and liquidity ratios and for their analysis.

Group Finance designs, distributes and administers the reporting tools for the two channels. These tools are designed to suit the channels' individual objectives and necessary complementarity, and provide information for the entire Group. In particular, Group Finance promotes the use of standard accounting systems in Group entities. The systems are designed at Group level and progressively rolled out. This approach promotes the sharing of information and facilitates the implementation of cross-functional projects in the context of the development of pooled account processing and synthesis within the Group.

For the preparation of liquidity-related data, the Group has adopted the principle of integrating internal management data and those required for regulatory reporting, which is based on the following system:

- governance involving Finance, ALMT and the Risk Function, at Group level and at the level of the divisions/business lines and entities;
- policies and methodologies applicable as required by regulations;
- permanent tools and processes at the Group level and at the level of the divisions/business lines and entities;
- a dedicated Group tool ensuring data collection and the production of internal and regulatory reports.

This system ensures the production of regulatory reports on liquidity as well as internal monitoring indicators and contributes to reporting relating to the bank resolution.

PERMANENT CONTROL OF ACCOUNTING AND FINANCIAL INFORMATION

Internal control within the Finance Function

Group Finance has a "Group Control & Certification" Department to enable it to monitor the control of accounting and financial information risk in a centralised manner. Its main tasks include:

- defining the Group's policy as regards the accounting internal control system. This system requires accounting entities to follow rules in organising their accounting internal control environments and to implement key controls ensuring that the information in their consolidation packages is reliable. The Group has issued internal accounting control guidelines for use by the consolidated entities and a standard accounting control plan listing the major mandatory controls aimed at covering the accounting risk;
- ensuring that the internal control environment for accounting and financial information functions properly within the Group, in particular via the procedure for internal certification of accounts described below; to report quarterly to Executive Management and the Board's Financial Statements Committee on the quality of the Group's financial statements;
- together with the Risk Function, overseeing the proper functioning of the system for collecting and processing consolidated credit risk reporting, including by means of a specific certification system and quality indicators;
- monitoring the implementation by entities of recommendations from the Statutory Auditors and from General Inspection relating to the accounting risk, with the support of the divisions/business lines. This monitoring is facilitated by use of dedicated tools that enable each entity to monitor the recommendations made to it and to regularly report on the progress made on the various action plans. Centralised monitoring of these recommendations enables Group Finance to identify improvements to the accounting internal control system made within the consolidated entities, identify any cross-functional problems and, if necessary, revise the Group-level procedures and instructions.

For the Accounting channel, independent central control teams pass these tasks to the Finance Departments in the divisions/business lines, which supervise the entities closely and, if necessary, implement accounting controls geared to their specific situation.

Lastly, within the entities' Finance Departments, the Group's accounting internal control principles have led to dedicated and independent accounting control teams or representatives, depending on the size of the entities, being set up. As such, the Group's established approach, in which the reporting production tasks are consolidated on regional platforms (improving the harmonisation of the reporting and control processes and increasing their efficiency for the entities concerned), also ensures that the accounting control teams are the appropriate size and have the necessary expertise. The main missions of these local teams are as follows :

- providing a link between Finance and the back offices that sends data to the accounting system, for instance, by verifying that the back offices have the information they need for their accountancy work (*e.g.* training in the accounting tools provided; knowledge about the accounting structure, etc.);
- implementing the second-level accounting controls within all entities within their scope. In a decentralised accounting framework, these controls complete the first level controls carried out by back offices, and particularly rely on accounting control tools that, for example, make it possible, in the case of each account, to identify the department responsible for its justification and control, to reconcile the balances recorded in the accounting system with the balances in the operational systems for each business, and to identify, justify and monitor the clearing of suspense accounts;
- coordinating the "elementary certification" process (described below) requiring an entity's different departments to report on the controls that they have carried out;

- to ensure that the accounting internal control system enables the entity's Finance Department to have sufficient oversight of the process of preparation of account summaries, and in particular over all the elements necessary for the Group's certification process (described below). To assist in achieving this objective, the tasks involved in accounts closure are formally defined. The use of tools to map the processes and associated risks and to document the checks as well as the coordination with other control channels contributes to improving the quality.

Internal Certification Process

At Group level

Group Finance uses FACT (Finance Accounting Control Tool) for the internal certification of the quarterly data produced by each entity for the consolidation package; for the validation performed within the Finance Departments of divisions/business lines; and for the consolidation process for which the Group Reporting Department within Group Finance is responsible.

The Finance manager of each entity concerned certifies to Group Finance that :

- the transmitted data have been prepared in accordance with the Group's norms and standards;
- the accounting internal control system guarantees its quality and reliability.

The main certificate completed by the entities consolidated by global integration reproduces the results of all of the major controls defined in the Group's accounting control plan, and leads to the determination of a rating for each entity. Entities consolidated by the equity method complete an appropriate certificate. Finally, non-consolidated entities are certified annually through a simplified procedure.

This internal certification process forms part of the Group's monitoring system for Internal control and enables Group Finance, which has the overall responsibility for the preparation and quality of the Group's consolidated financial statements, to be informed of any problems in the financial statements and to monitor the entities' implementation of appropriate corrective measures. A report on this process is presented to Executive Management and to the Financial Statements Committee of the Board of directors at the close of the Group's quarterly consolidated accounts.

This certification system is also in place, in conjunction with the Risk Function, for the information included regulatory reporting on credit risk and the solvency ratio. Those contributing to the reports attest that they have complied with the standards and procedures and that the data used is of appropriate quality. They further describe the results of the controls carried out at the various stages of producing the reports, including the accounting data to credit-risk data reconciliation.

On the same principles, a certification system is in place for the reporting of liquidity-related data. The various contributors report on the compliance of the data transmitted with the standards, and the results of key controls performed to ensure the quality of reporting.

At entity level

In order to ensure the oversight of all the processes of preparation of accounting information at the level of each entity's Finance Department, Group Control & Certification recommends implementing an "elementary certification" (or "sub-certification") process for accounting data whenever the processing of transactions and the preparation of accounting and financial data are organised in a decentralised way that makes such a process necessary.

This is a process by which the providers of the information used to prepare accounting and financial data (*e.g.* : middle office, back office, Human Resources, Suppliers' Accounts, etc.) formally certify that the fundamental controls intended to ensure the reliability of the accounting and financial data under their responsibility function properly. The elementary certificates are sent to the local Finance Department, which analyses them in combination with the accounting controls that it exercises directly, prepares a summary report intended to be used to prepare the main certificate, and liaises with the various players in order to monitor points requiring attention.

The FACT application also makes it possible to automate this sub-certification process by providing entities with a dedicated environment in which they can directly manage the processes set up at their level.

Control of the value of financial instruments and the use of valuation in determining the results of market activities and accounting reports

Group Finance is responsible for producing and ensuring the quality of the Group's accounting and management information. It delegates the production and control of market values or models for financial instruments to specialists in this area, who thus form a single, integrated channel for valuing such instruments. The processes covered include:

- verifying the appropriateness of the valuation system as part of the approval process for new transactions or activities;
- verifying the proper recording of transactions in the systems and ensuring it is appropriate with the valuation methodologies;
- verifying the development and approval mechanism independent of the valuation methods;
- determining the market parameters and the procedure for an independent verification of these parameters;
- determining valuation adjustments for market, liquidity and counterparty risks;
- classifying instruments within the fair value hierarchy, determining day one profit adjustments, estimating the sensitivity of level 3 valuations to valuation assumptions.

Through appropriate processes and tools, the channel's objectives are to ensure both the correctness and the reliability of the process for valuing financial instruments, and the quality and comprehensiveness of the control system. It can thus provide the appropriate data to the various decision-making bodies, data that also informs the operational processes for compiling the accounting and management results, and ensures the transparency of annexes dedicated to fair value.

The control exercised by the valuation channel which involves all players is supervised by the Finance Function and has its own governance framework. This control system is based on a set of organisational principles defined in the Group's Internal Control Charter for each organisational level, i.e. Group, CIB and the main entities that account for market transactions.

The Finance Function relies on dedicated CIB Methodology & Financial Control (CIB MFC) teams, which oversee the entire system, to ensure that it is functioning correctly. The Finance Function decides on the information that must be reported by the various players: this comprises both quantitative and qualitative data indicating trends in different businesses as well as the results and quality of upstream controls carried out.

Several committees that meet on a quarterly or monthly basis are set up to bring all of the players together to review and examine, for each process and business line, the methods used and/or the results of the controls conducted. These committees' operating methods are governed by procedures approved by the Finance Function, ensuring that the Finance Function takes part in the main choices and arbitrations. Lastly, the CIB MFC reports at each accounting quarter-end to the Product Financial Control Committee (PFC), an arbitration and decision-making committee chaired by the Group Chief Financial Officer, on its work, and informs the committee of the points of arbitration or attention concerning the effectiveness of the controls and the reliability of the result measurement and determination process. This quarterly Committee meeting brings together the business lines, Group Finance and the divisions concerned, the ALMT and the Risk Function. Intermediary PFC committees complete this system and aim to define project priorities, monitor their implementation and thoroughly examine certain technical elements.

Development of the system

The control system is continuously adapted to the Group's requirements. The procedures described form part of an evolving system that aims to guarantee an adequate level of control throughout the Group.

In particular, the quality of the accounting certification process is regularly reviewed with the divisions/business lines, for instance with the preparation of quantitative indicators for some controls, targeted cross-functional reviews of a major control and *ad hoc* reviews with the divisions/business lines on specific points for improvement in various areas. These reviews are supplemented by presentations to the various committees in the Finance channel, on-site visits and training sessions. Group procedures clarifying some major controls, and detailed instructions aimed at ensuring consistent responses and adequately-documented processes are also distributed. These Group procedures and instructions are extended where necessary at divisions/business lines level to cover issues specific to them.

Similarly, the certification system of the data contributing to the calculation of the capital adequacy ratio is subject to adjustment in order to take into account developments in the processes and the organisation, and to capitalise on indicators and controls in place in the various sectors in connection with the improvement programme on the reporting and the quality of the data mentioned below.

In addition, as part of the programme undertaken in respect of liquidity reporting, changes in processes and tools are carried out regularly in order to adapt to the new demands of regulatory reporting, and specific actions are taken with the various contributors in order to enhance the quality and controls for the channel.

Lastly, the Group pursued a programme called Risk Data Aggregation and Reporting (RaDAR) in response to the "Principles for effective risk data aggregation and risk reporting" established by the Basel Committee. The aim of this programme is to improve the quality and integrity of the data needed to produce reports covering the different types of risks to which BNP Paribas is exposed (credit, market, liquidity, operational), and to strengthen the consistency of reporting for all levels of the organisation during normal times as well as in times of stress or crisis. With the EU's General Data Protection Regulation (GDPR), the programme was extended in late 2016 to include personal data protection.

Structured around various areas, this year it has enabled the continuation of multi-year action plans in the Group's Divisions and Functions, to achieve a high degree of quality of critical data and to deploy the principles of governance in the divisions/business lines by consolidating the network of Chief Data Officers (CDOs). Each CDO is responsible, within his scope, for defining the strategy as a whole and implementing the process as well as ensuring its monitoring over time.

PERIODIC CONTROL

General Inspection has a team of inspectors (the Central Accounting Inspection Team) specialising in accounting and financial audit, thus reflecting its strategy of strengthening auditing capability in accountancy, as regards both the technical complexity of its work and its coverage of accounting risk.

Its action plan is based on an annual "Risk Assessment" exercise, the practical details of which have been established by General Inspection based on the risk evaluation chart defined by the Risk Function.

The core aims of the team are as follows:

- establishing a hub of accounting and financial expertise in order to reinforce the capability of General Inspection when carrying out inspections in such areas;
- disseminating internal audit best practices and standardising the quality of audit work throughout the Group;
- identifying and inspecting areas of accounting risk at Group level.

RELATIONS WITH THE STATUTORY AUDITORS

Each year, as part of their statutory assignment, the Statutory Auditors issue a report in which they give their opinion concerning the consistency and fairness of the consolidated financial statements of the BNP Paribas Group as well as the annual financial statements of the Group's companies. The Statutory Auditors also carry out limited reviews on the closing of the half-yearly accounts, and specific tasks in relation to the quarterly accounts.

Thus, as part of their statutory mission :

- they examine any significant changes in accounting standards and present their opinions to the Financial Statements Committee concerning the accounting choices with a material impact;
- they present their conclusions to the Finance Functions in the entities/business lines/divisions and Group Finance Functions, and in particular any observations and recommendations to improve certain aspects of the internal control system that contributes to the preparation of the accounting and financial information that they reviewed during their audit.

FINANCIAL COMMUNICATION (PRESS RELEASES, SPECIAL PRESENTATIONS, ETC.)

Financial communication for publication is written by the Investor Relations and Financial Information Department within Group Finance. It is directed at retail and institutional shareholders, financial analysts and rating agencies, and presents the Group's different activities, explains its results and describes its development strategy, while maintaining the financial information homogenous with that used at an internal level.

The team, which reports to Executive Management and the Chief Financial Officer, devises the format in which financial information is published by the BNP Paribas Group. It works with the divisions and functions to prepare the presentation of financial results, strategic projects and specific topics. It distributes them to the financial community.

The Statutory Auditors are associated with the validation and review phase of communications relating to the closing of quarterly, half-yearly or annual financial statements, before their presentation to the Financial Statements Committee and to the Board of directors, who approve them.

3 2018 REVIEW OF OPERATIONS

3

3.1 BNP Paribas consolidated results

In millions of euros	2018	2017	2018/2017
Revenues	**42,516**	**43,161**	**-1.5%**
Operating Expenses and Dep.	(30,583)	(29,944)	+2.1%
Gross Operating Income	**11,933**	**13,217**	**-9.7%**
Cost of Risk	(2,764)	(2,907)	-4.9%
Operating income	**9,169**	**10,310**	**-11.1%**
Share of Earnings of Equity-Method Entities	628	713	-11.9%
Other Non Operating Items	411	287	+43.2%
Non Operating Items	**1,039**	**1,000**	**+3.9%**
Pre-Tax Items	**10,208**	**11,310**	**-9.7%**
Corporate Income Tax	(2,203)	(3,103)	-29.0%
Net Income Attributable to Minority Interests	(479)	(448)	+6.9%
Net Income Attributable to Equity Holders	**7,526**	**7,759**	**-3.0%**
Cost/Income	**71.9%**	**69.4%**	**+2.5 pt**

GOOD RESILIENCE OF INCOME

The business of BNP Paribas was up in 2018 with higher outstanding loans in the context of economic growth in Europe. The revenue evolution was however penalised by the still low interest rate environment and an unfavourable financial market context with particularly challenging conditions at the end of the year.

Revenues totalled EUR 42,516 million, down by 1.5% compared to 2017 which included exceptional items: +EUR 233 million in capital gains from the sale of Shinhan and Euronext shares and -EUR 175 million in Own Credit Adjustment (OCA) and own credit risk included in derivatives (DVA).

In the operating divisions, revenues were down by 0.9% (-0.4% at constant scope and exchange rates): they were down slightly at Domestic Markets[1] (-0.2%) due to the low interest rate environment partly offset by good business development, in particular in the specialised businesses; up at International Financial Services (+3.4%), despite an unfavourable foreign exchange effect (+6.6% at constant scope and exchange rates[2]; but down at CIB (-7.5%) due to a lacklustre market context and very challenging conditions at the end of the year, notwithstanding good development with targeted customers.

At EUR 30,583 million, the Group's operating expenses were up by 2.1% compared to 2017. They included the exceptional EUR 1,235 million impact of businesses' transformation costs and acquisitions' restructuring costs[3] (EUR 957 million in 2017). Excluding these exceptional items, they rose by only 1.2%.

The operating expenses of the operating divisions rose by 1.7% compared to 2017 (+1.7% at constant scope and exchange rates): they were up by 0.8% for Domestic Markets[1] with a rise in the specialised businesses due to business development but down in the domestic networks; up by 5.4% for International Financial Services as a result of business growth support and new product development; but down by 1.3% for CIB due to cost saving measures.

The gross operating income of the Group thus totalled EUR 11,933 million, down by 9.7%. It was down by 6.0% for the operating divisions (-4.7% at constant scope and exchange rates).

The cost of risk was down at EUR 2,764 million (EUR 2,907 million in 2017). It was 35 basis points of outstanding customer loans. This low level reflects in particular the good control of risk at loan origination, the low interest rate environment and the continued improvement in Italy.

(1) Including 100% of Private Banking in the domestic networks (excluding PEL/CEL effects).

(2) Excluding the impact of the drop in markets at the end of the year in Insurance on assets at market value.

(3) In particular, LaSer, DAB Bank, GE LLD, ABN Amro Luxembourg and Raiffeisen Bank Polska.

The Group's operating income, at EUR 9,169 million (EUR 10,310 million in 2017), was thus down by 11.1%. It was down by 6.4% for the operating divisions (-5.5% at constant scope and exchange rates).

Non-operating items totalled EUR 1,039 million (EUR 1,000 million in 2017). They included the exceptional +EUR 101 million impact of the capital gain from the sale of a building and the +EUR 286 million capital gain from the sale of First Hawaiian Bank shares. Last year, they included a +EUR 326 million capital gain realised from the initial public offering of SBI Life as well as the full impairment of TEB's goodwill for -EUR 172 million.

Pre-tax income, which came to EUR 10,208 million (EUR 11,310 million in 2017), was thus down by 9.7%. It was down by 8.6% for the operating divisions (-5.3% at constant scope and exchange rates).

The average tax rate was 23.1%, benefitting in particular from a decrease in the corporate tax rate in Belgium and in the United States and from the low tax rate on the long term capital gain from amongst others the sale of First Hawaiian Bank shares.

The Group's net income attributable to equity holders was EUR 7,526 million, down by 3.0% compared to 2017 but by only 1.4%, at EUR 8,036 million, excluding the effect of exceptional items[(1)].

Noteworthy that net income reflected the spot impact, at the closing date, of the sharp fall in the markets on the revaluation of the residual stake in First Hawaiian Bank[(2)] and on some insurance portfolios (-EUR 220 million).

The return on equity was thus 8.2% (8.8% excluding exceptional items). The return on tangible equity came to 9.6% (10.2% excluding exceptional items). Earnings per share was €5.73.

As at 31 December 2018, the fully loaded Basel 3 common equity Tier 1 ratio[(3)] was 11.8% (stable compared to 31 December 2017 despite the -20 bp technical adjustment as at 1 January 2018 related to the full application of IFRS 9 and to an amended prudential treatment of irrevocable payment commitments). The fully loaded Basel 3 leverage ratio[(4)] came to 4.5% and the Liquidity Coverage Ratio to 132%. Lastly, the Group's immediately available liquidity reserve was EUR 308 billion, equivalent to over one year of room to manoeuvre in terms of wholesale funding.

The net book value per share reached EUR 74.7, equivalent to a compound annual growth rate of 5.0% since 31 December 2008, illustrating the continuous value creation throughout the cycle.

The Board of directors will propose to shareholders at the Shareholders' Meeting to pay a €3.02 dividend per share (stable compared to 2017), payable in cash.

The Group is pursuing an ambitious policy of engagement in society with significant initiatives to promote ethical responsibility, social and environmental innovation and a low carbon economy while strengthening its internal control and compliance system. The digital transformation programme is a success with the roll out of new customer experiences, the automation of processes and improved operating efficiency (EUR 1,150 million in savings since the launch of the programme in early 2017).

Capital allocation

Revenue from the capital allocated to each division is included in the division's profit and loss account. The capital allocated to each division corresponds to the amount required to comply with CRD IV regulation, also known as Basel 3, and is based on 11% of risk-weighted assets.

Risk-weighted assets are calculated as the sum of:

- the risk-weighted assets for credit and counterparty risk, calculated using the standard approach or the Internal Ratings Based Approach (IRBA) depending on the particular entity or business activity;
- the regulatory capital requirement for market risks, for adjustment of credit valuation and for operational risk, multiplied by 12.5.

Moreover, elements that are deducted from Tier 1 capital are allocated to each division.

Last, the capital allocated to the insurance business is based on the minimum solvency capital requirement as defined by Solvency II.

(1) Effect of exceptional items after tax: -EUR 510 million (-EUR 390 million in 2017).

(2) Value of the stake in First Hawaiian Bank now revalued at market value.

(3) Ratio taking into account all the CRD4 rules with no transitory provisions.

(4) Ratio taking into account all the CRD4 rules at 2019 with no transitory provisions, calculated according to the delegated act of the European Commission dated 10 October 2014.

3.2 Core business results

RETAIL BANKING & SERVICES

In millions of euros	2018	2017	2018/2017
Revenues	**31,546**	**31,045**	**+1.6%**
Operating Expenses and Dep.	(20,644)	(20,044)	+3.0%
Gross Operating Income	**10,903**	**11,001**	**-0.9%**
Cost of Risk	(2,624)	(2,705)	-3.0%
Operating Income	**8,279**	**8,296**	**-0.2%**
Share of Earnings of Equity-Method Entities	486	622	-21.9%
Other Non Operating Items	208	443	-53.1%
Pre-Tax Income	**8,972**	**9,361**	**-4.2%**
Cost/Income	65.4%	64.6%	+0.8 pt
Allocated Equity *(€bn)*	53.3	51.4	+3.7%

Including 100% of Private Banking in France (excluding PEL/CEL effects), in Italy, Belgium, Luxembourg, at BancWest and TEB for the Revenues to Pre-tax income line items.

DOMESTIC MARKETS

In millions of euros	2018	2017	2018/2017
Revenues	**15,683**	**15,718**	**-0.2%**
Operating Expenses and Dep.	(10,707)	(10,620)	+0.8%
Gross Operating Income	**4,977**	**5,098**	**-2.4%**
Cost of Risk	(1,046)	(1,356)	-22.8%
Operating Income	**3,930**	**3,743**	**+5.0%**
Share of Earnings of Equity-Method Entities	(3)	62	n.s.
Other Non Operating Items	0	10	n.s.
Pre-Tax income	**3,927**	**3,814**	**+3.0%**
Income Attributable to Wealth and Asset Management	(264)	(273)	-3.1%
Pre-Tax Income of Domestic Markets	**3,663**	**3,541**	**+3.4%**
Cost/Income	68.3%	67.6%	+0.7 pt
Allocated Equity *(€bn)*	25.2	24.6	+2.4%

Including 100% of Private Banking in France (excluding PEL/CEL effects), Italy, Belgium and Luxembourg for the Revenues to Pre-tax income line items.

For the whole of 2018, the business activity of Domestic Markets was up. Outstanding loans rose by 4.9% compared to 2017 with good growth in loans both in the domestic networks and in the specialised businesses (Arval, Leasing Solutions). Deposits rose by 5.2% compared to 2017 and were up in all countries. There were good net asset inflows at Private Banking (EUR 4.4 billion).

Domestic Markets continued to develop new customer experiences and digital transformation. Hello bank! reached 3 million customers and exceeded the threshold of 400,000 customers in France thanks to the good level of net client acquisition. For its part, Nickel exceeded 1.1 million accounts opened, or a 44% increase compared to 31 December 2017. The operating division accelerated individual customers' mobile uses and enhanced mobile app features available, ranking as France's leading bank in terms of mobile functionalities according to D-rating[(1)], and recorded a significant increase in the number of contacts via mobile app in the networks (+28% compared to December 2017). It continues adapting its offerings to new banking uses with the development of LyfPay, a universal mobile payment solution, which has already recorded over 1.3 million downloads since it was launched in May 2017. The operating division also continued the transformation of its operating model by streamlining and digitalising end-to-end its main customer journeys and automating its processes (280 robots in production at the end of 2018).

It is streamlining and optimising the local commercial network in order to enhance customer service and reduce costs (262 branches closed since 2016 in France, Belgium and Italy and removed in 2018 a regional management level in the network in France).

Revenues[(2)], at EUR 15,683 million, were down by 0.2% compared to 2017, as the impact of low interest rates was not fully offset by increased business and growth in the specialised businesses.

Operating expenses[(2)] (EUR 10,707 million) were up by 0.8% compared to 2017, with an increase in the specialised businesses due to their development but a 0.9% decrease in the retail networks' costs.

Gross operating income[(2)] was down by 2.4%, at EUR 4,977 million, compared to last year.

The cost of risk was down by 22.8% compared to 2017. It was down in all the networks and continued to decrease at BNL bc.

Thus, after allocating one-third of Domestic Markets Private Banking's net income to the Wealth Management business (International Financial Services division), the division reported EUR 3,663 million in pre-tax income[(3)], up by 3.4% compared to 2017.

FRENCH RETAIL BANKING (FRB)

In millions of euros	2018	2017	2018/2017
Revenues	**6,311**	**6,352**	**-0.7%**
Incl. Net Interest Income	*3,548*	*3,569*	*-0.6%*
Incl. Commissions	*2,763*	*2,783*	*-0.7%*
Operating Expenses and Dep.	(4,609)	(4,657)	-1.0%
Gross Operating Income	**1,701**	**1,695**	**+0.4%**
Cost of Risk	(288)	(331)	-12.8%
Operating Income	**1,413**	**1,365**	**+3.6%**
Non Operating Items	(-1)	1	n.s.
Pre-Tax Income	**1,412**	**1,366**	**+3.4%**
Income Attributable to Wealth and Asset Management	(148)	(153)	-2.8%
Pre-Tax Income of French Retail Banking	**1,263**	**1,213**	**+4.2%**
Cost/Income	73.0%	73.3%	-0.3 pt
Allocated Equity *(€bn)*	9.6	9.4	+1.6%

Including 100% of French Private Banking for the Revenues to Pre-tax income line items (excluding PEL/CEL effects).

For the whole of 2018, FRB continued its good business drive in the context of economic growth in France. Outstanding loans rose by 5.4% compared to 2017 with sustained growth in loans to both individual and corporate clients and, for mortgage loans, the confirmation of the return to normal of renegotiations and early repayments. Deposits were up by 5.3%, driven by strong growth in current accounts and Private Banking in France reported strong net asset inflows (EUR 3.3 billion).

The new property and casualty offering launched in May as part of the partnership between BNP Paribas Cardif and Matmut (Cardif IARD) is a success with already 100,000 contracts sold as at 31 December 2018. The goal is to multiply by three by 2020 sales of property and casualty contracts and to grow the customer penetration rate from 8% to 12%.

(1) Agency specialised in digital performance analysis.

(2) Including 100% of Private Banking in France (excluding PEL/CEL effects), Italy, Belgium and Luxembourg.

(3) Excluding PEL/CEL effects of +EUR 20 million compared to +EUR 19 million in 2017.

The business is accelerating individual customers' mobile uses and developing self-care features with, for example, the option for customers to deactivate payment cards or change authorised spending limits online.

Revenues[1] totalled EUR 6,311 million, down by 0.7% compared to 2017 with a gradual improvement of the trend during the course of the year and a return to growth in the last quarter. Net interest income[1] was down by 0.6% as the volume growth was more than offset by an unfavourable base effect due to renegotiation and early repayment penalties which were high in 2017. Fees[1] were down by 0.7% with a decrease in particular in financial fees.

At EUR 4,609 million, operating expenses[1] were down by 1.0% compared to 2017 as a result of cost saving measures (optimisation of the network and streamlining of the management set-up), thereby generating a positive 0.3 point jaws effect.

Gross operating income[1] thus came to EUR 1,701 million, up by 0.4% compared to last year.

The cost of risk[1] was down, at EUR 288 million (EUR 331 million in 2017) and amounts to 16 basis points of outstanding customer loans.

Thus, after allocating one-third of French Private Banking's net income to the Wealth Management business (International Financial Services division), FRB posted EUR 1,263 million in pre-tax income[2], up by 4.2% compared to 2017.

BNL BANCA COMMERCIALE (BNL BC)

In millions of euros	2018	2017	2018/2017
Revenues	**2,792**	**2,907**	**-4.0%**
Operating Expenses and Dep.	(1,797)	(1,801)	-0.2%
Gross Operating Income	**995**	**1,106**	**-10.1%**
Cost of Risk	(592)	(871)	-32.0%
Operating Income	**402**	**235**	**+71.3%**
Non Operating Items	(3)	1	n.s.
Pre-Tax Income	**399**	**236**	**+69.3%**
Income Attributable to Wealth and Asset Management	(43)	(44)	-2.0%
Pre-Tax Income of BNL bc	**356**	**192**	**+85.6%**
Cost/Income	64.4%	62.0%	2.4 pt
Allocated Equity *(€bn)*	5.5	5.8	-6.1%

Including 100% of Italian Private Banking for the Revenues to Pre-tax income line items.

For the whole of 2018, the outstanding loans of BNL bc grew by 0.6% compared to 2017. Deposits, for their part, grew by 4.7% driven by a rise in current accounts. Life insurance outstandings reported a good performance (+6.8% compared to 31 December 2017).

BNL bc also continued to develop new client journeys and digital transformation with the launch this year of *MyBiz*, a new app for SMEs offering mobile access to a large range of banking services including applying for loans. The business also continued the automation of processes with already 70 robots operational.

Revenues[3] were down 4.0% compared to 2017, at EUR 2,792 million. Net interest income[3] was down by 6.6% due to the persistently low interest rate environment and the positioning on clients with a better risk profile. However, margins on the loan origination tended to improve at the end of the year. Fees[3] were up by 0.5% for their part with a rise in banking fees partly offset by the decrease in financial fees.

Operating expenses[3], at EUR 1,797 million, were down by 0.2% (-0.8% excluding the additional contribution to the Italian resolution fund[4] thanks to the effect of cost saving measures.

Gross operating income[3] thus totalled EUR 995 million, down by 10.1% compared to last year.

The cost of risk[3], at 75 basis points of outstanding customer loans, continued its decrease (-EUR 279 million compared to 2017).

Thus, after allocating one-third of Italian Private Banking's net income to the Wealth Management business (International Financial Services division), BNL bc confirmed its improving profitability and posted EUR 356 million in pre-tax income (+EUR 164 million compared to 2017).

(1) Including 100% of Private Banking in France (excluding PEL/CEL effects).

(2) Excluding PEL/CEL impacts of EUR + 20 million versus EUR + 19 million in 2017.

(3) Including 100% of Private Banking in Italy.

(4) EUR 11 million paid in the second quarter 2018.

BELGIAN RETAIL BANKING (BRB)

In millions of euros	2018	2017	2018/2017
Revenues	**3,595**	**3,677**	**-2.2%**
Operating Expenses and Dep.	(2,521)	(2,554)	-1.3%
Gross Operating Income	**1,074**	**1,123**	**-4.3%**
Cost of Risk	(43)	(65)	-33.9%
Operating Income	**1,031**	**1,058**	**-2.5%**
Non Operating Items	18	28	-34.7%
Pre-Tax Income	**1,049**	**1,085**	**-3.3%**
Income Attributable to Wealth and Asset Management	(70)	(73)	-4.2%
Pre-Tax Income of Belgian Retail Banking	**980**	**1,013**	**-3.3%**
Cost/Income	70.1%	69.5%	+0.6 pt
Allocated Equity *(€bn)*	5.7	5.3	+7.9%

Including 100% of Belgian Private Banking for the Revenues to Pre-tax income line items.

For the whole of 2018, BRB reported sustained business activity. Loans were up by 4.2% compared to 2017 with a sharp rise in corporate loans and growth in mortgage loans. Deposits rose by 4.1% with growth in current and savings accounts.

The business also successfully continued its digital development. Thanks to the continuous enhancement of its features, the *Easy Banking* app recorded a 23% increase in the number of users compared to 31 December 2017, at 1.4 million. The number of companies using *Easy Banking Business* was also up sharply (+20% since 31 December 2017) with in particular the successful launch of the mobile version. The business was also successful in the exclusive launch of Apple Pay in Belgium.

BRB's revenues[(1)] were down by 2.2%, compared to 2017, at EUR 3,595 million: net interest income[(1)] was down by 1.2% due to the impact of the low interest rate environment partly offset by volume growth. Fees[(1)] were down by 5.2% with a decrease in financial fees, as a result in particular of the very unfavourable market context in the fourth quarter, and a rise in retrocession fees to independent agents whose network has been expanded.

Operating expenses[(1)], at EUR 2,521 million, were down by 1.3% compared to 2017 thanks to the effect of cost saving measures (optimisation of the branch network and streamlining of the management set-up).

Gross operating income[(1)], at EUR 1,074 million, was down by 4.3% compared to last year.

At EUR 43 million, the cost of risk[(1)] was down (EUR 65 million in 2017) and totalled 4 basis points of outstanding customer loans.

After allocating one-third of Belgian Private Banking's net income to the Wealth Management business (International Financial Services division), BRB generated EUR 980 million in pre-tax income, down by 3.3% compared to 2017.

OTHER DOMESTIC MARKETS BUSINESS UNITS (ARVAL, LEASING SOLUTIONS, PERSONAL INVESTORS AND LUXEMBOURG RETAIL BANKING)

In millions of euros	2018	2017	2018/2017
Revenues	**2,986**	**2,782**	**+7.3%**
Operating Expenses and Dep.	(1,779)	(1,608)	+10.6%
Gross Operating Income	**1,207**	**1,174**	**+2.8%**
Cost of Risk	(123)	(89)	+38.3%
Operating Income	**1,084**	**1,085**	**-0.1%**
Share of Earnings of Equity-Method Entities	(12)	38	n.s.
Other Non Operating Items	(5)	4	n.s.
Pre-Tax Income	**1,067**	**1,127**	**-5.3%**
Income Attributable to Wealth and Asset Management	(3)	(3)	-0.9%
Pre-Tax Income of Other Domestic Markets	**1,064**	**1,124**	**-5.4%**
Cost/Income	59.6%	57.8%	+1.8 pt
Allocated Equity *(€bn)*	4.4	4.0	+9.0%

Including 100% of Private Banking in Luxembourg for the Revenues to Pre-tax income line items.

(1) Including 100% of Private Banking in Belgium.

For the whole of 2018, Domestic Markets' specialised businesses continued their strong growth: the financed fleet of Arval grew by 7.7% and the financing outstandings of Leasing Solutions were up by 8.7%[1] compared to 2017; Personal Investors reported increased orders from individual customers (+8.9% compared to 2017) and Nickel continued its very strong growth with already over 1.1 million accounts opened (+347,000 in 2018). Nickel's target is to reach 2 million accounts opened by 2020. To this end, Nickel is growing its point of sales network (4,300 *buralistes* as at 31 December 2018, +48% compared to 31 December 2017) with a target of 10,000 by 2020.

The outstanding loans of Luxembourg Retail Banking (LRB) rose by 7.9% compared to 2017, with good growth in mortgage and corporate loans. Deposits were up by 11.8% with very good inflows in particular in the corporate segment.

The digital development continued with the growing use of e-signature at Leasing Solutions and Arval as well as the rollout by Arval in Europe of an offering to individuals, already operational in the Netherlands, to rent cars online *(Private Lease)*.

The revenues[2] of the five businesses, which totalled EUR 2,986 million, were up on the whole by 7.3% compared to 2017 due to scope effects and good business development.

Operating expenses[2] rose by 10.6% compared to 2017, to EUR 1,779 million, as a result of scope effects and development of the businesses as well as the costs to launch new digital services.

The cost of risk[2], at EUR 123 million, was up by EUR 34 million compared to 2017.

Thus, the pre-tax income of these five business units, after allocating one-third of Luxembourg Private Banking's net income to the Wealth Management business (International Financial Services division), was EUR 1,064 million (-5.4% compared to 2017).

INTERNATIONAL FINANCIAL SERVICES

In millions of euros	2018	2017	2018/2017
Revenues	**16,434**	**15,899**	**+3.4%**
Operating Expenses and Dep.	(10,242)	(9,722)	+5.4%
Gross Operating Income	**6,192**	**6,177**	**+0.2%**
Cost of Risk	(1,579)	(1,351)	+16.9%
Operating Income	**4,613**	**4,826**	**-4.4%**
Share of Earnings of Equity-Method Entities	489	561	-12.8%
Other Non Operating Items	208	433	-52.0%
Pre-Tax Income	**5,310**	**5,820**	**-8.8%**
Cost/Income	62.3%	61.1%	+1.2 pt
Allocated Equity *(€bn)*	28.1	26.8	+5.0%

For the whole of 2018, International Financial Services continued its growth and reported a sustained business activity: outstanding loans were up by 3.8% compared to 2017 (+7.1% at constant scope and exchange rates) and the operating division reported good net asset inflows (EUR 13.4 billion). The assets under management of the savings and insurance businesses were down slightly, at EUR 1,028 billion (-2.2% compared to 31 December 2017), due to the sharp fall in valuations at the end of the year.

The operating division actively implemented digital transformation and new technologies across all its businesses. The e-signature is now widely available with already 50% of contracts signed electronically at Personal Finance and 35 processes that use e-signatures in the international retail networks. It digitalised client journeys at Personal Finance with a completely digital application process for consumer loans already rolled out in 7 countries and put in place in Insurance in France an online questionnaire enabling over 80% of clients to get immediate approval for creditor protection insurance (150,000 contracts as at the end of 2018). It expanded the features available on mobile at Wealth Management with *My Biopass* which allows client identification and validation of transactions using biometrics and continued to expand its digital banks with already 665,000 customers for *Cepteteb* in Turkey and 223,000 customers for *BGZ Optima* in Poland. The operating division is developing new technologies and artificial intelligence with already 130 robots (automation of controls, reporting and data processing) and 17 chatbots already operational.

(1) At constant scope and exchange rates.

(2) Including 100% of Private Banking in Luxembourg.

International Financial Services reported this year an unfavourable foreign exchange effect (depreciation of the Turkish lira and the US dollar) partially offset by several scope effects.

At EUR 16,434 million, revenues were up by 3.4% compared to 2017. Excluding the impact of the fall in the markets at the end of the year on assets at market value at Insurance[(1)], they rose by 6.6% at constant scope and exchange rates, reflecting the good business drive.

Operating expenses, which totalled EUR 10,242 million, were up by 5.4% compared to the same period last year, as a result of business development and new product launches (+5.5% at constant scope and exchange rates and excluding non-recurring items[(2)].

Gross operating income came to EUR 6,192 million, up by 0.2% compared to 2017 (+4.7% at constant scope and exchange rates).

The cost of risk, at EUR 1,579 million, rose by 228 million compared to a weak base in 2017 given provision write-backs. It recorded the effect of the IFRS 9 application at Personal Finance where performing loans, which grow at a sustained level, are now provisioned.

Other non-operating items totalled EUR 208 million (EUR 433 million in 2017). They reflected the exceptional impact of the EUR 151 million capital gain[(3)] from the sale of First Hawaiian Bank shares. They included in the same period last year a EUR 326 million capital gain realised from the initial public offering of SBI Life.

International Financial Services' pre-tax income thus totalled EUR 5,310 million, down by 8.8% compared to 2017 but up by 3.3% at constant scope and exchange rates and excluding the impact of the fall in the markets at the end of the year at Insurance[(4)].

3

PERSONAL FINANCE

In millions of euros	2018	2017	2018/2017
Revenues	**5,533**	**4,923**	**+12.4%**
Operating Expenses and Dep.	(2,764)	(2,427)	+13.9%
Gross Operating Income	**2,768**	**2,496**	**+10.9%**
Cost of Risk	(1,186)	(1,009)	+17.5%
Operating Income	**1,583**	**1,487**	**+6.4%**
Share of Earnings of Equity-Method Entities	62	91	-31.9%
Other Non Operating Items	2	29	-93.9%
Pre-Tax Income	**1,646**	**1,607**	**+2.5%**
Cost/Income	50.0%	49.3%	+0.7 pt
Allocated Equity *(€bn)*	7.3	5.8	-25.9%

For the whole of 2018, Personal Finance continued its strong organic growth drive while integrating General Motors Europe's financing activities[(5)]: outstanding loans were up by +12.6% at constant scope and exchange rates compared to 2017, driven by an increase in demand in a favourable context in Europe and the effect of new partnerships. The business signed new commercial agreements with Hyundai and Uber in France, Carrefour in Poland and Dixons Carphone in the United Kingdom. It continued to expand its digital footprint and new technologies with 97 robots already deployed and more than 31 million selfcare transactions done by clients, or 73.9% of the total.

The revenues of Personal Finance were up by 12.4% compared to 2017, at EUR 5,533 million. They were up by 9.1% at constant scope and exchange rates as a result of the rise in volumes and the positioning on products with a better risk profile. They were driven in particular by a good drive in Italy, Spain and Germany.

Operating expenses were up by 13.9% compared to 2017, at EUR 2,764 million. They were up by 7.9% at constant scope and exchange rates, as a result of business development. The cost income ratio was 50.0%.

Gross operating income thus came to EUR 2,768 million, up by 10.9% compared to 2017 (+10.3% at constant scope and exchange rates).

The cost of risk came to EUR 1,186 million (EUR 1,009 million in 2017). At 141 basis points of outstanding customer loans, it was at a low level despite the effect of the IFRS 9 adoption.

Personal Finance's pre-tax income thus came to EUR 1,646 million, up by 2.5% compared to 2017 (+5.9% at constant scope and exchange rates and excluding the step effect of the IFRS 9 adoption).

(1) -EUR 180 million.

(2) Non-recurring items at Asset Management, Real Estate Services and at BancWest (EUR 34 million in 2018).

(3) In addition, EUR 135 million exchange difference booked in the P&L in the Corporate Centre.

(4) Excluding non-recurring items: -EUR 33 million in 2018 (+EUR 40 million in 2017).

(5) Acquisition closed on 31 October 2017.

EUROPE-MEDITERRANEAN

In millions of euros	2018	2017	2018/2017
Revenues	**2,358**	**2,337**	**+0.9%**
Operating Expenses and Dep.	(1,605)	(1,661)	-3.4%
Gross Operating Income	**753**	**675**	**+11.5%**
Cost of Risk	(308)	(259)	+18.8%
Operating Income	**445**	**416**	**+6.9%**
Non Operating Items	241	202	+19.1%
Pre-Tax Income	**686**	**619**	**+10.9%**
Income Attributable to Wealth and Asset Management	(3)	(2)	+7.8%
Pre-Tax Income of Europe-Mediterranean	**684**	**616**	**+10.9%**
Cost/Income	68.1%	71.1%	-3.0 pt
Allocated Equity *(€bn)*	4.8	4.9	-3.2%

Including 100% of Turkish Private Banking for the Revenue to Pre-tax income line items.

For the whole of 2018, Europe-Mediterranean delivered a good overall performance. Outstanding loans rose by 5.2%[1] compared to 2017. Deposits grew by 8.6%[1], up in particular in Turkey. The business continued to develop its digital banks (*Cepteteb* in Turkey and *BGZ Optima* in Poland) and to roll out e-signature in Poland, Turkey and Morocco for certain trade finance transactions and consumer loan applications.

The business also acquired this year the core banking activities of Raiffeisen Bank Polska[2], which strengthened BGZ BNP Paribas as the 6th largest bank in Poland (over 6% combined market share in loans and deposits) and is expected to have an above 1% positive impact on Group's net earnings per share in 2020.

At EUR 2,358 million, Europe-Mediterranean's revenues[3] were up by 12.5%[1] compared to 2017, as a result of increased volumes and margins as well as the good level of fees. They were up in all regions.

Operating expenses[3], at EUR 1,605 million, were up by 4.8%[1] due to business development with a largely positive jaws effect.

The cost of risk[3], which totalled EUR 308 million, was up by EUR 49 million as a result of a moderate rise in the cost of risk in Turkey. It was 82 basis points of outstanding customer loans.

After allocating one-third of Turkish Private Banking's net income to the Wealth Management business, Europe-Mediterranean generated EUR 684 million in pre-tax income, up significantly compared to the same period last year (+23.6% at constant scope and exchange rates and +10.9% at historical scope and exchange rates given the strong depreciation of the Turkish lira).

BANCWEST

In millions of euros	2018	2017	2018/2017
Revenues	**2,647**	**2,994**	**-11.6%**
Operating Expenses and Dep.	(1,870)	(2,035)	-8.1%
Gross Operating Income	**777**	**959**	**-19.0%**
Cost of Risk	(82)	(111)	-26.0%
Operating Income	**694**	**848**	**-18.1%**
Non Operating Items	152	3	n.s.
Pre-Tax Income	**847**	**851**	**-0.6%**
Income Attributable to Wealth and Asset Management	(28)	(21)	+31.5%
Pre-Tax Income of BancWest	**819**	**830**	**-1.4%**
Cost/Income	70.7%	68.0%	+2.7 pt
Allocated Equity *(€bn)*	5.7	6.4	-10.2%

Including 100% of US Private Banking for the Revenues to Pre-tax income line items.

(1) At constant scope and exchange rates.

(2) Excluding mortgage loans in foreign currencies and a limited amount of other assets; acquisition closed on 31 October 2018.

(3) Including 100% of Private Banking in Turkey.

For the whole of 2018, BancWest's commercial activity continued to grow. The scope of the business evolved with the sale of 43.6% of First Hawaiian Bank[1], which is only 18.4% owned and is no more fully consolidated since 1 August 2018. Deposits were up by 3.6%[2] and loans by 1.6%[2] compared to 2017 with good growth in loans to individual and corporate customers. Private Banking's assets under management (13.7 billion U.S. dollars as at 31 December 2018) were up by 4.8%[2] compared to 31 December 2017.

The business continued its digital transformation with already 30% account openings done online. It developed cooperation with CIB (over 50 significant transactions done jointly, or a 31% increase compared to 2017) and Personal Finance (car loans).

Revenues[3], at EUR 2,647 million, were up by 1.9%[2] compared to 2017 (+2.4%[2] excluding capital gains from the sale of securities and loans in 2017 for EUR 14 million), as a result of volume growth.

At EUR 1,870 million, operating expenses[3] rose by 2.6%[2] compared to 2017.

The cost of risk[3] (EUR 82 million), or 14 basis points of outstanding customer loans, was EUR 29 million lower compared to 2017.

Thus, after allocating one-third of U.S. Private Banking's net income to the Wealth Management business, BancWest posted EUR 819 million in pre-tax income, up by 3.3% at constant scope and exchange rates compared to 2017 (-1.4% at historical scope and exchange rates).

INSURANCE AND WEALTH & ASSET MANAGEMENT

INSURANCE

In millions of euros	2018	2017	2018/2017
Revenues	**2,680**	**2,514**	**+6.6%**
Operating Expenses and Dep.	(1,406)	(1,251)	+12.4%
Gross Operating Income	**1,273**	**1,263**	**+0.8%**
Cost of Risk	3	4	-23.3%
Operating Income	**1,276**	**1,267**	**+0.7%**
Share of Earnings of Equity-Method Entities	202	225	-10.1%
Other Non Operating Items	1	375	-99.8%
Pre-Tax Income	**1,479**	**1,867**	**-20.8%**
Cost/Income	52.5%	49.8%	+2.7 pt
Allocated Equity *(€bn)*	8.4	7.8	+7.7%

WEALTH & ASSET MANAGEMENT

In millions of euros	2018	2017	2018/2017
Revenues	**3,286**	**3,193**	**+2.9%**
Operating Expenses and Dep.	(2,636)	(2,387)	+10.4%
Gross Operating Income	**650**	**806**	**-19.4%**
Cost of Risk	(6)	24	n.s.
Operating Income	**644**	**831**	**-22.5%**
Share of Earnings of Equity-Method Entities	37	48	-22.8%
Other Non Operating Items	1	21	-97.4%
Pre-Tax Income	**681**	**899**	**-24.2%**
Cost/Income	80.2%	74.7%	+5.5 pt
Allocated Equity *(€bn)*	1.9	1.9	+2.2%

(1) Sale of 13.2% on 8 May 2018, 15.5% on 31 July 2018 and 14.9% on 5 September 2018.

(2) At constant scope and exchange rates.

(3) Including 100% of Private Banking in the United States.

For the whole of 2018, Insurance and Wealth and Asset Management's businesses continued their growth. Assets under management[1] reached EUR 1,028 billion as at 31 December 2018. They were down by 2.2% compared to 31 December 2017 due in particular to a very negative performance effect (-EUR 51.1 billion) as a result of the sharp fall in the markets at the end of the year, and despite a good level of net asset inflows at EUR 13.4 billion (very good asset inflows at Wealth Management in particular in Asia, France, Italy, Germany and the United States; asset outflows at Asset Management concentrated on a bond mandate following the in-sourcing by a client of its fund management, partly offset by asset inflows into money market funds; good asset inflows in Insurance in particular in unit-linked policies), a +EUR 10.7 billion scope effect due in particular to the integration of ABN Amro's activities in Luxembourg[2] and a +EUR 3.9 billion foreign exchange effect.

As at 31 December 2018, assets under management[1] broke down as follows: Asset Management (EUR 399 billion), Wealth Management (EUR 361 billion), Insurance (EUR 239 billion) and Real Estate Services (EUR 29 billion).

Insurance continued its good business development with in particular good performance of protection insurance in Asia. The new property and casualty insurance offering in the FRB network via *Cardif IARD* (joint venture with Matmut) has gotten off to a good start with already 100,000 contracts sold and the new partnership with Orange (cell phone insurance) is a success. The business signed new partnerships with Seloger.com in France, Sumitomo Mitsui in Japan and Sainsbury's in the UK.

Revenues of Insurance, at EUR 2,680 million, rose by 6.6% compared to 2017 due to a good business drive but reflected at the end of the year the impact of the fall in the markets due to the booking of part of the assets at market value[3]. Operating expenses, at EUR 1,406 million, rose by 12.4%, as a result of good business development. Other non-operating items were negligible but included during the same period last year a +EUR 326 million capital gain from the sale of a 4.0% stake in SBI Life. After taking into account decreased income of the associated companies, pre-tax income was thus down by 20.8% at historical scope and exchange rates compared to 2017, at EUR 1,479 million. It is virtually stable at constant scope and exchange rates (-0.3%), including the spot impact of the fall in the markets at the end of the year.

Wealth and Asset Management continued its business development: Wealth Management integrated ABN Amro's activities in Luxembourg[2] thereby strengthening its positioning on the large entrepreneur segment; Asset Management continued its industrialisation with in particular the roll out of Blackrock's Aladdin IT outsourcing solution; Real Estate Services reported good growth in its business, in particular in real estate fund management in Germany and in advisory business in France, Italy and Germany.

Wealth and Asset Management's revenues (EUR 3,286 million) grew by 2.9% compared to 2017, driven by Real Estate Services, but were impacted this year by MiFID II regulation and the unfavourable movements in the financial markets at the end of the year. Operating expenses totalled EUR 2,636 million, up by 10.4% compared to 2017 due to specific transformation projects at Asset Management, costs related to the acquisition of Strutt & Parker at Real Estate Services and continuous business development. The cost of risk was -EUR 6 million (it was a net write-back of EUR 24 million in 2017). At EUR 681 million, Wealth and Asset Management's pre-tax income, after receiving one-third of the net income of Private Banking in the domestic markets, in Turkey and in the United States, was down by 24.2% compared to 2017 (-18.1% excluding non-recurring items[4].

CORPORATE AND INSTITUTIONAL BANKING (CIB)

In millions of euros	2018	2017	2018/2017
Revenues	**10,829**	**11,704**	**-7.5%**
Operating Expenses and Dep.	(8,163)	(8,273)	-1.3%
Gross Operating Income	**2,666**	**3,431**	**-22.3%**
Cost of Risk	(43)	(81)	-47.1%
Operating Income	**2,623**	**3,350**	**-21.7%**
Share of Earnings of Equity-Method Entities	59	24	n.s.
Other Non Operating Items	0	22	n.s.
Pre-Tax Income	**2,681**	**3,395**	**-21.0%**
Cost/Income	75.4%	70.7%	+4.7 pt
Allocated Equity *(€bn)*	20.8	21.1	-1.4%

(1) Including distributed assets.

(2) Closing of the acquisition on 3 September 2018 (+EUR 7.7 billion in assets under management at Wealth Management and +EUR 2.7 billion at Insurance).

(3) -EUR 180 million in the fourth quarter.

(4) Provision write-back in the 1st quarter 2017; capital gain from the sale of a building in the second quarter 2017, specific transformation projects in Asset Management and costs related to the acquisition of Strutt & Parker in Real Estate Services: -EUR 56 million in 2018 (-EUR 2 million in 2017).

GLOBAL MARKETS

In millions of euros	2018	2017	2018/2017
Revenues	**4,727**	**5,584**	**-15.4%**
Incl. FICC	*2,719*	*3,450*	*-21.2%*
Incl. Equity & Prime Services	*2,008*	*2,135*	*-6.0%*
Operating Expenses and Dep.	(3,937)	(4,255)	-7.5%
Gross Operating Income	**790**	**1,330**	**-40.6%**
Cost of Risk	(19)	(15)	+28.3%
Operating Income	**771**	**1,315**	**-41.4%**
Share of Earnings of Equity-Method Entities	3	(3)	n.s.
Other Non Operating Items	(2)	9	n.s.
Pre-Tax Income	**772**	**1,321**	**-41.6%**
Cost/Income	83.3%	76.2%	+7.1 pt
Allocated Equity *(€bn)*	7.8	7.8	-0.6%

SECURITIES SERVICES

In millions of euros	2018	2017	2018/2017
Revenues	**2,152**	**1,955**	**+10.1%**
Operating Expenses and Dep.	(1,719)	(1,588)	+8.2%
Gross Operating Income	**432**	**366**	**+18.0%**
Cost of Risk	7	3	n.s.
Operating Income	**439**	**369**	**+18.9%**
Non Operating Items	0	1	-83.4%
Pre-Tax Income	**439**	**371**	**+18.5%**
Cost/Income	79.9%	81.3%	-1.4 pt
Allocated Equity *(€bn)*	0.9	0.9	-3.1%

CORPORATE BANKING

In millions of euros	2018	2017	2018/2017
Revenues	**3,951**	**4,165**	**-5.1%**
Operating Expenses and Dep.	(2,507)	(2,430)	+3.2%
Gross Operating Income	**1,444**	**1,735**	**-16.8%**
Cost of Risk	(31)	(70)	-55.4%
Operating Income	**1,413**	**1,665**	**-15.2%**
Non Operating Items	57	37	+52.1%
Pre-Tax Income	**1,470**	**1,703**	**-13.7%**
Cost/Income	63.5%	58.3%	+5.2 pt
Allocated Equity *(€bn)*	12.2	12.4	-1.8%

For the whole of 2018, CIB maintained its leading positions in Europe where it ranked joint number 3 and maintained its global market share after an increase in 2017. The operating division continued its good development on targeted clientele bases, onboarding over 300 new groups globally over the past two years.

CIB operated however in an unfavourable market environment and revenues, at EUR 10,829 million, were down by 7.5% compared to 2017 with contrasting evolutions between the businesses.

At EUR 4,727 million, Global Markets' revenues were down by 15.4% compared to 2017 given the lacklustre context for FICC[1] in Europe and particularly challenging conditions for Equity and Prime Services at the end of the year. The VaR, which measures the level of market risks, was still at a low level (EUR 25 million) but rose slightly at the end of the year given increased volatility.

The revenues of FICC[1], at EUR 2,719 million, were down by 21.2% compared to last year. Client business in rates and credit was still weak in Europe due to monetary policy which resulted in low volatility and very low interest rates. The business also reported poor performance in forex, in particular in emerging markets. It did, however, deliver good performances on the primary market and on structured products. It confirmed its strong positions on bond issues (ranked number 1 for all bond issues in euros and number 9 for all international bond issues) and made significant progress on certain segments (ranked number 3 in the high-yield segment in Europe and number 3 for international green bond issues). The business continued its digital transformation with good development on multi dealer platforms where it ranked number 1 by volume for interest rate swaps in euros and number 5 for foreign exchange.

Revenues of Equity and Prime Services, at EUR 2,008 million, were down for their part by 6% with in particular the impact of extreme market movements at the end of the year on inventories valuation and a loss on index derivative hedging in the United States. The business, however, reported increased client business in equity derivatives and prime brokerage.

Securities Services' revenues, at EUR 2,152 million, rose by 10.1% compared to 2017. Excluding the transfer this quarter of the correspondent banking business from Corporate Banking, they were up by 8.7% as a result of increased transactions as well as assets under custody and administration (+4.3% on average compared to 2017), benefitting additionally from the positive impact of the revaluation of an equity stake. The business continued its excellent drive with gains of significant mandates (Carmignac, Intermediate Capital Group), the finalisation of the strategic partnership with Janus Henderson in the United States and the acquisition of the depositary bank business of Banco BPM[2]. The business is implementing its digital transformation with already over 40 automated processes delivered and 30 in development. Its expertise was recognised with the Custodian of the Year Award at the 2018 CustodyRisk Global Awards.

Corporate Banking's revenues, at EUR 3,951 million, were down by 5.1% compared to 2017 but rose by 0.3% excluding capital gains realised in the second quarter 2017, the transfer of the correspondent banking business to Securities Services and the impact of the environmental responsibility policy[3]. The business continued the development of the transaction businesses (cash management, trade finance) where it reinforced its number 1 position in Europe and reported good business development in Asia. It confirmed its leading position on syndicated loans (ranked number 1 in the EMEA region[4]). Loans, at EUR 132 billion, were up by 1.0% compared to 2017 and deposits, at EUR 126 billion, were down by 3.5%. The business continued to implement its digital transformation, and Centric, its online platform for corporates, has already 10,000 clients as at 31 December 2018 (+1,500 compared to the end of 2017).

At EUR 8,163 million, CIB's operating expenses were down by 1.3% compared to 2017 thanks to cost saving measures (EUR 221 million in savings in 2018) with in particular the ramping up of shared platforms, the implementation of digitalised end-to-end processes of transactions and the automation of operations (over 180 processes in production).

The gross operating income of CIB was thus down by 22.3%, at EUR 2,666 million.

The cost of risk was still low, at EUR 43 million (EUR 81 million in 2017), as the provisions were partly offset by write-backs. It broke down between Global Markets (EUR 19 million compared to EUR 15 million in 2017), Corporate Banking (EUR 31 million compared to EUR 70 million in 2017) and Securities Services (net write-back of EUR 7 million compared to a net write-back of EUR 3 million in 2017).

CIB thus generated EUR 2,681 million in pre-tax income, down by 21.0% compared to 2017, as the impact of the unfavourable market context was attenuated by the decrease in costs and good control of risks.

(1) Fixed Income, Currencies and Commodities.

(2) Closing of the acquisition on 28 September 2018.

(3) Stopped financing gas and oil from shale and tobacco companies.

(4) Europe, Middle East and Africa.

CORPORATE CENTRE

In millions of euros	2018	2017
Revenues	**120**	**394**
Operating Expenses and Dep.	(1,776)	(1,627)
Incl. Restructuring and Transformation Costs	*(1,235)*	*(957)*
Gross Operating Income	**(1,656)**	**(1,234)**
Cost of Risk	(97)	(121)
Operating Income	**(1,753)**	**(1,355)**
Share of Earnings of Equity-Method Entities	84	68
Other Non Operating Items	204	(177)
Pre-Tax Income	**(1,466)**	**(1,464)**

For the whole of 2018, Corporate Centre revenues totalled EUR 120 million compared to EUR 394 million in 2017 which recorded the exceptional impact of capital gains from the sale of Shinhan and Euronext shares for a total of +EUR 233 million as well as -EUR 175 million in Own Credit Adjustment (OCA) and own credit risk included in derivatives (DVA). Revenues included a lesser contribution by Principal Investments compared to a high level in 2017.

Operating expenses totalled EUR 1,776 million compared to EUR 1,627 million in 2017. They included the exceptional impact of EUR 1,106 million in transformation costs (EUR 856 million in 2017) and EUR 129 million in acquisitions' restructuring costs[(1)] (EUR 101 million in 2017).

The cost of risk totalled EUR 97 million (EUR 121 million in 2017). It included the booking of stage 1 provisions on the portfolio of non-doubtful loans of Raiffeisen Bank Polska following the acquisition of its core banking activities (EUR 60 million).

The share of income of the associated companies totalled EUR 84 million-(EUR 68 million in 2017).

Non-operating items totalled EUR 204 million (-EUR 177 million in 2017). They included the exceptional impact of a +EUR 101 million capital gain on the sale of a building, a +EUR 135 million exchange difference from a sale of First Hawaiian Bank[(2)] shares, the impact of the revaluation at market value as at 31 December 2018 of the residual stake in First Hawaiian Bank[(3)] for -EUR 125 million and the booking of a badwill related to the acquisition of Raiffeisen Bank Polska for +EUR 68 million. They included last year the exceptional impact of the full impairment of TEB's goodwill for -EUR 172 million.

The Corporate Centre's pre-tax income was thus -EUR 1,466 million compared to -EUR 1,464 million in 2017.

(1) In particular, LaSer, DAB Bank GE LLD, ABN Amro Luxembourg and Raiffeisen Bank Polska.

(2) In addition, +EUR 151 million capital gain booked in BancWest.

(3) First Hawaiian Bank accounted under the IFRS 5 standard as of 30/06/2018.

3.3 Balance sheet

ASSETS

GENERAL

The BNP Paribas Group implemented the IFRS 9 accounting standard as of 1 January 2018, which led to a review of the principles for the classification, measurement and impairment of financial assets. This change, as well as previous presentation changes - including the reclassification of investments of insurance activities on a separate balance sheet line - are presented in note 2 to the consolidated financial statements.

As at 31 December 2018, the total consolidated balance sheet of the BNP Paribas Group amounted to EUR 2,040.8 billion, up 5% from 1 January 2018 (EUR 1,949.8 billion). The Group's main assets include cash and balances at central banks, financial instruments at fair value through profit or loss, loans and advances to customers, debt securities at amortised cost or at fair value through equity, financial investments of insurance activities and accrued income and other assets, which, together, account for 96% of total assets at 31 December 2018 (95% at 1 January 2018). The 5% increase in assets is mainly due to the increase of:

- financial instruments at fair value through profit or loss, which increase by EUR 33.4 billion, or 7%, mainly as a result of the increase in reverse repurchase agreement operations;
- loans and advances to customers, up 5% (+EUR 34.7 billion to EUR 766 billion at 31 December 2018).

CASH AND BALANCES AT CENTRAL BANKS

Cash and central banks account for EUR 185.1 billion at 31 December 2018, up 4% from 1 January 2018 (EUR 178.4 billion).

FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets recognised at market or model value through profit or loss are composed of trading portfolios, of financial derivatives and certain assets not held for trading purposes whose characteristics do not permit recognition at amortised cost or at fair value through equity. Financial assets in the trading portfolio include securities, loans and reverse repurchase agreements.

These assets are measured at market or model value at each balance sheet date.

Total financial instruments at fair value through profit or loss are up 7% (EUR +33.4 billion) compared to 1 January 2018. This increase is mainly due to the 27% increase in loans and reverse repurchase agreements (EUR +38.8 billion to EUR 183.7 billion as at 31 December 2018), partly offset by the decrease in the portfolio of securities of 6% (EUR -8.4 billion, at EUR 122.0 billion as at 31 December 2018).

LOANS AND ADVANCES TO CUSTOMERS

Loans and advances to customers are divided into ordinary accounts, customer loans, reverse repurchase agreements and finance leases.

Loans and advances to customers (net of impairment) amounted to EUR 765.9 billion at 31 December 2018, compared with EUR 731.2 billion at 1 January 2018, up 5%. This is due to the increase in loans to customers (+5%, i.e. EUR 695.6 billion at 31 December 2018 compared to EUR 664.0 billion at 1 January 2018), as well as the increase in finance leases, which amount to EUR 32.1 billion at 31 December 2018, increasing by 10% compared to 1 January 2018. Impairment provisions were down to EUR 24.1 billion at 31 December 2018, compared with EUR 27.4 billion at 1 January 2018.

DEBT SECURITIES AT AMORTISED COST OR AT MARKET OR MODEL VALUE THROUGH EQUITY

Debt securities that are not held for trading purposes and which meet the cash flow criterion established by IFRS 9 are recognised:

- at amortised cost if managed to collect cash flows by collecting contractual payments over the life of the instrument; or
- at fair value through equity if held in a business model whose objective is achieved through both the collection of contractual cash flows and the sale of financial assets.

Thus, in the context of the implementation of IFRS 9, the analysis of the management modalities of debt securities that were essentially classified as available-for-sale assets under IAS 39 led to the division of the portfolio between the two business models.

Debt securities at amortised cost

Debt securities at amortised cost are measured using the effective interest rate method. They totalled EUR 75.1 billion at 31 December 2018 (net of impairment), compared with EUR 69.4 billion at 1 January 2018, thus increasing by 8%.

Debt securities at fair value through equity

These assets are measured at market or model value through equity at each balance sheet date. They fall by EUR 0.1 billion between 1 January 2018 and 31 December 2018, amounting to EUR 53.8 billion.

Debt securities at fair value through equity posted an unrealised gain of EUR 0.1 billion at 31 December 2018, compared with EUR 0.6 billion at 1 January 2018, a decrease of EUR 0.5 billion.

FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES

Financial investments of insurance activities include:

- the financial instruments that remain recognised in accordance with IAS 39 (cf. note 1.a.1 of the consolidated financial statements); they include investments in representation of the technical reserves of insurance activities, including unit-linked insurance policies;
- derivatives used for hedging purposes with a positive market value;
- investment property;
- equity-method investments;
- and the share of reinsurers in liabilities related to insurance and investment contracts.

Financial investments of insurance activities amounted to EUR 232.3 billion at 31 December 2018, an increase of 2% compared to 1 January 2018. This increase is mainly due to the 7% increase in financial instruments designated as at fair value through profit or loss (EUR 102.9 billion at 31 December 2018, compared with EUR 96.2 billion at 1 January 2018), partly offset by a 2% decrease in available-for-sale financial assets (EUR 112.0 billion at 31 December 2018, compared to EUR 114.2 billion at 1 January 2018).

The financial assets available for sale have an unrealised gain of EUR 9.1 billion at 31 December 2018, compared with EUR 13.2 billion at 1 January 2018, a decrease of EUR 4.1 billion.

ACCRUED INCOME AND OTHER ASSETS

Accrued income and other assets are divided between guarantee deposits and bank guarantees paid, collection accounts, accrued income and prepaid expense, other debtors and miscellaneous assets.

Accrued income and other assets amounted to EUR 103.3 billion at 31 December 2018, compared with EUR 93.0 billion at 1 January 2018, up 11%. This increase is in particular related to guarantee deposits and bank guarantees paid, up by EUR 8.5 billion (+15%).

LIABILITIES

GENERAL

The Group's liabilities (excluding equity) amounted to EUR 1,935.1 billion at 31 December 2018, up 5% from 1 January 2018 (EUR 1,845.2 billion). The Group's main liabilities consist of financial instruments at fair value through profit or loss, deposits from customers, debt securities, accrued expense and other liabilities, and technical reserves and other insurance liabilities. These items together accounted for 94% of the Group's total liabilities (excluding shareholders' equity) at 31 December 2018 (93% at 1 January 2018). The 5% increase in liabilities is mainly due to:

- the 8% or EUR 40.1 billion increase in financial instruments at fair value through profit or loss (EUR 559.9 billion at 31 December 2018);
- the 5% or EUR 35.6 billion rise in deposits from customers (EUR 796.5 billion as at 31 December 2018).

FINANCIAL INSTRUMENTS AT FAIR OR MODEL VALUE THROUGH PROFIT OR LOSS

The trading portfolio consists mainly of sales of borrowed securities, repurchase agreements and financial derivatives. Financial liabilities designated as at fair or model value through profit or loss are mainly composed of issues originated and structured on behalf of clients, where the risk exposure is managed in combination with the hedging strategy. These types of issues contain significant embedded derivatives, whose changes in value are offset by changes in value of the hedging instrument.

Total financial instruments at fair value through profit or loss rose by 8% compared to 1 January 2018, mainly in relation to the 17% increase in repurchase agreements (a EUR 29.4 billion increase, to EUR 204.0 billion at 31 December 2018) and to the 12% increase in securities portfolios (a EUR 8.1 billion rise at 31 December 2018).

DEPOSITS FROM CUSTOMERS

Deposits from customers consist primarily of on-demand deposits, term accounts, savings accounts and repurchase agreements. Deposits from customers amount to EUR 796.5 billion, up EUR 35.6 billion from 1 January 2018. This is due to the 5% increase in on-demand accounts (a EUR 23.6 billion rise, to EUR 474.0 billion as at 31 December 2018) and the 8% rise in term accounts by (a EUR 13.0 billion increase, to EUR 175.7 billion at 31 December 2018).

DEBT SECURITIES

This category includes negotiable certificates of deposit and bond issues, but does not include debt securities classified as financial liabilities at fair value through profit or loss (see note 5.a of the consolidated financial statements). Debt securities are increasing from EUR 148.2 billion at 1 January 2018 to EUR 151.5 billion at 31 December 2018.

ACCRUED EXPENSE AND OTHER LIABILITIES

Accrued expense and other liabilities consist of guarantee deposits received, collection accounts, accrued expense and deferred income, as well as other creditors and miscellaneous liabilities. Accrued expense and other liabilities amounted to EUR 89.6 billion at 31 December 2018, compared with EUR 80.5 billion at 1 January 2018, an increase of 11%. This increase is mainly due to guarantee deposits received (up EUR 9.4 billion, or +24%) as well as to collection accounts (up EUR 2.1 billion), while other creditors and miscellaneous liabilities decreased by EUR 3.3 billion (-11%).

TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

Technical reserves of insurance companies increased by 1% compared to 1 January 2018 and amounted to EUR 209.8 billion at 31 December 2018 (EUR 207.0 billion at 1 January 2018), mainly due to the increase in liabilities related to insurance contracts.

MINORITY INTERESTS

Minority interests were down by EUR 0.9 billion, i.e. EUR 4.3 billion at 31 December 2018 compared with EUR 5.1 billion at 1 January 2018. This is mainly due to changes in the scope of consolidation affecting minority interests (-EUR 1.3 billion).

CONSOLIDATED EQUITY ATTRIBUTABLE TO SHAREHOLDERS

Shareholders' equity (before dividend payout) amounts to EUR 101.5 billion as at 31 December 2018, compared with EUR 99.4 billion as at 1 January 2018. This EUR 2.1 billion increase is mainly attributable to the profit of the period which amounted to EUR 7.5 billion, partially offset by the EUR 3.8 billion dividend paid in respect of the year ended 31 December 2017 and by the EUR 1.3 billion decrease in changes in assets and liabilities recognised directly in equity.

FINANCING AND GUARANTEE COMMITMENTS

FINANCING COMMITMENTS

Financing commitments given mainly consist mostly of documentary credit, other credit confirmations and other commitments. They rose by EUR 18.5 billion compared to 1 January 2018, to EUR 304.6 billion at 31 December 2018.

Financing commitments given to customers rose by 6% to EUR 301.4 billion at 31 December 2018 and those given to credit institutions increased by EUR 1 billion to EUR 3.2 billion at 31 December 2018.

Financing commitments received consist mainly of financing commitments received from credit institutions in the context of refinancing from central banks. Financing commitments received rose by 14%, to EUR 83.7 billion at 31 December 2018, compared with EUR 73.6 billion at 1 January 2018.

GUARANTEE COMMITMENTS

Guarantee commitments given rose by EUR 3% to EUR 146.6 billion at 31 December 2018 (compared with EUR 142.6 billion at 1 January 2018); this increase comes from the guarantee commitments given to customers (a 3% increase to EUR 113.1 billion at 31 December 2018), while guarantee commitments to credit institutions remain stable at EUR 33 billion at 31 December 2018.

3.4 Profit and loss account

NET BANKING INCOME

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017	Change (2018/2017)
Net interest income	21,062	21,191	-0.6%
Net commission income	9,207	9,430	-2.4%
Net gains on financial instruments at fair value through profit or loss	5,808	5,346	8.6%
Net gains on financial instruments at fair value through equity	315	1,711	-81.6%
Net gains on derecognised financial assets at amortised cost	(5)	55	n.s.
Net income from insurance activities	4,064	3,813	6.6%
Net income from other activities	2,065	1,615	27.9%
NET BANKING INCOME	**42,516**	**43,161**	**-1.5%**

GENERAL

The EUR 0.6 billion decrease in the Group's net banking income between 2017 and 2018 is mainly the result of a -EUR 0.9 billion variation in net gains on financial instruments at fair value through profit or loss or through equity, of the decrease by EUR 0.2 billion of net commission income, of the -EUR 0.1 billion variation in net interest income, partially offset by the EUR 0.4 billion increase in net income from other activities and the EUR 0.2 billion increase in net income from insurance activities.

NET INTEREST INCOME

This line item includes net interest income and expense related to customer transactions, interbank transactions, debt instruments issued by the Group, cash flow hedge instruments, derivatives used for interest-rate portfolio hedge, debt securities at amortised cost or at fair value through equity, and non-trading instruments at fair value through profit or loss.

More specifically, the "Net interest income" line item includes:

- net interest income from loans and advances, including interest, transaction costs, fees and commissions included in the initial value of the loan. These items are calculated using the effective interest method, and recognised in the profit and loss account over the life of the loan;
- net interest income from debt securities held by the Group, which are measured at amortised cost or at fair value through equity (for the interest calculated using the effective interest method), and from non-trading debt securities at fair value through profit or loss (for the contractual accrued interest);
- net interest income from cash flow hedges, which are used in particular to hedge the interest rate risk on variable-rate assets and liabilities. Changes in the fair value of cash flow hedges are recorded in equity. The amounts recorded in equity over the life of the hedge are transferred to "Net interest income" as and when the cash flows from the hedged item are recognised as profit or loss in the income statement.

Interest income and expense on fair value hedge derivatives are included with the interest generated by the hedged item. Similarly, interest income and expense arising from derivatives used for economic hedge of transactions designated as at fair value through profit or loss are allocated to the same line items as the interest income and expense relating to the underlying transactions.

The main factors affecting the level of net interest income are the relative volumes of interest-earning assets and interest-bearing liabilities and the spread between lending and funding rates. Net interest income is also affected by the impact of hedging transactions, and, to a lesser extent, exchange rate fluctuations.

Volumes of interest-earning assets and interest-bearing liabilities can be affected by various factors, in addition to general market conditions and growth in the Group's lending activities (either organically or through acquisitions). One such factor is the Group's business mix, such as the relative proportion of capital allocated to interest-generating as opposed to fee-generating businesses.

The other principal factor affecting net interest income is the spread between lending and funding rates, which itself is influenced by several factors. These include central bank funding rates (which affect both the yield on interest-earning assets and the rates paid on sources of funding, although not always in a linear and simultaneous manner), the proportion of funding sources represented by non-interest bearing customer deposits, government decisions to raise or lower interest rates on regulated savings accounts, the competitive environment, the relative weight of the Group's various interest-bearing products, which have different margins as a result of different competitive environments, and the Bank's hedging strategy and accounting treatment of hedging transactions.

Net interest income decreased by 0.6% to EUR 21,062 million for the year ended 31 December 2018. This variation is mainly attributable to the decrease in income from loans, deposits and borrowings (EUR 18,888 million for the year ended 31 December 2018, compared with EUR 19,099 million for the year ended 31 December 2017), to the increase in net expense on debt issued by the Group (EUR 2,281 million for the year ended 31 December 2018, compared with EUR 1,872 million for the year ended 31 December 2017), partially offset by the increase in net income from debt securities at amortised cost and at fair value through equity (EUR 1,659 million in 2018, compared with EUR 1,364 million in 2017) and the increase in net income from finance leases (EUR 1,239 million in 2018, compared with EUR 1,095 million in 2017).

Besides, expense on financial instruments designated as at fair value through profit or loss increased from EUR 317 million in 2017 to EUR 442 million in 2018, net revenues of cash flow hedge instruments increased by EUR 76 million compared with the year ended 31 December 2017, and net revenues of interest rate portfolio hedge instruments increased by EUR 100 million.

NET COMMISSION INCOME

Net commission income includes commissions on customer transactions, securities and derivatives transactions, financing and guarantee commitments, and asset management and other services. Net commission income decreased by 2.4%, from EUR 9,430 million in 2017 to EUR 9,207 million in 2018.

Insurance activity fees are included in the item "Net income from insurance activities".

NET GAINS ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

This line item includes all profit and loss items relating to financial instruments managed in the trading book, to financial instruments designated as at fair value through profit or loss by the Group under the fair value option and to non-trading debt securities that do not meet the IFRS 9 criteria required to be recognised at amortised cost or at fair value through equity (other than interest income and expense on the last two categories, which are recognised under "Net interest income" as presented above). It also includes gains and losses on non-trading equity instruments that the Group did not choose to measure at fair value through equity. This includes both capital gains and losses on the sale and the marking to fair value of these instruments, along with dividends from equity securities.

This line item also includes gains and losses due to the ineffectiveness of fair value hedges, cash flow hedges, and net foreign investment hedges.

The gains and losses resulting from cash flows and the remeasurement of financial instruments, either cash or derivatives, must be appreciated as a whole in order to give a fair representation of the profit or loss resulting from trading activities.

Net gains on financial instruments at fair value through profit or loss increased by 8.6%, from EUR 5,346 million for the year ended 31 December 2017 to EUR 5,808 million for the year ended 31 December 2018.

The change in the net gain on financial instruments designated as at fair value through profit or loss for the year ended 31 December 2017 was partly attributable to the change in the issuer risk of the BNP Paribas Group for a loss of EUR 61 million. In 2018, the debt remeasurement effect arising from BNP Paribas Group issuer risk is recognised within "Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss", as requested by IFRS 9. The other components of income from items designated as at fair value through profit or loss are partly offset by changes in the value of the derivative instruments hedging these assets.

In 2018, this item also includes income and expense on equity securities that were classified under IAS 39 as available-for-sale assets and that the Group did not choose to recognise at fair value through equity under IFRS 9. This net gain amounts to EUR 571 million in 2018.

NET GAINS ON FINANCIAL INSTRUMENTS AT FAIR VALUE THOUGH EQUITY

For the year 2018, net gains on financial instruments at fair value through equity correspond to gains and losses realised on debt securities recognised at fair value through equity and to dividends from equity securities that the Group chose to recognise at fair value through equity.

Changes in fair value (excluding interest due) of these assets are initially recognised under "Changes in assets and liabilities recognised directly in equity". Upon sale of these assets, realised gains or losses are recognised in the profit or loss account under "Net gains on financial instruments at fair value through equity" for debt securities, or transferred to retained earnings for equity securities.

For the year 2017, this line item also included income elements relating to securities classified under IAS 39 as available-for-sale securities that have been reclassified under IFRS 9 as financial assets at fair value through profit or loss or at amortised cost.

Net gains on financial instruments at fair value through equity amounted to EUR 315 million in 2018 and EUR 1,711 million in 2017.

NET INCOME FROM INSURANCE ACTIVITIES

Net income from insurance activities rose by 6.6% compared to 2017, amounting to EUR 4,064 million. Its main components are: gross written premiums, net income from financial investments, technical charges related to contracts, policy benefit expenses and net expense from ceded reinsurance.

The change in net income from insurance activities is due to an 8.3% increase in gross written premiums (EUR 27,026 million in 2018, compared with EUR 24,964 million in 2017) and to the decrease of net gains from financial investments which correspond to a net loss of EUR 2,133 million in 2018 and to a net gain of EUR 9,031 million in 2017. The latter is partially offset by the 34% decrease in technical charges that amount to -EUR 18,487 million for the year ended 31 December 2018, compared to -EUR 28,130 million for the year ended 31 December 2017.

NET INCOME FROM OTHER ACTIVITIES

This item includes, among other things, net income from investment property, assets held under operating lease and property development activities. Net income from other activities increased by 28%, from EUR 1,615 million in 2017 to EUR 2,065 million in 2018. This change is mainly due to a EUR 278 million increase in other net income, as well as a EUR 88 million increase in net income from assets held under operating lease.

OPERATING EXPENSES, AMORTISATION AND DEPRECIATION OF FIXED AND INTANGIBLE ASSETS

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec.2017	Change (2018/2017)
Salary and employee benefit expense	(16,617)	(16,496)	1%
Other operating expenses	(12,290)	(11,729)	5%
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(1,676)	(1,719)	-3%
OPERATING EXPENSES, AMORTISATION AND DEPRECIATION OF FIXED AND INTANGIBLE ASSETS	**(30,583)**	**(29,944)**	**2%**

Operating expenses, amortisation and depreciation of fixed and intangible assets increased from EUR 29,944 million in 2017 to EUR 30,583 million in 2018.

GROSS OPERATING INCOME

The Group's gross operating income decreased by -9.7% to EUR 11,933 million for the year ended 31 December 2018 (compared to EUR 13,217 million for the year ended 31 December 2017) due to the decrease in net banking income (-1%) and to the increase in operating expense (+2%).

COST OF RISK

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec.2017	Change (2018/2017)
Net allowances to impairment	(2,490)	(2,852)	-13%
Recoveries on loans and receivables previously written off	483	537	-10%
Loss on irrecoverable loans	(757)	(592)	28%
TOTAL COST OF RISK FOR THE PERIOD	**(2,764)**	**(2,907)**	**-5%**

This line item represents the net amount of impairment losses recognised for credit risks inherent in the Group's intermediation activities, as well as any impairment loss relating to counterparty risks on over-the-counter derivative instruments.

The Group's cost of risk amounts to EUR 2,764 million, down 5% from 2017.

The decrease in the cost of risk in 2018 is mainly due to the contribution of Domestic Markets, with net allowances of EUR 1,044 million in 2018 (compared with EUR 1,353 million in 2017). This 23% decrease is linked in particular to BNL banca commerciale, whose cost of risk is EUR 593 million (EUR 870 million for the year ended 31 December 2017).

As at 31 December 2018, the total amount of loans, securities and commitments, net of collateral, is EUR 26.2 billion (compared to EUR 28.6 billion as at 1 January 2018) and the related impairment amounts to EUR 19.9 billion (EUR 22.9 billion at 1 January 2018). The coverage ratio is 76% at 31 December 2018, compared to 80% at 1 January 2018.

More detailed information on the cost of risk per business line is available in the "Core business results" section.

NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017	Change (2018/2017)
OPERATING INCOME	**9,169**	**10,310**	**-11%**
Share of earnings of equity-method entities	628	713	-12%
Net gains on non-current assets	358	488	-27%
Change in value of goodwill	53	(201)	n.s.
Corporate income tax	(2,203)	(3,103)	-29%
Net income attributable to minority interests	(479)	(448)	7%
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS	**7,526**	**7,759**	**-3%**

SHARE OF EARNINGS OF EQUITY-METHOD ENTITIES

The share of earnings of equity-method entities decreased from EUR 713 million in 2017 to EUR 628 million in 2018.

NET GAINS ON NON-CURRENT ASSETS

This item includes net realised gains or losses on sales of tangible and intangible assets used in operations, and on sales of investments in consolidated entities.

Net gains on other fixed assets decreased by EUR 130 million (EUR 358 million in 2018 compared with EUR 488 million in 2017). The main capital gains realised relate to the sale of 4% of SBI Life in 2017 for EUR 326 million and of 30.4% of First Hawaiian Bank in 2018 for EUR 286 million.

CHANGE IN VALUE OF GOODWILL

Changes in the value of goodwill amounted to +EUR 53 million in 2018 (including a EUR 68 million negative goodwill on the "Core bank" activity of Raiffeisen Polska), compared with -EUR 201 million in 2017 (including the full goodwill impairment of Turk Ekonomi Bankasi for EUR 172 million).

CORPORATE INCOME TAX

The Group recorded a tax expense on of EUR 2,203 million in 2018, down from the amount of EUR 3,103 million recorded in 2017.

MINORITY INTERESTS

Minority interests increased by EUR 31 million (EUR 479 million in 2018, compared to EUR 448 million in 2017).

3.5 Recent events

PRODUCTS AND SERVICES

BNP Paribas regularly introduces new products and services for its customers. More information is available on the Group's websites, including in the press releases available at www.invest.bnpparibas.com.

ACQUISITIONS AND PARTNERSHIPS

On 31 October 2018, BNP Paribas Group closed the acquisition of the core banking operations of Raiffeisen Bank Polska (the "Core Bank"), merged today with the subsidiary of BNP Paribas in Poland, BGZ BNP Paribas. The Core Bank consists of the business of Raiffeisen Bank Polska ("RBPL"), excluding the foreign currency retail mortgage loan portfolio and excluding a limited amount of other assets. Corporate and retail gross loans of the Core Bank amount to PLN 19 billion (equivalent to EUR 4.4 billion[1] and customer deposits to PLN 34 billion (equivalent to EUR 7.9 billion[1]) at year-end 2017.

The transaction price is set at PLN 3.25 billion (EUR 756 million[1]), corresponding to ~87% of the Core Bank book value at closing and ~95% of its tangible book value.

The transaction had an impact of -10 bp on the CET1 ratio of the BNP Paribas Group in the fourth quarter 2018 and will improve its earnings per share by ~1.0% in 2020.

(1) €/PLN rate of ~4.3 as at 30/10/2018.

3.6 Outlook

A CONFIRMED 2020 AMBITION

The Group is actively implementing its 2017-2020 development plan in a contrasted environment (economic growth still favourable but which is expected to slow down, low interest rate environment in Europe which is expected to improve only gradually and uncertain evolution of foreign exchange parities).

Leveraging on its integrated and diversified business model, the Group is successfully implementing its digital transformation and pursues differentiated business development strategies in Domestic Markets, International Financial Services (IFS) and CIB, all the while resolutely committing for a positive impact on society.

A TRAJECTORY IN LINE WITH THE PLAN FOR DOMESTIC MARKETS AND IFS BUT NEED TO ACCELERATE TRANSFORMATION AT CIB

In line with its mid-term plan objectives, Domestic Markets confirms its 2020 ambitions. In an interest rate environment that is expected to improve only gradually and with new expectations from customers influenced by digital uses, the operating division will continue to strengthen its sales and marketing drive while improving the customer experience and offering new services. It will intensify its cost reduction measures with an additional savings programme of EUR 150 million compared to the initial objective. It will continue adapting its branch network, creating omni-channel customer service centres and rolling out end-to-end digitalised processes. It will continue its rigorous risk management policy with in particular the continued improvement of the risk profile of BNL bc for which it confirms the cost of risk target of 50 basis points in 2020.

The operating division thus confirms its 2020 trajectory with a revenue evolution slightly above initial expectations, an upcoming significant improvement of the operating efficiency generating a positive jaws effect (decrease in the cost income ratio in the networks and virtually stable in the specialised businesses) and a confirmation of the plan's RONE[1] target.

Despite an unfavourable foreign exchange effect, IFS likewise presents a 2020 trajectory in line with the plan and confirms its role as a growth engine for the Group. The operating division will thus continue its sustained growth, consolidating its leading positions in the businesses thanks to the quality of its product offering, pursuing its digital transformation, continuing the selective development of Retail Banking outside the Eurozone, strengthening cooperation with the Group and executing the integration of acquisitions made recently. It will intensify cost saving measures with a programme of an additional EUR 120 million in savings compared to the initial objective, continuing the industrialisation and pooling of processes, the streamlining of certain product offerings and the implementation of digital initiatives.

IFS thus confirms its 2020 trajectory with a revenue growth in line with the plan, thanks to a good business drive and acquisitions made, and a significant improvement of the operating efficiency (leading to a positive jaws effect as early as 2019) but less however than expected initially due mainly to the unfavourable foreign exchange effect. The RONE[1] will reach a level close to the target.

In the face of an unfavourable environment, CIB is intensifying its transformation. Despite the successes recorded both in terms of gains of new clients and cost savings (down for the third year in a row) and of containment of allocated capital (-6.3% since 2016), the operating division is confronted with a decrease of the global revenue pool in the CIB industry and a decrease in its profitability with a 12.9% RONE[1] this year (-3.2 points compared to 2017).

CIB thus announces three-pronged structural actions to improve a profitability that deviated from the 2020 trajectory:

(1) review of non-strategic, subscale or unprofitable business segments (*e.g.* stopped Opera Trading Capital's proprietary business and commodity derivatives in the United States); analysis of certain peripheral locations and rationalisation of the relationship with clients who are sub-profitable. The preliminary scope of potential exits could represent revenues in the range of 200 to EUR 300 million for a cost income ratio above 100% and EUR 5 billion in risk-weighted assets;

(2) intensification of the industrialisation to reduce costs with in particular the adaptation of the flow businesses to the fast electronisation of the financial markets at Global Markets, the development of shared platforms at Corporate Banking, the industrialisation of the multi-local operations model at Securities Services and the streamlining and mutualising of IT and back offices. CIB thus increases its recurring savings programme by EUR 350 million to bring it to EUR 850 million[2] over 2019 and 2020;

(3) priority given to even more selective and profitable growth with in particular reinforced cooperation between the businesses (e.g. expansion of the joint Corporate Banking and Global Markets platform to develop the Originate & Distribute policy), the implementation of targeted measures at Global Markets to turn around the performances of the forex and the equity derivatives businesses, the continuation of development at Corporate Banking in targeted countries in Europe and the selective growth in America and Asia, and the integration of the acquisitions made at Securities Services.

(1) Pre-tax return on notional equity.

(2) Excluding savings related to businesses exits.

The operating division thus focuses on profitable growth to be the preferred European partner of its clients by continuing to strengthen its leading positions in Europe and selective development in the United States and Asia, and deepening the integrated model between the businesses and the regions ("One Bank").

CIB is thereby adjusting its 2020 trajectory, with a downward revision of its revenue target (expected to be up however compared to a weak 2018 base), a significant improvement of operating efficiency enabling to generate a positive jaws effect thanks to additional cost saving efforts, stable risk-weighted assets in 2020 compared to 2016 (compared to a 2% increase per year[(1)] in the initial plan) and a rise in the RONE[(2)] to a level close to the initial objective.

SIGNIFICANT PROGRESS IN THE DIGITAL TRANSFORMATION

The Group is successfully implementing in all the operating divisions its ambitious transformation programme designed to implement new customer experiences, accelerate digitalisation and improve operating efficiency.

Digital is strongly growing in all the businesses. Domestic Markets already has over 8 million digital clients in Retail Banking (of which 3 million at Hello bank! and 1.1 million at Nickel) and accelerates mobile uses of individual customers thanks to expanded features available, ranking as first bank in France in terms of mobile features according to D-rating[(3)]. IFS has 0.9 million clients in its digital banks (*Cepteteb* in Turkey and *BZG Optima* in Poland) and makes electronic signature widely available (accounting already for 50% of contracts signed at Personal Finance). At CIB, the Centric digital platform is growing rapidly with close to 10,000 customers using it.

Robotics and artificial intelligence are developing rapidly with already over 500 robots operational (chatbots, automation of controls, reportings, data processing). Processes are industrialised and optimised everywhere and new end-to-end digitalised customer journeys implemented. Lastly, new digital products are being launched, such as LyfPay, a value-added mobile payment solution, with already 1.3 million downloadings.

The Group is thus successfully implementing its five transformation levers (implement new customer journeys, make better use of data, upgrade the operational model, adapt and mutualise information systems and develop more digital work practices).

The costs associated with this transformation totalled EUR 2 billion since last year, in line with the plan. For 2019, the envelope of transformation costs is revised downward by EUR 300 million, to EUR 700 million versus EUR 1 billion initially planned (-10% compared to the EUR 3 billion envelope originally planned for the whole plan).

The recurring cost savings generated by the end of 2018 totalled EUR 1.15 billion, in line with the objective. Given the higher rise than expected of certain regulatory costs totalling EUR 200 million by 2020 and the needed intensification of transformation at CIB, the Group updated its programme with an additional EUR 600 million in savings (55% at CIB, 25% at Domestic Markets, 20% at IFS). These additional savings will be achieved in particular thanks to the streamlining of the IT organisation and the use of the cloud, the reinforcement of the industrialisation of the functions with increased use of artificial intelligence, the streamlining of structures through international mutualized competency centers and the optimisation of real estate costs (stepping-up of flex offices, etc.). The 2020 recurring cost savings target is thus raised from EUR 2.7 billion to EUR 3.3 billion.

COMMITMENT FOR A POSITIVE IMPACT ON SOCIETY

The Group is pursuing out an ambitious corporate social and environmental responsibility (CSR) policy and is committed to making a positive impact on society with concrete impacts.

It thus stopped in 2018 financing companies whose primary business is gas/oil from shale, oil from tar sands or gas / oil production in the Arctic as well as financing tobacco companies. It ranks number 3 for green bonds and was involved in EUR 15.6 billion in financing renewable energies and EUR 1.6 billion dedicated to social entrepreneurship.

The Group aims in particular to finance the economy in an ethical way, promote the development of its employees, support initiatives with a social impact and play a major role in the transition toward a low carbon economy. It thereby wants to be a major contributor to the UN Sustainable Development Goals and targets EUR 185 billion in 2020 in financing to sectors that contribute to these goals (EUR 166 billion by the end of 2018).

This policy of engagement to make a positive impact on society is recognised through the bank's very good rankings in major specialised indices (World's Best Bank for sustainable finance at the Euromoney Awards for Excellence 2018).

The Group is also a very significant tax payer with a total amount of taxes and levies of EUR 5.6 billion in 2018, of which EUR 2.5 billion in France.

2020 TARGETS UPDATED

The Group is updating the plan's targets with revenue growth during the period 2016-2020 reviewed at 1.5% per year (2.5% per year in the initial plan) and a recurring cost savings target of EUR 3.3 billion (EUR 2.7 billion in the initial plan) from 2020. It expects about 2.5%[(4)] growth of risk-weighted assets per year by 2020 with active management of the balance sheet (sales of non-core equity stakes or assets). The Group thus expects an organic capital generation of at least 30 basis points per year after dividend distribution.

On these bases, the return on equity is expected at 9.5% in 2020 (or a return on tangible equity above 10.5%) with a CET1 ratio equal or above 12%.

The Group thus expects more than 20% growth in the earnings per share between 2016 and 2020 leading to, with a 50% pay-out ratio, an increase of the dividend of 35% during the same period.

(1) 2016-2020 compound annual growth rate.

(2) Pre-tax return on notional equity.

(3) Agency specialised in digital performance analysis.

(4) 2018-2020 Compound Annual Growth Rate.

TREND INFORMATION

Trend information (Macroeconomic environment and Laws and regulations applicable to financial institutions) is described in the Top and emerging risks sub-section, in the Risks and capital adequacy chapter.

3.7 Financial structure

The Group's balance sheet is very solid.

The impacts of the first time application of the new IFRS 9 accounting standard were fully taken into account as of 1 January 2018: -EUR 2.5 billion impact on revaluated shareholders' equity[(1)] and -10 bp on the fully loaded Basel 3 common equity Tier 1 ratio[(2)]. This ratio also recorded as at 1 January 2018 the impact of -10 bp of the supervisor's new general requirement to deduct irrevocable payment commitments from the prudential capital and thus came to 11.6% *pro forma* as at 1 January 2018.

It rose back to 11.8% as at 31 December 2018, or an increase of 20 bp compared to 1 January 2018 which breaks down between:

- the net income for the year (excluding capital gain on the sale of 43.6% of First Hawaiian Bank) after taking into account dividend payment (+50 bp);
- the increase in risk weighted assets, in particular in Domestic Markets and Personal Finance, excluding foreign exchange effect and operational risk (-20 bp);
- the risk-weighted assets related to operational risk brought to the standard method level (-10 bp);
- the other effects which have a negligible impact on the ratio overall (including the effects of the acquisitions and sales of the year).

The Basel 3 fully loaded leverage ratio[(3)], calculated on total Tier 1 capital, totalled 4.5% as at 31 December 2018.

The Liquidity Coverage Ratio stood at 132% as at 31 December 2018.

The Group's liquid and asset reserve immediately available totalled EUR 308 billion, which is equivalent to more than one year of room to manoeuvre in terms of wholesale funding.

The evolution of these ratios illustrates the Group's ability to generate capital regularly and manage its balance sheet in a disciplined manner within a more demanding regulatory framework.

(1) Shareholders'equity including valuation reserves.

(2) Taking into account all the rules of the CRD4 directives with no transitory provisions. Subject to the provisions of article 26.2 of Regulation (EU) No. 575/2013.

(3) Taking into account all the rules of the CRD4 directives in 2019 with no transitory provisions, calculated according to the delegated act of the European Commission dated 10 October 2014.

3.8 Alternative Performance Measures (APM) – Article 223-1 of the AMF's General regulation

Alternative Performance Measures	Definition	Reason for use
Operating division profit and loss account aggregates (revenues, operating expenses, gross operating income, operating income, pre-tax income)	Sum of Domestic Markets' profit and loss account aggregates (with Domestic Markets' profit and loss account aggregates, including 2/3 of private banking in France, Italy, Belgium and Luxembourg), IFS and CIB BNP Paribas Group profit and loss account aggregates = Operating division profit and loss account aggregates + Corporate centre profit and loss account aggregates Reconciliation with Group profit and loss account aggregates is provided in the table "Core business results"	Representative measure of the BNP Paribas Group's operating performance
Profit and loss account aggregates, excluding PEL/CEL effect (revenues, gross operating income, operating income, pre-tax income)	Profit and loss account aggregate, excluding PEL/CEL effect Reconciliation with Group profit and loss account aggregates is provided in the table below	Representative measure of the aggregates of the period excluding changes in the provision that accounts for the risk generated by PEL and CEL accounts during their lifetime
Profit and loss account aggregates of Retail Banking activity with 100% of Private Banking	Profit and loss account aggregate of a Retail Banking activity including the whole profit and loss account of Private Banking Reconciliation with Group profit and loss account aggregates is provided in the table below	Representative measure of the performance of Retail Banking activity including the total performance of Private Banking (before sharing the profit & loss account with the Wealth Management business, Private Banking being under a joint responsibility of Retail Banking (2/3) and Wealth Management business (1/3)
Cost/income ratio	Costs to income ratio	Measure of operational efficiency in the banking sector
Cost of risk/Customer loans at the beginning of the period (in basis points)	Cost of risk (in €m) divided by customer loans at the beginning of the period Details of the calculation are provided in the tables below	Measure of the risk level by business in percentage of the volume of outstanding loans
Doubtful loans' coverage ratio	Relationship between stage 3 impairments and impaired outstandings (stage 3), balance sheet and off-balance sheet, netted for collateral received, for customer items and credit institutions, including liabilities at amortised cost and debt securities at fair value through equity (excluding insurance business)	Measure of cover for doubtful loans
Net income Group share excluding exceptional items	Net income attributable to equity holders excluding exceptional items Details of exceptional items are provided in the tables hereafter	Measure of BNP Paribas Group's net income excluding non-recurring items of a significant amount or items that do not reflect the underlying operating performance, notably transformation and restructuring costs.
Return on Equity (ROE)	Details of the ROE calculation are provided in the tables hereafter.	Measure of the BNP Paribas Group's return on equity
Return on Tangible Equity (ROTE)	Details of the ROTE calculation are provided in the tables hereafter	Measure of the BNP Paribas Group's return on tangible equity

RECONCILIATION OF PROFIT & LOSS WITH THE ALTERNATIVE PERFORMANCE MEASURES

2018 - Results by Core businesses

In millions of euros		Domestic Markets	International Financial Services	CIB	Operating Divisions	Corporate Centre	Group
		15,132	**16,434**	**10,829**	**42,396**	**120**	**42,516**
Revenues	%Change/2017	-0.2%	+3.4%	-7.5%	-0.9%	-69.5%	-1.5%
		(10,401)	(10,242)	(8,163)	(28,807)	(1,776)	(30,583)
Operating Expenses and Dep.	%Change/2017	+0.8%	+5.4%	-1.3%	+1.7%	+9.1%	+2.1%
		4,731	**6,192**	**2,666**	**13,589**	**-1,656**	**11,933**
Gross Operating Income	%Change/2017	-2.3%	+0.2%	-22.3%	-6.0%	+34.2%	-9.7%
		(1,045)	(1,579)	(43)	(2,667)	(97)	(2,764)
Cost of Risk	%Change/2017	-22.8%	+16.9%	-47.1%	-4.3%	-19.6%	-4.9%
		3,686	**4,613**	**2,623**	**10,922**	**-1,753**	**9,169**
Operating Income	%Change/2017	+5.7%	-4.4%	-21.7%	-6.4%	+29.4%	-11.1%
Share of Earnings of Equity-Method Entities		-3	489	59	544	84	628
Other Non Operating Items		0	208	0	207	204	411
		3,683	**5,310**	**2,681**	**11,674**	**-1,466**	**10,208**
Pre-Tax Income	%Change/2017	+3.5%	-8.8%	-21.0%	-8.6%	+0.1%	-9.7%
Net Income Attributable to Minority Interests							-479
Net Income Attributable to Equity Holders							**7,526**

Reconciliation with profit and loss account aggregates of Retail Banking activity, excluding PEL/CEL effect and with 100% Private Banking

In millions of euros	2018	2017
Retail Banking & Services Excluding PEL/CEL Effects		
Revenues	**31,546**	**31,045**
Operating Expenses and Dep.	(20,644)	(20,044)
Gross Operating Income	**10,903**	**11,001**
Cost of Risk	(2,624)	(2,705)
Operating Income	**8,279**	**8,296**
Share of Earnings of Equity-Method Entities	486	622
Other Non Operating Items	208	443
Pre-Tax Income	**8,972**	**9,361**
Allocated Equity *(€bn, year to date)*	53.3	51.4

In millions of euros	2018	2017
Retail Banking & Services		
Revenues	**31,567**	**31,063**
Operating Expenses and Dep.	(20,644)	(20,044)
Gross Operating Income	**10,923**	**11,020**
Cost of Risk	(2,624)	(2,705)
Operating Income	**8,299**	**8,315**
Share of Earnings of Equity-Method Entities	486	622
Other Non Operating Items	208	443
Pre-Tax Income	**8,993**	**9,379**
Allocated Equity *(€bn, year to date)*	53.3	51.4

In millions of euros	2018	2017
Domestic Markets (including 100% of Private Banking in France, Italy, Belgium and Luxembourg)(*) Excluding PEL/CEL Effects		
Revenues	**15,683**	**15,718**
Operating Expenses and Dep.	(10,707)	(10,620)
Gross Operating Income	**4,977**	**5,098**
Cost of Risk	(1,046)	(1,356)
Operating Income	**3,930**	**3,743**
Share of Earnings of Equity-Method Entities	(3)	62
Other Non Operating Items	0	10
Pre-Tax Income	**3,927**	**3,814**
Income Attributable to Wealth and Asset Management	(264)	(273)
Pre-Tax Income of Domestic Markets	**3,663**	**3,541**
Allocated Equity *(€bn, year to date)*	25.2	24.6

(*) Including 100% of Private Banking for the Revenues to Pre-tax income items.

In millions of euros	2018	2017
Domestic Markets (including 2/3 of Private Banking in France, Italy, Belgium and Luxembourg)		
Revenues	**15,132**	**15,164**
Operating Expenses and Dep.	(10,401)	(10,322)
Gross Operating Income	**4,731**	**4,842**
Cost of Risk	(1,045)	(1,353)
Operating Income	**3,686**	**3,489**
Share of Earnings of Equity-Method Entities	(3)	61
Other Non Operating Items	0	10
Pre-Tax Income	**3,683**	**3,560**
Allocated Equity *(€bn, year to date)*	25.2	24.6

In millions of euros	2018	2017
French Retail Banking (including 100% of Private Banking in France)(*)		
Revenues	**6,331**	**6,371**
Incl. Net Interest Income	*3,568*	*3,588*
Incl. Commissions	*2,763*	*2,783*
Operating Expenses and Dep.	(4,609)	(4,657)
Gross Operating Income	**1,722**	**1,714**
Cost of Risk	(288)	(331)
Operating Income	**1,434**	**1,383**
Non Operating Items	(1)	1
Pre-Tax Income	**1,432**	**1,384**
Income Attributable to Wealth and Asset Management	(148)	(153)
Pre-Tax Income of French Retail Banking	**1,284**	**1,231**
Allocated Equity *(€bn, year to date)*	9.6	9.4

(*) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2018	2017
French Retail Banking (including 100% of Private Banking in France)(*) Excluding PEL/CEL Effects		
Revenues	**6,311**	**6,352**
Incl. Net Interest Income	*3,548*	*3,569*
Incl. Commissions	*2,763*	*2,783*
Operating Expenses and Dep.	(4,609)	(4,657)
Gross Operating Income	**1,701**	**1,695**
Cost of Risk	(288)	(331)
Operating Income	**1,413**	**1,365**
Non Operating Items	(1)	1
Pre-Tax Income	**1,412**	**1,366**
Income Attributable to Wealth and Asset Management	(148)	(153)
Pre-Tax Income of French Retail Banking	**1,263**	**1,213**
Allocated Equity *(€bn, year to date)*	9.6	9.4

(*) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2018	2017
French Retail Banking (including 2/3 of Private Banking in France)		
Revenues	**6,035**	**6,071**
Operating Expenses and Dep.	(4,463)	(4,510)
Gross Operating Income	**1,571**	**1,562**
Cost of Risk	(286)	(331)
Operating Income	**1,285**	**1,231**
Non Operating Items	(1)	0
Pre-Tax Income	**1,284**	**1,231**
Allocated Equity *(€bn, year to date)*	9.6	9.4

In millions of euros	2018	2017
PEL/CEL effects(*)	20	19

(*) *Reminder on PEL/CEL provision: this provision, accounted in the French Retail Banking's revenues, takes into account the risk generated by Plans Épargne Logement (PEL) and Comptes Épargne Logement (CEL) during their whole lifetime.*

In millions of euros	2018	2017
BNL banca commerciale (Including 100% of Private Banking in Italy)(*)		
Revenues	**2,792**	**2,907**
Operating Expenses and Dep.	(1,797)	(1,801)
Gross Operating Income	**995**	**1,106**
Cost of Risk	(592)	(871)
Operating Income	**402**	**235**
Non Operating Items	(3)	1
Pre-Tax Income	**399**	**236**
Income Attributable to Wealth and Asset Management	(43)	(44)
Pre-Tax Income of BNL bc	**356**	**192**
Allocated Equity *(€bn, year to date)*	5.5	5.8

(*) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2018	2017
BNL banca commerciale (Including 2/3 of Private Banking in Italy)		
Revenues	**2,704**	**2,822**
Operating Expenses and Dep.	(1,752)	(1,761)
Gross Operating Income	**952**	**1,061**
Cost of Risk	(593)	(870)
Operating Income	**359**	**191**
Non Operating Items	(3)	1
Pre-Tax Income	**356**	**192**
Allocated Equity *(€bn, year to date)*	5.5	5.8

In millions of euros	2018	2017
Belgian Retail Banking (Including 100% of Private Banking in Belgium)(*)		
Revenues	**3,595**	**3,677**
Operating Expenses and Dep.	(2,521)	(2,554)
Gross Operating Income	**1,074**	**1,123**
Cost of Risk	(43)	(65)
Operating Income	**1,031**	**1,058**
Share of Earnings of Equity-Method Entities	10	22
Other Non Operating Items	8	6
Pre-Tax Income	**1,049**	**1,085**
Income Attributable to Wealth and Asset Management	(70)	(73)
Pre-Tax Income of Belgian Retail Banking	**980**	**1,013**
Allocated Equity *(€bn, year to date)*	5.7	5.3

(*) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2018	2017
Belgian Retail Banking (Including 2/3 of Private Banking in Belgium)		
Revenues	**3,422**	**3,499**
Operating Expenses and Dep.	(2,418)	(2,451)
Gross Operating Income	**1,004**	**1,049**
Cost of Risk	(42)	(64)
Operating Income	**961**	**985**
Share of Earnings of Equity-Method Entities	10	22
Other Non Operating Items	8	6
Pre-Tax Income	**980**	**1,013**
Allocated Equity *(€bn, year to date)*	5.7	5.3

In millions of euros	2018	2017
Other Domestic Markets Activities including Luxembourg (Including 100% of Private Banking in Luxembourg)(*)		
Revenues	**2,986**	**2,782**
Operating Expenses and Dep.	(1,779)	(1,608)
Gross Operating Income	**1,207**	**1,174**
Cost of Risk	(123)	(89)
Operating Income	**1,084**	**1,085**
Share of Earnings of Equity-Method Entities	(12)	38
Other Non Operating Items	(5)	4
Pre-Tax Income	**1,067**	**1,127**
Income Attributable to Wealth and Asset Management	(3)	(3)
Pre-Tax Income of Other Domestic Markets	**1,064**	**1,124**
Allocated Equity *(€bn, year to date)*	4.4	4.0

(*) Including 100% of Private Banking for the Revenues to Pre-tax income items.

In millions of euros	2018	2017
Other Domestic Markets Activities including Luxembourg (Including 2/3 of Private Banking in Luxembourg)		
Revenues	**2,972**	**2,772**
Operating Expenses and Dep.	(1,768)	(1,601)
Gross Operating Income	**1,204**	**1,171**
Cost of Risk	(123)	(89)
Operating Income	**1,081**	**1,082**
Share of Earnings of Equity-Method Entities	(12)	38
Other Non Operating Items	(5)	4
Pre-Tax Income	**1,064**	**1,124**
Allocated Equity *(€bn, year to date)*	4.4	4.0

In millions of euros	2018	2017
Europe-Mediterranean (Including 100% of Private Banking in Turkey)(*)		
Revenues	**2,358**	**2,337**
Operating Expenses and Dep.	(1,605)	(1,661)
Gross Operating Income	**753**	**675**
Cost of Risk	(308)	(259)
Operating Income	**445**	**416**
Share of Earnings of Equity-Method Entities	188	198
Other Non Operating Items	53	5
Pre-Tax Income	**686**	**619**
Income Attributable to Wealth and Asset Management	(3)	(2)
Pre-Tax Income of Europe-Mediterranean	**684**	**616**
Allocated Equity *(€bn, year to date)*	4.8	4.9

(*) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2018	2017
Europe-Mediterranean (Including 2/3 of Private Banking in Turkey)		
Revenues	**2,351**	**2,329**
Operating Expenses and Dep.	(1,600)	(1,656)
Gross Operating Income	**750**	**673**
Cost of Risk	(308)	(259)
Operating Income	**443**	**414**
Share of Earnings of Equity-Method Entities	188	198
Other Non Operating Items	53	5
Pre-Tax Income	**684**	**616**
Allocated Equity *(€bn, year to date)*	4.8	4.9

In millions of euros	2018	2017
BancWest (Including 100% of Private Banking in United States)(*)		
Revenues	**2,647**	**2,994**
Operating Expenses and Dep.	(1,870)	(2,035)
Gross Operating Income	**777**	**959**
Cost of Risk	(82)	(111)
Operating Income	**694**	**848**
Share of Earnings of Equity-Method Entities	0	0
Other Non Operating Items	152	3
Pre-Tax Income	**847**	**851**
Income Attributable to Wealth and Asset Management	(28)	(21)
Pre-Tax Income of BancWest	**819**	**830**
Allocated Equity *(€bn, year to date)*	5.7	6.4

(*) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2018	2017
BancWest (Including 2/3 of Private Banking in United States)		
Revenues	**2,585**	**2,939**
Operating Expenses and Dep.	(1,836)	(2,001)
Gross Operating Income	**749**	**938**
Cost of Risk	(82)	(111)
Operating Income	**667**	**827**
Non Operating Items	152	3
Pre-Tax Income	**819**	**830**
Allocated Equity *(€bn, year to date)*	5.7	6.4

Reconciliation with the aggregate cost of risk on outstanding (cost of risk/customer loans at the beginning of the period, in annualised bp(*))

	2018	2017
Domestic Markets		
Loan outstandings as of the beg. of the quarter *(€bn)*	401.3	362.3
Cost of risk *(€m)*	1,046	1,356
Cost of risk *(in annualised bp)*	26	37
FRB		
Loan outstandings as of the beg. of the quarter *(€bn)*	185.2	155.9
Cost of risk *(€m)*	288	331
Cost of risk *(in annualised bp)*	16	21
BNL bc		
Loan outstandings as of the beg. of the quarter *(€bn)*	78.6	78.3
Cost of risk *(€m)*	592	871
Cost of risk *(in annualised bp)*	75	111
BRB		
Loan outstandings as of the beg. of the quarter *(€bn)*	106.4	100.4
Cost of risk *(€m)*	43	65
Cost of risk *(in annualised bp)*	4	6

	2018	2017
BancWest		
Loan outstandings as of the beg. of the quarter *(€bn)*	59.2	64.9
Cost of risk *(€m)*	82	111
Cost of risk *(in annualised bp)*	14	17
Europe-Mediterranean		
Loan outstandings as of the beg. of the quarter *(€bn)*	37.7	38.2
Cost of risk *(€m)*	308	259
Cost of risk *(in annualised bp)*	82	68
Personal Finance		
Loan outstandings as of the beg. of the quarter *(€bn)*	84.3	68.7
Cost of risk *(€m)*	1,186	1,009
Cost of risk *(in annualised bp)*	141	147
CIB - Corporate Banking		
Loan outstandings as of the beg. of the quarter *(€bn)*	132.6	123.5
Cost of risk *(€m)*	31	70
Cost of risk *(in annualised bp)*	2	6
Group(**)		
Loan outstandings as of the beg. of the quarter *(€bn)*	788.4	738.6
Cost of risk *(€m)*	2,764	2,907
Cost of risk *(in annualised bp)*	35	39

(*) With Private Banking at 100%.
(**) Including cost of risk of market activities, International Financial Services and Corporate Centre.

METHODOLOGY – COMPARATIVE ANALYSIS AT CONSTANT SCOPE AND EXCHANGE RATES

The method used to determine the effect of changes in scope of consolidation depends on the type of transaction (acquisition, sale, etc.). The underlying purpose of the calculation is to facilitate period-on-period comparisons.

In case of acquired or created entity, the results of the new entity are eliminated from the constant scope results of current-year periods corresponding to the periods when the entity was not owned in the prior-year.

In case of divested entities, the entity's results are excluded symmetrically for the prior year for quarters when the entity was not owned.

In case of change of consolidation method, the policy is to use the lowest consolidation percentage over the two years (current and prior) for results of quarters adjusted on a like-for-like basis.

Comparative analysis at constant exchange rates are prepared by restating results for the prior-year quarter (reference quarter) at the current quarter exchange rate (analysed quarter). All of these calculations are performed by reference to the entity's reporting currency.

REMINDER

Net Banking Income: in this document, the terms «Net Banking Income» and «Revenues» are used interchangeably.

Operating expenses: sum of salary and employee benefit expenses, other operating expenses and depreciation, amortisation and impairment of property, plant and equipment. In the whole document, the terms operating expenses or costs can be used indifferently.

Operating divisions: they consist of 3 divisions:

- Domestic Markets including: French Retail Banking (FRB), BNL banca commerciale (BNL bc), Belgium Retail Banking (BRB), Other Domestic Markets activities including Arval, Leasing Solutions, Personal Investors and Luxembourg Retail Banking (LRB);
- International Financial Services (IFS) including: Europe-Mediterranean, BancWest, Personal Finance, Insurance, Wealth & Asset Management (WAM) that includes Asset Management, Wealth Management and Real Estate Services;
- Corporate and Institutional Banking (CIB) including: Corporate Banking, Global Markets, Securities Services.
- Capital allocation: see page 115.

NET EARNINGS PER SHARE

In millions	31 Dec. 18	31 Dec. 17	31 Dec. 16	31 Dec. 15	31 Dec. 14
Average number of Shares outstanding excluding Treasury Shares	**1,248**	**1,246**	**1,244**	**1,243**	**1,242**
Net income attributable to equity holders	7,526	7,759	7,702	6,694	6,071(*)
Remuneration net of tax of Undated Super Subordinated Notes	(367)	(286)	(357)	(282)	(240)
Exchange rate effect on reimbursed Undated Super Subordinated Notes	0	64	125	(27)	0
Net income attributable to equity holders, after remuneration and exchange rate effect on Undated Super subordinated Notes	**7,159**	**7,537**	**7,470**	**6,385**	**5,831**
NET EARNINGS PER SHARE (EPS) IN EUROS	**5.73**	**6.05**	**6.00**	**5.14**	**4.70****

(*) *Excluding the costs related to the comprehensive settlement with the US authorities.*
(**) *Excluding the costs related to the comprehensive settlement with the US authorities. Excluding this effect, net earnings per share came to EUR -0.07 and return on equity stood at -0.1%.*

RETURN ON EQUITY

In millions of euros	31 Dec. 18	31 Dec. 17
Shareholders' Equity Group Share	**7,526**	**7,759**
Remuneration net of tax of Undated Super Subordinated Notes	(367)	(286)
Exchange rate effect on reimbursed Undated Super Subordinated Notes	0	64
Net income restated used for the calculation of ROE/ROTE	**7,159**	**7,537**
Exceptional items (after tax)[(a)]	(510)	(390)
Net income Group share excluding exceptional items restated used for the calculation of ROE/ROTE excluding items	**7,669**	**7,927**
Average permanent shareholders' equity, not revaluated[(b)]	**87,257**	**84,695**
Return on Equity	**8.2%**	**8.9%**
Return on Equity excluding exceptional items	**8.8%**	**9.4%**
Average tangible permanent shareholders' equity, not revaluated[(c)]	**74,901**	**71,864**
Return on Tangible Equity	**9.6%**	**10.5%**
Return on Tangible Equity excluding exceptional items	**10.2%**	**11.0%**

(a) *See chapter 3 section 3.1 BNP Paribas Consolidated results.*
(b) *Average Permanent shareholders' equity: average of beginning of the year and end of the period (Permanent Shareholders' equity = Shareholders' equity attributable to shareholders - changes in assets and liabilities recognised directly in equity - Undated Super Subordinated Notes - remuneration net of tax payable to holders of Undated Super Subordinated Notes - proposed dividend distribution).*
(c) *Average Tangible permanent shareholders' equity: average of beginning of the year and end of the period (Tangible permanent shareholders' equity = permanent shareholders' equity - intangible assets - goodwill).*

MAIN EXCEPTIONNAL ITEMS

In millions of euros	2018	2017
Own credit adjustment and DVA *(Corporate Centre)*		**(175)**
Capital gain on the sale of 1.8% stake in Shinhan *(Corporate Centre)*		148
Capital gain on the sale of 4.78% stake in Euronext *(Corporate Centre)*		85
Total exceptional revenues		**58**
Restructuring costs of acquisitions* *(Corporate Centre)*	(129)	(101)
Transformation costs of Businesses *(Corporate Centre)*	(1,106)	(856)
Total exceptional operating expenses	**(1,235)**	**(957)**
Capital gain on the sale of a building *(Corporate Centre)*	101	
Capital gain on the sale of First Hawaiian Bank shares *(BancWest & Corporate Centre)***	286	
Capital gain on the sale of 4% stake in SBI Life *(Insurance)*		326
Full impairment of TEB's goodwill *(Corporate Centre)*		(172)
Total other non-operating items	**387**	**154**
TOTAL EXCEPTIONAL ITEMS *(BEFORE TAX)*	**(848)**	**(745)**
TOTAL EXCEPTIONAL ITEMS *(AFTER TAX)****	**(510)**	**(390)**

* *Restructuring costs, in particular of LaSer, DAB Bank, GE LLD, ABN Amro Luxembourg and Raiffeisen Bank Polska.*
** *BancWest (capital gain : EUR 151 million); Corporate Centre (exchange difference : EUR 135 million).*
*** *Group share.*

4 CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2018

The consolidated financial statements of the BNP Paribas Group are presented for the years ended 31 December 2018 and 31 December 2017. In accordance with article 20.1 of Annex I of European Commission Regulation (EC) 809/2004, the consolidated financial statements for the year ended 31 December 2016 are provided in the Registration document filed with the Autorité des marchés financiers on 6 March 2018 under number D.18-0104.

IFRS 9 and IFRS 15 are applicable retrospectively as from 1 January 2018 and introduce the option not to restate the comparative figures for prior periods. Since the Group has retained this option, the comparative financial statements for 2017 have not been restated for these changes in method.

Presentation changes have however been performed on these comparative figures in order to present separately the assets and liabilities related to insurance activities and to harmonise item headings with those established by IFRS 9. These changes are described in note 2.a. Moreover, the synthetic balance sheet includes a comparative reference as at 1 January 2018 which takes into account the impacts of the IFRS 9 and IFRS 15 adoption (note 2.b). Comparative figures presented in the notes to the financial statements related to balance sheet items (note 5) are based on that reference.

4.1 Profit and loss account for the year ended 31 December 2018

In millions of euros	Notes	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017[1] *IAS 39*
Interest income	3.a	35,723	33,566
Interest expense	3.a	(14,661)	(12,375)
Commission income	3.b	12,925	12,943
Commission expense	3.b	(3,718)	(3,513)
Net gain on financial instruments at fair value through profit or loss	3.c	5,808	5,346
Net gains on financial instruments at fair value through equity	3.d	315	1,711
Net gains on derecognised financial assets at amortised cost	3.d	(5)	55
Net income from insurance activities	3.e	4,064	3,813
Income from other activities	3.f	12,324	11,697
Expense on other activities	3.f	(10,259)	(10,082)
REVENUES		**42,516**	**43,161**
Salary and employee benefit expense	7.a	(16,617)	(16,496)
Other operating expenses	3.g	(12,290)	(11,729)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	5.n	(1,676)	(1,719)
GROSS OPERATING INCOME		**11,933**	**13,217**
Cost of risk	3.h	(2,764)	(2,907)
OPERATING INCOME		**9,169**	**10,310**
Share of earnings of equity-method entities	5.m	628	713
Net gain on non-current assets		358	488
Goodwill	5.o	53	(201)
PRE-TAX INCOME		**10,208**	**11,310**
Corporate income tax	3.i	(2,203)	(3,103)
NET INCOME		**8,005**	**8,207**
Net income attributable to minority interests		479	448
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS		**7,526**	**7,759**
Basic earnings per share	8.a	5.73	6.05
Diluted earnings per share	8.a	5.73	6.05

(1) Revised presentation based on the reclassifications and the re-labelling within Net Banking Income described in note 2a: re-labelling of "net gains on available-for sale financial assets and other assets not measured at fair value" to "net gains on financial assets at fair value through equity" and "net gains on derecognised financial assets at amortised cost", reclassification of items related to insurance activities within "Net income from insurance activities" and reclassification of interest on trading instruments within "Net gains on financial instruments at fair value through profit or loss".

4.2 Statement of net income and changes in assets and liabilities recognised directly in equity

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017[(1)] *IAS 39*
Net income for the period	**8,005**	**8,207**
Changes in assets and liabilities recognised directly in equity	**(1,315)**	**(3,019)**
Items that are or may be reclassified to profit or loss	**(1,404)**	**(3,171)**
Changes in exchange differences	(159)	(2,589)
Changes in fair value of financial assets at fair value through equity		
Changes in fair value recognised in equity	*(461)*	*679*
Changes in fair value reported in net income	*(110)*	*(837)*
Changes in fair value of investments of insurance activities		
Changes in fair value recognised in equity	*(530)*	*(243)*
Changes in fair value reported in net income	*(99)*	*(25)*
Changes in fair value of hedging instruments		
Changes in fair value recognised in equity	*(406)*	*(237)*
Changes in fair value reported in net income	*(7)*	*4*
Income tax	505	426
Changes in equity-method investments	(137)	(349)
Items that will not be reclassified to profit or loss	**89**	**152**
Changes in fair value of equity instruments designated as at fair value through equity	(148)	
Debt remeasurement effect arising from BNP Paribas Group issuer risk	195	
Remeasurement gains (losses) related to post-employment benefit plans	137	177
Income tax	(96)	(25)
Changes in equity-method investments	1	
TOTAL	**6,690**	**5,188**
Attributable to equity shareholders	6,215	4,956
Attributable to minority interests	475	232

(1) Revised presentation, including the changes described in note 2a: reallocation of "changes in fair value of available-for-sale financial assets, including those reclassified as loans and receivables" related to insurance activities into "changes in fair value of investments of insurance activities" and re-labelling of "changes in fair value of available-for-sale financial assets, including those reclassified as loans and receivables" not related to insurance activities into "changes in fair value of financial instruments at fair value through equity".

4.3 Balance sheet at 31 December 2018

In millions of euros	Notes	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018(1) *IFRS 9 & IFRS 15*	31 December 2017(2) *IAS 39*
ASSETS				
Cash and balances at central banks		185,119	178,433	178,446
Financial instruments at fair value through profit or loss				
Securities	5.a	121,954	130,326	122,964
Loans and repurchase agreements	5.a	183,716	144,948	143,988
Derivative financial instruments	5.a	232,895	229,896	229,897
Derivatives used for hedging purposes	5.b	9,810	13,721	13,723
Financial assets at fair value through equity				
Debt securities	5.c	53,838	53,942	110,881
Equity securities	5.c	2,151	2,330	6,928
Financial assets at amortised cost				
Loans and advances to credit institutions	5.e	19,556	20,356	20,405
Loans and advances to customers	5.e	765,871	731,176	735,013
Debt securities	5.e	75,073	69,426	15,378
Remeasurement adjustment on interest-rate risk hedged portfolios		2,787	3,064	3,064
Financial investments of insurance activities	5.i	232,308	227,712	227,712
Current and deferred tax assets	5.k	7,220	7,368	6,568
Accrued income and other assets	5.l	103,346	92,961	92,875
Equity-method investments	5.m	5,772	6,221	6,426
Property, plant and equipment and investment property	5.n	26,652	25,000	25,000
Intangible assets	5.n	3,783	3,327	3,327
Goodwill	5.o	8,487	9,571	9,571
Non-current assets held for sale	8.c	498		
TOTAL ASSETS		**2,040,836**	**1,949,778**	**1,952,166**
LIABILITIES				
Deposits from central banks		1,354	1,471	1,471
Financial instruments at fair value through profit or loss				
Securities	5.a	75,189	67,087	67,087
Deposits and repurchase agreements	5.a	204,039	174,645	174,645
Issued debt securities	5.a	54,908	50,490	50,490
Derivative financial instruments	5.a	225,804	227,644	227,644
Derivatives used for hedging purposes	5.b	11,677	15,682	15,682
Financial liabilities at amortised cost				
Deposits from credit institutions	5.g	78,915	76,503	76,503
Deposits from customers	5.g	796,548	760,941	760,941
Debt securities	5.h	151,451	148,156	148,156
Subordinated debt	5.h	17,627	15,951	15,951
Remeasurement adjustment on interest-rate risk hedged portfolios		2,470	2,372	2,372
Current and deferred tax liabilities	5.k	2,255	2,234	2,466
Accrued expenses and other liabilities	5.l	89,562	80,472	79,994
Technical reserves and other insurance liabilities	5.j	213,691	210,494	210,494
Provisions for contingencies and charges	5.p	9,620	11,084	11,061
TOTAL LIABILITIES		**1,935,110**	**1,845,226**	**1,844,957**
EQUITY				
Share capital, additional paid-in capital and retained earnings		*93,431*	*89,880*	*91,026*
Net income for the period attributable to shareholders		*7,526*	*7,759*	*7,759*
Total capital, retained earnings and net income for the period attributable to shareholders		**100,957**	**97,639**	**98,785**
Changes in assets and liabilities recognised directly in equity		*510*	*1,787*	*3,198*
Shareholders' equity		**101,467**	**99,426**	**101,983**
Minority interests	8.d	**4,259**	**5,126**	**5,226**
TOTAL EQUITY		**105,726**	**104,552**	**107,209**
TOTAL LIABILITIES AND EQUITY		**2,040,836**	**1,949,778**	**1,952,166**

(1) As of 1 January 2018 after implementation of IFRS 9 and IFRS 15, as described in note 2.b.

(2) Revised presentation, based on reclassifications and adjustments detailed in note 2.a, mainly related to the re-labelling of financial instruments item headings, the reclassification of financial instruments of insurance activities into "Financial investments of insurance activities", and the impact of securities recognition at settlement date.

4.4 Cash flow statement for the year ended 31 December 2018

In millions of euros	Notes	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Pre-tax income		**10,208**	**11,310**
Non-monetary items included in pre-tax net income and other adjustments		**9,713**	**19,811**
Net depreciation/amortisation expense on property, plant and equipment and intangible assets		5,144	4,550
Impairment of goodwill and other non-current assets		(133)	190
Net addition to provisions		10,210	10,021
Share of earnings of equity-method entities		(628)	(713)
Net (income) from investing activities		(660)	(453)
Net expense (income) from financing activities		(501)	355
Other movements		(3,719)	5,861
Net decrease in cash related to assets and liabilities generated by operating activities		**(20,439)**	**(2,154)**
Net decrease in cash related to transactions with customers and credit institutions		(1,104)	(10,253)
Net increase (decrease) in cash related to transactions involving other financial assets and liabilities		(13,276)	16,079
Net decrease in cash related to transactions involving non-financial assets and liabilities		(4,823)	(6,107)
Taxes paid		(1,236)	(1,873)
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS GENERATED BY OPERATING ACTIVITIES		**(518)**	**28,967**
Net increase in cash related to acquisitions and disposals of consolidated entities		3,152	527
Net decrease related to property, plant and equipment and intangible assets		(1,827)	(1,347)
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS RELATED TO INVESTING ACTIVITIES		**1,325**	**(820)**
Decrease in cash and equivalents related to transactions with shareholders		(4,039)	(3,457)
Increase in cash and equivalents generated by other financing activities		9,865	308
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS RELATED TO FINANCING ACTIVITIES		**5,826**	**(3,149)**
EFFECT OF MOVEMENT IN EXCHANGE RATES ON CASH AND EQUIVALENTS		**1,529**	**(5,900)**
NON-MONETARY IMPACTS FROM NON-CURRENT ASSETS HELD FOR SALE		**(700)**	**-**
NET INCREASE IN CASH AND EQUIVALENTS		**7,462**	**19,098**
Balance of cash and equivalent accounts at the start of the period		**175,061**	**155,963**
Cash and amounts due from central banks		178,446	160,400
Due to central banks		(1,471)	(233)
On demand deposits with credit institutions		8,063	6,513
On demand loans from credit institutions	5.g	(9,906)	(10,775)
Deduction of receivables and accrued interest on cash and equivalents		(71)	58
Balance of cash and equivalent accounts at the end of the period		**182,523**	**175,061**
Cash and amounts due from central banks		185,134	178,446
Due to central banks		(1,354)	(1,471)
On demand deposits with credit institutions		8,813	8,063
On demand loans from credit institutions	5.g	(10,571)	(9,906)
Deduction of receivables and accrued interest on cash and equivalents		501	(71)
NET INCREASE IN CASH AND EQUIVALENTS		**7,462**	**19,098**

4.5 Statement of changes in shareholders' equity

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	
In millions of euros	Share capital and additional paid-in-capital	Undated Super Subordinated Notes	Non-distributed reserves	Total	Financial assets designated as at fair value through equity	Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss
Capital and retained earnings at 31 December 2016	**26,948**	**8,430**	**59,118**	**94,496**		
Appropriation of net income for 2016			**(3,369)**	**(3,369)**		
Increases in capital and issues	88	636	(2)	722		
Reduction or redemption of capital		(927)	64	(863)		
Movements in own equity instruments	15	33	(10)	38		
Share-based payment plans			3	3		
Remuneration on preferred shares and undated super subordinated notes			(311)	(311)		
Impact of internal transactions on minority shareholders *(note 8.d)*			1	1		
Movements in consolidation scope impacting minority shareholders *(note 8.d)*				-		
Acquisitions of additional interests or partial sales of interests *(note 8.d)*			253	253		
Change in commitments to repurchase minority shareholders' interests				-		
Other movements			(34)	(34)		
Changes in assets and liabilities recognised directly in equity			158	158		
Net income for 2017			**7,759**	**7,759**		
Interim dividend payments				-		
Capital and retained earnings at 31 December 2017	**27,051**	**8,172**	**63,630**	**98,853**		
Revised presentation *(note 2.a)*			(68)	(68)		
Capital and retained earnings at 31 December 2017 new presentation	**27,051**	**8,172**	**63,562**	**98,785**		
IFRS 9 implementation impacts *(note 2.b)*			(1,122)	(1,122)	561	(323)
IFRS 15 implementation impacts *(note 2.b)*			(24)	(24)		
Capital and retained earnings at 1 January 2018	**27,051**	**8,172**	**62,416**	**97,639**	**561**	**(323)**
Appropriation of net income for 2017			**(3,772)**	**(3,772)**		
Increases in capital and issues	49	660	(2)	707		
Reduction or redemption of capital		(600)		(600)		
Movements in own equity instruments	(64)	(2)	(142)	(208)		
Share-based payment plans			2	2		
Remuneration on preferred shares and undated super subordinated notes			(356)	(356)		
Impact of internal transactions on minority shareholders *(note 8.d)*			6	6		
Movements in consolidation scope impacting minority shareholders *(note 8.d)*			(37)	(37)		
Acquisitions of additional interests or partial sales of interests *(note 8.d)*			71	71		
Change in commitments to repurchase minority shareholders' interests			(6)	(6)		
Other movements			(8)	(8)		
Realised gains or losses reclassified to retained earnings			(7)	(7)		7
Changes in assets and liabilities recognised directly in equity				-	(158)	134
Net income for 2018			**7,526**	**7,526**		
Interim dividend payments				-		
Capital and retained earnings at 31 December 2018	**27,036**	**8,230**	**65,691**	**100,957**	**403**	**(182)**

between 1 January 2017 and 31 December 2018

Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss							
Remeasurement gains (losses) related to post-employment benefits plans	Total	Exchange differences	Financial assets at fair value through equity	Financial investments of insurance activities	Derivatives used for hedging purposes	Total	Total shareholders' equity	Minority interests (note 8.d)	Total equity
	-	645	4,372		1,152	6,169	100,665	4,555	105,220
	-					-	(3,369)	(131)	(3,500)
	-					-	722		722
	-					-	(863)		(863)
	-					-	38		38
	-					-	3	2	5
	-					-	(311)	(2)	(313)
	-					-	1	(1)	-
	-					-	-	493	493
	-	(89)	10		1	(78)	175	104	279
	-					-	-	(8)	(8)
	-					-	(34)	23	(11)
	-	(2,748)	(198)		(15)	(2,961)	(2,803)	(216)	(3,019)
	-					-	7,759	448	8,207
	-					-	-	(41)	(41)
	-	(2,192)	4,184		1,138	3,130	101,983	5,226	107,209
68	68		(1,947)	1,947		-	-		-
68	68	(2,192)	2,237	1,947	1,138	3,130	101,983	5,226	107,209
	238		(1,648)		(1)	(1,649)	(2,533)	(100)	(2,633)
	-					-	(24)		(24)
68	306	(2,192)	589	1,947	1,137	1,481	99,426	5,126	104,552
	-					-	(3,772)	(160)	(3,932)
	-					-	707	4	711
	-					-	(600)		(600)
	-					-	(208)		(208)
	-					-	2		2
	-					-	(356)	(2)	(358)
	-					-	6	(6)	-
37	37					-	-	(1,299)	(1,299)
9	9	(29)	10			(19)	61	307	368
	-					-	(6)	(165)	(171)
	-					-	(8)	11	3
	7					-	-		-
96	72	(252)	(398)	(418)	(315)	(1,383)	(1,311)	(4)	(1,315)
	-					-	7,526	479	8,005
	-					-	-	(32)	(32)
210	431	(2,473)	201	1,529	822	79	101,467	4,259	105,726

4.6 Notes to the financial statements prepared in accordance with IFRS as adopted by the European Union

Note 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLIED BY THE GROUP

1.a ACCOUNTING STANDARDS

1.a.1 Applicable accounting standards

The consolidated financial statements of the BNP Paribas Group have been prepared in accordance with international accounting standards (International Financial Reporting Standards – IFRS), as adopted for use in the European Union(1). Accordingly, certain provisions of IAS 39 on hedge accounting have been excluded, and certain recent texts have not yet undergone the approval process.

Information on the nature and extent of risks relating to financial instruments as required by IFRS 7 "Financial Instruments: Disclosures" and to insurance contracts as required by IFRS 4 "Insurance Contracts", along with information on regulatory capital required by IAS 1 "Presentation of Financial Statements" are presented in chapter 5 of the Registration document. This information, which is an integral part of the notes to the BNP Paribas Group's consolidated financial statements, is covered by the opinion of the Statutory Auditors concerning the consolidated financial statements, and is identified in the Annual Report by the word "Audited".

IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers"

Since 1 January 2018, the Group applies:

- IFRS 9 "Financial Instruments" and amendments to IFRS 9: "Prepayment Features with Negative Compensation" adopted by the European Union, on 22 November 2016 and on 22 March 2018 respectively.

  IFRS 9 replaces IAS 39 "Financial Instruments: Recognition and Measurement", related to the classification and measurement of financial instruments. It sets out the new principles for the classification and measurement of financial instruments (Phase 1), for impairment for credit risk on debt instruments measured at amortised cost or at fair value through shareholders' equity, loan commitments given, financial guarantee contracts, lease and trade receivables and contract assets (Phase 2), as well as for general hedge accounting; i.e. micro hedging (Phase 3).

  IFRS 9 has modified the provisions relating to the own credit risk of financial liabilities designated as at fair value through profit or loss (fair value option).

  As regards hedge accounting (micro-hedging), the Group has maintained the hedge accounting principles under IAS 39. Besides, IFRS 9 does not explicitly address the fair value hedge of the interest rate risk on a portfolio of financial assets or liabilities. The provisions of IAS 39 for these portfolio hedges, as adopted by the European Union, continue to apply.
- the amendment to IFRS 4 "Insurance Contracts": "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts" adopted by the European Union on 3 November 2017.

  This amendment provides the option for entities that predominantly undertake insurance activities to defer the effective date of IFRS 9 until 1 January 2021(2). The effect of such a deferral is that those entities may continue to report their financial statements under the existing standard IAS 39.

  This temporary exemption from IFRS 9, which was limited to groups that predominantly undertook insurance activities according to the IASB amendment, has been extended to the insurance sector of financial conglomerates as defined by the Directive 2002/87/EC as adopted by the European Union. This exemption is subject to conditions, notably the absence of internal transfer of financial instruments, other than financial instruments that are measured at fair value through profit or loss, between insurance entities and other entities of the financial conglomerate.

  BNP Paribas Group applies this amendment to all its insurance entities, including funds related to this activity, which will apply IAS 39 "Financial instruments: Recognition and Measurement" until 31 December 2020.
- IFRS 15 "Revenue from Contracts with Customers" adopted by the European Union on 22 September 2016.

IFRS 9 and IFRS 15 introduce the option not to restate the comparative figures for prior periods. Since the Group has retained this option, the comparative financial statements for 2017 have not been restated for these changes in method.

The introduction of other standards and amendments which are mandatory as of 1 January 2018 did not have an effect on the 2018 financial statements.

(1) The full set of standards adopted for use in the European Union can be found on the website of the European Commission at: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting_en

(2) At its 14 November 2018 Board meeting, the IASB decided to propose an amendment to IFRS 4 that would enable eligible insurance entities to defer the first application of IFRS 9 until 1 January 2022.

The Group did not anticipate the application of the new standards, amendments, and interpretations adopted by the European Union, when the application in 2018 was optional, except for the amendment to IFRS 9 "Prepayment Features with Negative Compensation".

1.a.2 New major accounting standards, published but not yet applicable

IFRS 16 Leases

IFRS 16 "Leases", issued in January 2016, will supersede IAS 17 "Leases" and the interpretations relating to the accounting of such contracts. The new definition of leases relies on both the identification of an asset and the control of the right to use the identified asset by the lessee.

From the lessor's point of view, the expected impact should be limited, as the requirements of IFRS 16 remain mostly unchanged from the current IAS 17.

For the lessee, IFRS 16 will require recognition in the balance sheet of all leases, in the form of a right-of-use on the leased asset presented under fixed assets, along with the recognition of a financial liability for the rent and other payments to be made over the leasing period. The right-of-use assets will be amortised on a straight-line basis and the financial liabilities will be amortised on an actuarial basis over the lease period. The main change induced by this new standard is related to contracts which, under IAS 17, met the definition of operating leases, and as such, did not require recognition of the leased assets in the balance sheet.

Adopted by the European Union on 31 October 2017, IFRS 16 will become mandatory for annual periods beginning on or after 1 January 2019.

For the first application of IFRS 16, the Group decided to apply the simplified retrospective transition requirements.

The discount rate applicable for the measurement of both the right-of-use and the lease liability is the incremental borrowing rate at the date of the initial application of IFRS 16, based on the residual maturity of the contract at that date.

Most of the lease contracts identified are property leases, and to a lesser extent computer and banking equipment leases and vehicles leases. Property leases encompass either commercial agencies from retail banking, or office buildings serving as head offices or operating offices in France or abroad.

The key hypotheses used by the Group for the measurement of rights-of-use and lease liabilities will be the following:

- the lease term will correspond to the non-cancellable period, together with periods covered by an extension option if the Group is reasonably certain to exercise this option. In France, the standard commercial lease contract is the so-called "three, six, nine" contract for which the maximum period of use is of nine years, with a first non-cancellable period of three years followed by two optional extension periods of three years each;
- the discount rates used for measuring the right-of-use and the lease liability will be assessed for each contract, based on the incremental borrowing rate at the date of signature.

The Group will use both exemptions to the application of IFRS 16 requirements permitted by the standard, i.e. relating to leases whose term is shorter than or equal to 12 months, and to leases whose individual underlying asset value is below or equal to EUR 5,000 or USD 5,000 before tax.

The Group made the choice not to apply the exemption to the accounting of initial deferred tax assets (DTA) and deferred tax liabilities (DTL) permitted by paragraphs 15 and 24 of IAS 12 "Income Taxes". Consequently, distinct deferred tax assets and deferred tax liabilities will be accounted for with regards to the balance-sheet amounts of rights-of-use and lease liabilities of the lessee.

The main impacts expected from the application of IFRS 16 will be, on the balance-sheet:

- an increase of the fixed assets and the recognition of lease liabilities;
- an increase of deferred tax assets and deferred tax liabilities.

The main impact expected in the profit and loss account after the first application of the standard will be to replace rental expenses previously accounted for on a linear basis in operating expenses by additional interest expenses in Net Banking Income (NBI) in relation with lease liabilities, and to recognise additional amortizing expenses in relation with rights-of-use.

Following analysis performed on the standard, its principles and its interpretation, lease contracts have been inventoried and data collected in order to identify the impacts of the application of the new accounting model.

At this stage of the project, the estimation of the impacts of the first application of IFRS 16 is being finalized. The expected impact on the Group financial statements is not significant.

IFRS 17 Insurance Contracts

IFRS 17 "Insurance Contracts", issued in May 2017, will replace IFRS 4 "Insurance Contracts" and will become mandatory for annual periods beginning on or after 1 January 2021[(1)], after its adoption by the European Union for application in Europe.

The analysis of the standard and the identification of its effects continued in 2018.

1.b CONSOLIDATION

1.b.1 Scope of consolidation

The consolidated financial statements of BNP Paribas include entities that are controlled by the Group, jointly controlled, and under significant influence, with the exception of those entities whose consolidation is regarded as immaterial to the Group. Companies that hold shares in consolidated companies are also consolidated.

Subsidiaries are consolidated from the date on which the Group obtains effective control. Entities under temporary control are included in the consolidated financial statements until the date of disposal.

(1) At its 14 November 2018 Board meeting, the IASB decided to propose an amendment to IFRS 17 that would defer the mandatory initial application of IFRS 17 until 1 January 2022.

1.b.2 Consolidation methods

Exclusive control

Controlled enterprises are fully consolidated. The Group controls a subsidiary when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

For entities governed by voting rights, the Group generally controls the entity if it holds, directly or indirectly, the majority of the voting rights (and if there are no contractual provisions that alter the power of these voting rights) or if the power to direct the relevant activities of the entity is conferred on it by contractual agreements.

Structured entities are defined as entities that are not governed by voting rights, such as when those voting rights relate to administrative tasks only, whereas the relevant activities are directed by means of contractual arrangements. They often have the following features or attributes: restricted activities, a narrow and well-defined objective and insufficient equity to permit them to finance their activities without subordinated financial support.

For these entities, the analysis of control shall consider the purpose and design of the entity, the risks to which the entity is designed to be exposed and to what extent the Group absorbs the related variability. The assessment of control shall consider all facts and circumstances able to determine the Group's practical ability to make decisions that could significantly affect its returns, even if such decisions are contingent on uncertain future events or circumstances.

In assessing whether it has power, the Group considers only substantive rights which it holds or which are held by third parties. For a right to be substantive, the holder must have the practical ability to exercise that right when decisions about the relevant activities of the entity need to be made.

Control shall be reassessed if facts and circumstances indicate that there are changes to one or more of the elements of control.

Where the Group contractually holds the decision-making power, for instance where the Group acts as fund manager, it shall determine whether it is acting as agent or principal. Indeed, when associated with a certain level of exposure to the variability of returns, this decision-making power may indicate that the Group is acting on its own account and that it thus has control over those entities.

Minority interests are presented separately in the consolidated profit and loss account and balance sheet within consolidated equity. The calculation of minority interests takes into account the outstanding cumulative preferred shares classified as equity instruments issued by subsidiaries, when such shares are held outside the Group.

As regards fully consolidated funds, units held by third-party investors are recognised as debts at fair value through profit or loss, inasmuch as they are redeemable at fair value at the subscriber's initiative.

For transactions resulting in a loss of control, any equity interest retained by the Group is remeasured at its fair value through profit or loss.

Joint control

Where the Group carries out an activity with one or more partners, sharing control by virtue of a contractual agreement which requires unanimous consent on relevant activities (those that significantly affect the entity's returns), the Group exercises joint control over the activity. Where the jointly controlled activity is structured through a separate vehicle in which the partners have rights to the net assets, this joint venture is accounted for using the equity method. Where the jointly controlled activity is not structured through a separate vehicle or where the partners have rights to the assets and obligations for the liabilities of the jointly controlled activity, the Group accounts for its share of the assets, liabilities, revenues and expenses in accordance with the applicable IFRSs.

Significant influence

Companies over which the Group exercises significant influence or associates are accounted for by the equity method. Significant influence is the power to participate in the financial and operating policy decisions of a company without exercising control. Significant influence is presumed to exist when the Group holds, directly or indirectly, 20% or more of the voting rights of a company. Interests of less than 20% can be included in the consolidation scope if the Group effectively exercises significant influence. This is the case for example for entities developed in partnership with other associates, where the BNP Paribas Group participates in strategic decisions of the enterprise through representation on the Board of directors or equivalent governing body, or exercises influence over the enterprise's operational management by supplying management systems or senior managers, or provides technical assistance to support the enterprise's development.

Changes in the net assets of associates (companies accounted for under the equity method) are recognised on the assets side of the balance sheet under "Investments in equity-method entities" and in the relevant component of shareholders' equity. Goodwill recorded on associates is also included in "Investments in equity-method entities".

Whenever there is an indication of impairment, the carrying amount of the investment consolidated under the equity method (including goodwill) is subjected to an impairment test, by comparing its recoverable value (the higher of value-in-use and market value less costs to sell) to its carrying amount. Where appropriate, impairment is recognised under "Share of earnings of equity-method entities" in the consolidated income statement and can be reversed at a later date.

If the Group's share of losses of an equity-method entity equals or exceeds the carrying amount of its investment in this entity, the Group discontinues including its share of further losses. The investment is reported at nil value. Additional losses of the equity-method entity are provided for only to the extent that the Group has contracted a legal or constructive obligation, or has made payments on behalf of this entity.

Where the Group holds an interest in an associate, directly or indirectly through an entity that is a venture capital organisation, a mutual fund, an open-ended investment company or similar entity such as an investment-related insurance fund, it may elect to measure that interest at fair value through profit or loss.

Realised gains and losses on investments in consolidated undertakings are recognised in the profit and loss account under "Net gain on non-current assets".

The consolidated financial statements are prepared using uniform accounting policies for similar transactions and other events occurring in similar circumstances.

1.b.3 Consolidation rules

Elimination of intragroup balances and transactions

Intragroup balances arising from transactions between consolidated enterprises, and the transactions themselves (including income, expenses and dividends), are eliminated. Profits and losses arising from intragroup sales of assets are eliminated, except where there is an indication that the asset sold is impaired. Unrealised gains and losses included in the value of financial instruments at fair value through equity and available-for-sale assets are maintained in the consolidated financial statements.

Translation of accounts expressed in foreign currencies

The consolidated financial statements of BNP Paribas are prepared in euros.

The financial statements of enterprises whose functional currency is not the euro are translated using the closing rate method. Under this method, all assets and liabilities, both monetary and non-monetary, are translated using the spot exchange rate at the balance sheet date. Income and expense items are translated at the average rate for the period.

The same method is applied to the financial statements of enterprises located in hyperinflationary economies, after adjusting for the effects of inflation by applying a general price index.

Differences arising from the translation of balance sheet items and profit and loss items are recorded in shareholders' equity under "Exchange differences", and in "Minority interests" for the portion attributable to outside investors. Under the optional treatment permitted by IFRS 1, the Group has reset to zero all exchange differences, by booking all cumulative exchange differences attributable to shareholders and to minority interests in the opening balance sheet at 1 January 2004 to retained earnings.

On liquidation or disposal of some or all of an interest held in a foreign enterprise located outside the euro zone, leading to a change in the nature of the investment (loss of control, loss of significant influence or loss of joint control without keeping a significant influence), the cumulative exchange difference at the date of liquidation or sale, determined according to the step method, is recognised in the profit and loss account.

Should the percentage of interest change without leading to a modification in the nature of the investment, the exchange difference is reallocated between the portion attributable to shareholders and that attributable to minority interests if the entity is fully consolidated; if the entity is consolidated under the equity method, it is recorded in profit or loss for the portion related to the interest sold.

1.b.4 Business combination and measurement of goodwill

Business combinations

Business combinations are accounted for using the purchase method.

Under this method, the acquiree's identifiable assets and liabilities assumed are measured at fair value at the acquisition date except for non-current assets classified as assets held for sale which are accounted for at fair value less costs to sell.

The acquiree's contingent liabilities are not recognised in the consolidated balance sheet unless they represent a present obligation on the acquisition date and their fair value can be measured reliably.

The cost of a business combination is the fair value, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued to obtain control of the acquiree. Costs directly attributable to the business combination are treated as a separate transaction and recognised through profit or loss.

Any contingent consideration is included in the cost, as soon as control is obtained, at fair value on the date when control was acquired. Subsequent changes in the value of any contingent consideration recognised as a financial liability are recognised through profit or loss.

The Group may recognise any adjustments to the provisional accounting within 12 months of the acquisition date.

Goodwill represents the difference between the cost of the combination and the acquirer's interest in the net fair value of the identifiable assets and liabilities of the acquiree at the acquisition date. Positive goodwill is recognised in the acquirer's balance sheet, while negative goodwill is recognised immediately in profit or loss, on the acquisition date. Minority interests are measured at their share of the fair value of the acquiree's identifiable assets and liabilities. However, for each business combination, the Group can elect to measure minority interests at fair value, in which case a proportion of goodwill is allocated to them. To date, the Group has never used this latter option.

Goodwill is recognised in the functional currency of the acquiree and translated at the closing exchange rate.

On the acquisition date, any previously held equity interest in the acquiree is remeasured at its fair value through profit or loss. In the case of a step acquisition, the goodwill is therefore determined by reference to the acquisition-date fair value.

Since the revised IFRS 3 has been applied prospectively, business combinations completed prior to 1 January 2010 were not restated for the effects of changes to IFRS 3.

As permitted under IFRS 1, business combinations that took place before 1 January 2004 and were recorded in accordance with the previously applicable accounting standards (French GAAP), had not been restated in accordance with the principles of IFRS 3.

Measurement of goodwill

The BNP Paribas Group tests goodwill for impairment on a regular basis.

Cash-generating units

The BNP Paribas Group has split all its activities into cash-generating units[1] representing major business lines. This split is consistent with the Group's organisational structure and management methods, and reflects the independence of each unit in terms of results and management approach. It is reviewed on a regular basis in order to take account of events likely to affect the composition of cash-generating units, such as acquisitions, disposals and major reorganisations.

Testing cash-generating units for impairment

Goodwill allocated to cash-generating units is tested for impairment annually and whenever there is an indication that a unit may be impaired, by comparing the carrying amount of the unit with its recoverable amount. If the recoverable amount is less than the carrying amount, an irreversible impairment loss is recognised, and the goodwill is written down by the excess of the carrying amount of the unit over its recoverable amount.

Recoverable amount of a cash-generating unit

The recoverable amount of a cash-generating unit is the higher of the fair value of the unit less costs to sell, and its value in use.

Fair value is the price that would be obtained from selling the unit at the market conditions prevailing at the date of measurement, as determined mainly by reference to actual prices of recent transactions involving similar entities or on the basis of stock market multiples for comparable companies.

Value in use is based on an estimate of the future cash flows to be generated by the cash-generating unit, derived from the annual forecasts prepared by the unit's management and approved by Group Executive Management, and from analyses of changes in the relative positioning of the unit's activities on their market. These cash flows are discounted at a rate that reflects the return that investors would require from an investment in the business sector and region involved.

1.c TRANSLATION OF FOREIGN CURRENCY TRANSACTIONS

The methods used to account for assets and liabilities relating to foreign currency transactions entered into by the Group, and to measure the foreign exchange risk arising on such transactions, depend on whether the asset or liability in question is classified as a monetary or a non-monetary item.

Monetary assets and liabilities[2] expressed in foreign currencies

Monetary assets and liabilities expressed in foreign currencies are translated into the functional currency of the relevant Group entity at the closing rate. Foreign exchange differences are recognised in the profit and loss account, except for those arising from financial instruments designated as a cash flow hedge or a net foreign investment hedge, which are recognised in equity.

Non-monetary assets and liabilities expressed in foreign currencies

Non-monetary assets may be measured either at historical cost or at fair value. Non-monetary assets expressed in foreign currencies are translated using the exchange rate at the date of the transaction (date of initial recognition of the non-monetary asset or the non-monetary liability that might arise for example from the payment or receipt of advance consideration) if they are measured at historical cost, and at the closing rate if they are measured at fair value.

Foreign exchange differences relating to non-monetary assets denominated in foreign currencies and recognised at fair value (equity instruments) are recognised in profit or loss when the asset is classified in "Financial assets at fair value through profit or loss" and in equity when the asset is classified under "Financial assets at fair value through equity".

1.d NET INTEREST INCOME, COMMISSIONS AND INCOME FROM OTHER ACTIVITIES

1.d.1 Net interest income

Income and expenses relating to debt instruments measured at amortised cost and at fair value through shareholders' equity are recognised in the income statement using the effective interest rate method.

The effective interest rate is the rate that ensures the discounted value of estimated future cash flows through the expected life of the financial instrument or, when appropriate, a shorter period, is equal to the carrying amount of the asset or liability in the balance sheet. The effective interest rate measurement takes into account all fees received or paid that are an integral part of the effective interest rate of the contract, transaction costs, and premiums and discounts.

Commissions considered as an additional component of interest are included in the effective interest rate, and are recognised in the profit and loss account in "Net interest income". This category includes notably commissions on financing commitments when it is considered that the setting up of a loan is more likely than unlikely. Commissions received in respect of financing commitments are deferred until they are drawn and then included in the effective interest rate calculation and amortised over the life of the loan. Syndication commissions are also included in this category for the portion of the commission equivalent to the remuneration of other syndication participants.

(1) As defined by IAS 36.

(2) Monetary assets and liabilities are assets and liabilities to be received or paid in fixed or determinable amounts of cash.

1.d.2 Commissions and income from other activities

Commissions received with regards to banking and similar services provided (except for those that are integral part of the effective interest rate), revenues from property development and revenues from services provided in connection with lease contracts fall within the scope of IFRS 15 "Revenue from Contracts with Customers".

This standard defines a single model for recognising revenue based on five-step principles. These five steps enable to identify the distinct performance obligations included in the contracts and allocate the transaction price among them. The income related to those performance obligations is recognised as revenue when the latter are satisfied, namely when the control of the promised goods or services has been transferred.

The price of a service may contain a variable component. Variable amounts may be recognised in the income statement only if it is highly probable that the amounts recorded will not result in a significant downward adjustment.

Commission

The Group records commission income and expenses in profit or loss:

- either over time as the service is rendered when the client receives continuous service. These include, for example, certain commissions on transactions with customers when services are rendered on a continuous basis, commissions on financing commitments that are not included in the interest margin, because the probability that they give rise to the drawing up of a loan is low, commissions on financial guarantees, clearing commissions on financial instruments, commissions related to trust and similar activities, securities custody fees...

  Commissions received under financial guarantee commitments are deemed to represent the initial fair value of the commitment. The resulting liability is subsequently amortised over the term of the commitment, in Commission income;
- or at a point in time when the service is rendered, in other cases. These include, for example, distribution fees received, loan syndication fees remunerating the arrangement service, advisory fees...

Income from other activities

Income from property development as well as income from services provided in connection with lease contracts is recorded under "income from other activities" in the income statement.

As regards property development income, the Group records it in profit or loss:

- over time, when the performance obligation creates or enhances an asset on which the customer obtains control as it is created or enhanced (e.g. work in progress controlled by the client on the land in which the asset is located...), or where the service performed does not create an asset that the entity could otherwise use and gives it enforceable right to payment for performance completed to date. This is the case for contracts such as VEFA (sale in the future state of completion) in France;
- at completion in other cases.

Regarding income from services provided in connection with lease contracts, the Group records them in profit or loss as the service is rendered, i.e. in proportion to the costs incurred for maintenance contracts.

1.e FINANCIAL ASSETS AND LIABILITIES

Financial assets, except those relating to insurance activities (see note 1.f) are classified at amortised cost, at fair value through shareholders' equity or at fair value through profit or loss depending on the business model and the contractual features of the instruments at initial recognition.

Financial liabilities are classified at amortised cost or at fair value through profit or loss at initial recognition.

Financial assets and liabilities are recognised in the balance sheet when the Group becomes a party to the contractual provisions of the instrument. Purchases and sales of financial assets made within a period established by the regulations or by a convention in the relevant marketplace are recognised in the balance sheet at the settlement date.

Accounting principles applicable to financial assets and liabilities for the financial statements as at 31 December 2017 are presented in the 2017 Registration document.

1.e.1 Financial assets at amortised cost

Financial assets are classified at amortised cost if the following two criteria are met: the business model objective is to hold the instrument in order to collect the contractual cash flows and the cash flows consist solely of payments relating to principal and interest on the principal.

Business model criterion

Financial assets are managed within a business model whose objective is to hold financial assets in order to collect cash flows through the collection of contractual payments over the life of the instrument.

The realisation of disposals close to the maturity of the instrument and for an amount close to the remaining contractual cash-flows, or due to an increase in the counterparty's credit risk is consistent with a business model whose objective is to collect the contractual cash flows ("collect"). Sales imposed by regulatory requirements or to manage the concentration of credit risk (without an increase in the asset's credit risk) are also consistent with this business model when they are infrequent or insignificant in value.

Cash flow criterion

The cash flow criterion is satisfied if the contractual terms of the debt instrument give rise, on specified dates, to cash flows that are solely repayments of principal and interest on the principal amount outstanding.

The criterion is not met in the event of a contractual characteristic that exposes the holder to risks or to the volatility of contractual cash flows that are inconsistent with those of a non-structured or "basic lending" arrangement. It is also not satisfied in the event of leverage that increases the variability of the contractual cash flows.

Interest consists of consideration for the time value of money, for the credit risk, and for the remuneration of other risks (e.g. liquidity risk), costs (e.g. administration fees), and a profit margin consistent with that of a basic lending arrangement. The existence of negative interest does not call into question the cash flow criterion.

The time value of money is the component of interest – usually referred to as the "rate" component – which provides consideration for only the passage of time. The relationship between the interest rate and the passage of time shall not be modified by specific characteristics that would likely call into question the respect of the cash flow criterion.

Thus, when the variable interest rate of the financial asset is periodically reset on a frequency that does not match the duration for which the interest rate is established, the time value of money may be considered as modified and, depending on the significance of that modification, the cash flow criterion may not be met. Some financial assets held by the Group present a mismatch between the interest rate reset frequency and the maturity of the index, or interest rates indexed on an average of benchmark rate. The Group has developed a consistent methodology for analysing this alteration of the time value of money.

Regulated rates meet the cash flow criterion when they provide a consideration that is broadly consistent with the passage of time and does not expose to risks or volatility in the contractual cash flows that would be inconsistent with those of a basic lending arrangement (example: loans granted in the context of Livret A savings accounts).

Some contractual clauses may change the timing or the amount of cash flows. Early redemption options do not call into question the cash flow criterion if the prepayment amount substantially represents the principal amount outstanding and the interest thereon, which may include a reasonable compensation for the early termination of the contract. For example, as regards loans to retail customers, the compensation limited to 6 months of interest or 3% of the capital outstanding is considered as reasonable. Actuarial penalties, corresponding to the discount value of the difference between the residual contractual cash-flows of the loan, and their reinvestment in a loan to a similar counterparty or in the interbank market for a similar residual maturity are also considered as reasonable, even when the compensation can be positive or negative (i.e. so called "symmetric" compensations). An option that permits the issuer or the holder of a financial instrument to change the interest rate from floating to fixed rate does not breach the cash flow criterion if the fixed rate is determined at origination, or if it represents the time value of money for the residual maturity of the instrument at the date of exercise of the option.

In the particular case of financial assets contractually linked to payments received on a portfolio of underlying assets and which include a priority order for payment of cash flows between investors ("tranches"), thereby creating concentrations of credit risk, a specific analysis is carried out. The contractual characteristics of the tranche and those of the underlying financial instruments portfolios must meet the cash flow criterion and the credit risk exposure of the tranche must be equal or lower than the exposure to credit risk of the underlying pool of financial instruments.

Certain loans may be "non-recourse", either contractually, or in substance when they are granted to a special purpose entity. That is in particular the case of numerous project financing or asset financing loans. The cash-flow criterion is met as long as these loans do not represent a direct exposure on the assets acting as collateral. In practice, the sole fact that the financial asset explicitly gives rise to cash-flows that are consistent with payments of principal and interest is not sufficient to conclude that the instrument meets the cash-flows criterion. In that case, the particular underlying assets to which there is limited recourse shall be analysed using the "look-through" approach. If those assets do not themselves meet the cash-flows criterion, an assessment of the existing credit enhancement has to be performed. The following aspects are considered: structuring and sizing of the transaction, own funds level of the structure, expected source of repayment, volatility of the underlying assets. This analysis is applied to "non-recourse" loans granted by the Group.

The "financial assets at amortised cost" category includes, in particular, loans granted by the Group, as well as, reverse repurchase agreements and securities held by the Group ALM Treasury in order to collect contractual flows and meeting the cash-flows criterion.

Recognition

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction as well as commissions related to the origination of the loans.

They are subsequently measured at amortised cost, including accrued interest and net of repayments of principal and interest during the past period. These financial assets are also subject, from initial recognition, to the measurement of a loss allowance for expected credit losses (note 1.e.5).

Interest is calculated using the effective interest method determined at inception of the contract.

1.e.2 Financial assets at fair value through shareholders' equity

Debt instruments

Debt instruments are classified at fair value through shareholders' equity if the following two criteria are met:

- business model criterion: Financial assets are held in a business model whose objective is achieved by both holding the financial assets in order to collect contractual cash flows and selling the financial assets ("collect and sale"). The latter is not incidental but is an integral part of the business model;
- cash flow criterion: The principles are identical to those applicable to financial assets at amortised cost.

The securities held by the Group ALM Treasury in order to collect contractual flows or to be sold and meeting the cash flow criterion are in particular classified in this category.

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction. They are subsequently measured at fair value and changes in fair value are recognised under a specific line of shareholders' equity entitled "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss". These financial assets are also subject to the measurement of a loss allowance for expected credit losses on the same approach as for debt instruments at amortised cost. The counterparty of the related impact in cost of risk is recognised in the same specific line of shareholders' equity. On disposal, changes in fair value previously recognised in shareholders' equity are reclassified to profit or loss.

In addition, interest is recognised in the income statement using the effective interest method determined at the inception of the contract.

Equity instruments

Investments in equity instruments such as shares are classified on option, and on a case by case basis, at fair value through shareholders' equity (under a specific line). On disposal of the shares, changes in fair value previously recognised in equity are not recognised in profit or loss. Only dividends, if they represent remuneration for the investment and not repayment of capital, are recognised in profit or loss. These instruments are not subject to impairment.

Investments in mutual funds puttable to the issuer do not meet the definition of equity instruments. They do not meet the cash flow criterion either, and thus are recognised at fair value through profit or loss.

1.e.3 Financing and guarantee commitments

Financing and financial guarantee commitments that are not recognised as derivative instruments at fair value through profit or loss are presented in the note relating to financing and guarantee commitments. They are subject to the measurement of a loss allowance for expected credit losses. These loss allowances are presented under "provisions for contingencies and charges".

1.e.4 Regulated savings and loan contracts

Home savings accounts (*Comptes Épargne-Logement* – CEL) and home savings plans (*Plans d'Épargne Logement* – PEL) are government-regulated retail products sold in France. They combine a savings phase and a loan phase which are inseparable, with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas: an obligation to pay interest on the savings for an indefinite period, at a rate set by the government at the inception of the contract (in the case of PEL products) or at a rate reset every six months using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer's option) an amount contingent upon the rights acquired during the savings phase, at a rate set at the inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

The Group's future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and are equivalent to:

- for the loan phase: statistically probable loans outstanding and actual loans outstanding;
- for the savings phase: the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk loans outstanding for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed rate home loans in the case of the loan phase and products offered to individual clients in the case of the savings phase. In order to reflect the uncertainty of future interest rate trends, and the impact of such trends on customer behaviour models and on at-risk outstandings, the obligations are estimated using the Monte-Carlo method.

Where the sum of the Group's estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for the Group, a provision is recognised (with no offset between generations) in the balance sheet in "Provisions for contingencies and charges". Movements in this provision are recognised as interest income in the profit and loss account.

1.e.5 Impairment of financial assets measured at amortised cost and debt instruments measured at fair value through shareholders' equity

The impairment model for credit risk is based on expected losses.

This model applies to loans and debt instruments measured at amortised cost or fair value through equity, to loan commitments and financial guarantee contracts that are not recognised at fair value, as well as to lease receivables, trade receivables and contract assets.

General model

The Group identifies three "stages" that correspond each to a specific status with regards to the evolution of counterparty credit risk since the initial recognition of the asset.

- 12-month expected credit losses ("stage 1"): If at the reporting date, the credit risk of the financial instrument has not increased significantly since its initial recognition, this instrument is impaired at an amount equal to 12-month expected credit losses (resulting from the risk of default within the next 12 months);
- lifetime expected credit losses for non-impaired assets ("stage 2"): The loss allowance is measured at an amount equal to the lifetime expected credit losses if the credit risk of the financial instrument has increased significantly since initial recognition, but the financial asset is not considered credit-impaired or doubtful;
- lifetime expected credit losses for credit-impaired or doubtful financial assets ("stage 3"): the loss allowance is also measured for an amount equal to the lifetime expected credit losses.

This general model is applied to all instruments within the scope of IFRS 9 impairment, except for purchased or originated credit-impaired financial assets and instruments for which a simplified model is used (see below).

The IFRS 9 expected credit loss approach is symmetrical, i.e. if lifetime expected credit losses have been recognised in a previous reporting period, and if it is assessed in the current reporting period that there is no longer any significant increase in credit risk since initial recognition, the loss allowance reverts to a 12-months expected credit loss.

As regards interest income, under "stage" 1 and 2, it is calculated on the gross carrying amount. Under "stage 3", interest income is calculated on the amortised cost (i.e. the gross carrying amount adjusted for the loss allowance).

Definition of default

The definition of default is aligned with the Basel regulatory default definition, with a rebuttable presumption that the default occurs no later than 90 days past-due.

The definition of default is used consistently for assessing the increase in credit risk and measuring expected credit losses.

Doubtful credit-impaired financial assets

Definition

A financial asset is considered doubtful and classified in "stage 3" when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

At an individual level, objective evidence that a financial asset is credit-impaired includes observable data regarding the following events: the existence of accounts that are more than 90 days past due; knowledge or indications that the borrower meets significant financial difficulties, such that a risk can be considered to have arisen regardless of whether the borrower has missed any payments; concessions with respect to the credit terms granted to the borrower that the lender would not have considered had the borrower not been meeting financial difficulties (see section "Restructuring of financial assets for financial difficulties").

Specific cases of purchased or originated credit-impaired assets

In some cases, financial assets are credit-impaired at their initial recognition.

For these assets, there is no loss allowance accounted for at initial recognition. The effective interest rate is calculated taking into account the lifetime expected credit losses in the initial estimated cash flows. Any change in lifetime expected credit losses since initial recognition, positive or negative, is recognised as a loss allowance adjustment in profit or loss.

Simplified model

The simplified approach consists in accounting for a loss allowance corresponding to lifetime expected credit losses since initial recognition, and at each reporting date.

The Group applies this model to trade receivables with a maturity shorter than 12 months.

Significant increase in credit risk

The significant increase in credit risk may be assessed on an individual basis or on a collective basis (by grouping financial instruments according to common credit risk characteristics) taking into account all reasonable and supportable information and comparing the risk of default of the financial instrument at the reporting date with the risk of default of the financial instrument at the date of initial recognition.

Assessment of deterioration is based on the comparison of the probabilities of default or the ratings on the date of initial recognition with those existing at the reporting date.

There is also, according to the standard, a rebuttable presumption that the credit risk of an instrument has significantly increased since initial recognition when the contractual payments are more than 30 days past due.

In the consumer credit specialised business, a significant increase in credit risk is also considered when a past due event has occurred within the last 12 months, even if regularized since.

The principles applied to assess the significant increase in credit risk are detailed in note 3.h *Cost of risk*.

Measurement of expected credit losses

Expected credit losses are defined as an estimate of credit losses (i.e. the present value of all cash shortfalls) weighted by the probability of occurrence of these losses over the expected life of financial instruments. They are measured on an individual basis, for all exposures.

In practice, for exposures classified in stage 1 and stage 2, expected credit losses are measured as the product of the probability of default (PD), Loss Given Default (LGD) and exposure at default (EAD), discounted at the effective interest rate of the exposure (EIR). They result from the risk of default within the next 12 months (stage 1), or from the risk of default over the maturity of the facility (stage 2). In the consumer credit specialised business, because of the specificity of credit exposures, the methodology used is based on the probability of transition to term forfeiture, and on discounted loss rates after term forfeiture. The measurement of these parameters is performed on a statistical basis for homogeneous populations.

For exposures classified in stage 3, expected credit losses are measured as the value, discounted at the effective interest rate, of all cash shortfalls over the life of the financial instrument. Cash shortfalls represent the difference between the cash-flows that are due in accordance with the contract, and the cash-flows that are expected to be received.

The methodology developed is based on existing concepts and methods (in particular the Basel framework) on exposures for which capital requirement for credit risk is measured according to the IRBA methodology. This method is also applied to portfolios for which capital requirement for credit risk is measured according to the standardised approach. Besides, the Basel framework has been supplemented with the specific provisions of IFRS 9, in particular the use of forward-looking information.

Maturity

All contractual terms of the financial instrument (including prepayment, extension and similar options) over the life of the instrument are taken into account. In the rare cases where the expected life of the financial instrument cannot be estimated reliably, the residual contractual term must be used. The standard specifies that the maximum period to consider when measuring expected credit losses is the maximum contractual period. However, for revolving credit cards and overdrafts, in accordance with the exception provided by IFRS 9 for these products, the maturity considered for expected credit losses measurement is the period over which the entity is exposed to credit risk, which may extend beyond the contractual maturity (notice period). For revolving credits and overdrafts to non-retail counterparties, the contractual maturity can be taken, for example if the next review date is the contractual maturity as they are individually managed.

Probabilities of Default (PD)

The Probability of Default is an estimate of the likelihood of default over a given time horizon.

The measurement of expected credit losses requires the estimation of both 1-year probabilities of default and lifetime probabilities of default:

- 1-year PDs are derived from long-term average regulatory "through the cycle" PDs to reflect the current situation ("point in time" or "PIT");
- lifetime PDs are determined from the rating migration matrices reflecting the expected rating evolution of the exposure until maturity, and the associated probabilities of default.

Loss Given Default (LGD)

The Loss Given Default is the difference between the contractual cash-flows and the expected cash-flows, discounted using the effective interest rate (or an approximation thereof) at the default date. The LGD is expressed as a percentage of the EAD.

The estimate of expected cash flows takes into account cash flows resulting from the sale of collateral held or other credit enhancements if they are part of the contractual terms and are not accounted for separately by the entity (for example, a mortgage associated with a residential loan), net of the costs of obtaining and selling the collateral.

The LGD used for IFRS 9 purpose is derived from the Basel LGD parameter. It is retreated from downturn and conservatism margins (in particular regulatory margins), except margins for model uncertainties.

Exposure At Default (EAD)

The Exposure At Default (EAD) of an instrument is the anticipated outstanding amount owed by the obligor at the time of default. It is determined by the expected payment profile taking into account, depending on the product type: the contractual repayment schedule, expected early repayments and expected future drawings for revolving facilities.

Forward looking

The amount of expected credit losses is measured on the basis of probability-weighted scenarios, in view of past events, current conditions and reasonable and supportable economic forecasts.

The principles applied to take into account forward looking information when measuring expected credit losses are detailed in note 3.h Cost of risk.

Write-offs

A write-off consists in reducing the gross carrying amount of a financial asset when there are no longer reasonable expectations of recovering that financial asset in its entirety or a portion thereof, or when it has been fully or partially forgiven. The write-off is recorded when all other means available to the Bank for recovering the receivables or guarantees have failed, and also generally depends on the context specific to each jurisdiction.

If the amount of loss on write-off is greater than the accumulated loss allowance, the difference is an additional impairment loss posted in "cost of risk". For any receipt occurring when the financial asset (or part of it) is no longer recognised on the balance-sheet, the amount received is recorded as an impairment gain in "Cost of risk".

Recoveries through the repossession of the collateral

When a loan is secured by a financial or a non-financial asset serving as a guarantee and the counterparty is in default, the Group may decide to exercise the guarantee and, according to the jurisdiction, it may then become owner of the asset. In such a situation, the loan is written-off in counterparty of the asset received as collateral.

Once ownership of the asset is carried out, it is accounted for at fair value and classified according to the intent of use.

Restructuring of financial assets for financial difficulties

A restructuring due to the borrower's financial difficulties is defined as a change in the terms and conditions of the initial transaction that the Group is considering only for economic or legal reasons related to the borrower's financial difficulties.

For restructurings not resulting in derecognition of the financial asset, the restructured asset is subject to an adjustment of its gross carrying amount, to reduce it to the discounted amount, at the original effective interest rate of the asset, of the new expected future flows. The change in the gross carrying amount of the asset is recorded in the income statement in "Cost of risk".

The existence of a significant increase in credit risk for the financial instrument is then assessed by comparing the risk of default after the restructuring (under the revised contractual terms) and the risk of default at the initial recognition date (under the original contractual terms). In order to demonstrate that the criteria for recognising lifetime expected credit losses are no longer met, good quality payment behaviour will have to be observed over a certain period of time.

When the restructuring consists of a partial or total exchange against other substantially different assets (for example, the exchange of a debt instrument against an equity instrument), it results in the extinction of the original asset and the recognition of the assets remitted in exchange, measured at their fair value at the date of exchange. The difference in value is recorded in the income statement in "Cost of risk".

Modifications of financial assets that are not due to the borrower's financial difficulties (i.e. commercial renegotiations) are generally analysed as the early prepayment of the former financial asset, which is then derecognised, followed by the set-up of a new financial asset at market conditions.

1.e.6 Cost of risk

Cost of risk includes the following items of income:

- impairment gains and losses resulting from the accounting of loss allowances for 12-month expected credit losses and lifetime expected credit losses ("stage 1" and "stage 2") relating to debt instruments measured at amortised cost or at fair value through shareholders' equity, loan commitments and financial guarantee contracts that are not recognised at fair value as well as lease receivables, contract assets and trade receivables;
- impairment gains and losses resulting from the accounting of loss allowances relating to financial assets for which there is objective evidence of impairment ("stage 3"), write-offs on irrecoverable loans and amounts recovered on loans written-off;
- impairment gains and losses relating to fixed-income securities of insurance entities that are individually impaired (which fall under IAS 39).

It also includes expenses relating to fraud and to disputes inherent to the financing activity.

1.e.7 Financial instruments at fair value through profit or loss

Trading portfolio and other financial assets measured at fair value through profit or loss

The trading portfolio includes instruments held for trading (trading transactions), including derivatives.

Other financial assets measured at fair value through profit or loss include debt instruments that do not meet the "collect" or "collect and sale" business model criterion or that do not meet the cash-flow criterion, as well as equity instruments for which the fair value through shareholders' equity option has not been retained.

All those financial instruments are measured at fair value at initial recognition, with transaction costs directly posted in profit or loss. At reporting date, they are measured at fair value, with changes presented in "Net gain/loss on financial instruments at fair value through profit or loss". Income, dividends, and realised gains and losses on disposal related to held-for-trading transactions are accounted for in the same profit or loss account.

Financial liabilities designated as at fair value through profit or loss

Financial liabilities are recognised under option in this category in the two following situations:

- for hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- when using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would otherwise arise if they were to be classified in separate categories.

Changes in fair value due to the own credit risk are recognised under a specific heading of shareholders' equity.

1.e.8 Financial liabilities and equity instruments

A financial instrument issued or its various components are classified as a financial liability or equity instrument, in accordance with the economic substance of the legal contract.

Financial instruments issued by the Group are qualified as debt instruments if the entity in the Group issuing the instruments has a contractual obligation to deliver cash or another financial asset to the holder of the instrument. The same applies if the Group is required to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the Group, or to deliver a variable number of the Group's own equity instruments.

Equity instruments result from contracts evidencing a residual interest in an entity's assets after deducting all of its liabilities.

Debt securities and subordinated debt

Debt securities and subordinated debt are measured at amortised cost unless they are recognised at fair value through profit or loss.

Debt securities are initially recognised at the issue value including transaction costs, and are subsequently measured at amortised cost using the effective interest method.

Bonds redeemable or convertible into own equity are hybrid instruments that may contain a debt component and an equity component, determined upon initial recognition of the transaction.

Equity instruments

The term "own equity instruments" refers to shares issued by the parent company (BNP Paribas SA) and by its fully consolidated subsidiaries. External costs that are directly attributable to an issue of new shares are deducted from equity net of all related taxes.

Own equity instruments held by the Group, also known as treasury shares, are deducted from consolidated shareholders' equity irrespective of the purpose for which they are held. Gains and losses arising on such instruments are eliminated from the consolidated profit and loss account.

When the Group acquires equity instruments issued by subsidiaries under the exclusive control of BNP Paribas, the difference between the acquisition price and the share of net assets acquired is recorded in retained earnings attributable to BNP Paribas shareholders. Similarly, the liability corresponding to put options granted to minority shareholders in such subsidiaries, and changes in the value of that liability, are offset against minority interests, with any surplus offset against retained earnings attributable to BNP Paribas shareholders. Until these options have been exercised, the portion of net income attributable to minority interests is allocated to minority interests in the profit and loss account. A decrease in the Group's interest in a fully consolidated subsidiary is recognised in the Group's accounts as a change in shareholders' equity.

Financial instruments issued by the Group and classified as equity instruments (e.g. Undated Super Subordinated Notes) are presented in the balance sheet in "capital and retained earnings".

Distributions from a financial instrument classified as an equity instrument are recognised directly as a deduction from equity. Similarly, the transaction costs of an instrument classified as equity are recognised as a deduction from shareholders' equity.

Own equity instrument derivatives are treated as follows, depending on the method of settlement:

- as equity instruments if they are settled by physical delivery of a fixed number of own equity instruments for a fixed amount of cash or other financial asset. Such instruments are not revalued;
- as derivatives if they are settled in cash or by choice by physical delivery of the shares or in cash. Changes in value of such instruments are taken to the profit and loss account.

If the contract includes an obligation, whether contingent or not, for the bank to repurchase its own shares, the bank recognises the debt at its present value with an offsetting entry in shareholders' equity.

1.e.9 Hedge accounting

The Group retained the option provided by the standard to maintain the hedge accounting requirements of IAS 39 until the future standard on macro-hedging is entered into force. Furthermore, IFRS 9 does not explicitly address the fair value hedge of the interest rate risk on a portfolio of financial assets or liabilities. The provisions in IAS 39 for these portfolio hedges, as adopted by the European Union, continue to apply.

Derivatives contracted as part of a hedging relationship are designated according to the purpose of the hedge.

Fair value hedges are particularly used to hedge interest rate risk on fixed rate assets and liabilities, both for identified financial instruments (securities, debt issues, loans, borrowings) and for portfolios of financial instruments (in particular, demand deposits and fixed rate loans).

Cash flow hedges are particularly used to hedge interest rate risk on floating-rate assets and liabilities, including rollovers, and foreign exchange risks on highly probable forecast foreign currency revenues.

At the inception of the hedge, the Group prepares formal documentation which details the hedging relationship, identifying the instrument, or portion of the instrument, or portion of risk that is being hedged, the hedging strategy and the type of risk hedged, the hedging instrument, and the methods used to assess the effectiveness of the hedging relationship.

On inception and at least quarterly, the Group assesses, in consistency with the original documentation, the actual (retrospective) and expected (prospective) effectiveness of the hedging relationship. Retrospective effectiveness tests are designed to assess whether the ratio of actual changes in the fair value or cash flows of the hedging instrument to those in the hedged item is within a range of 80% to 125%. Prospective effectiveness tests are designed to ensure that expected changes in the fair value or cash flows of the derivative over the residual life of the hedge adequately offset those of the hedged item. For highly probable forecast transactions, effectiveness is assessed largely on the basis of historical data for similar transactions.

Under IAS 39 as adopted by the European Union, which excludes certain provisions on portfolio hedging, interest rate risk hedging relationships based on portfolios of assets or liabilities qualify for fair value hedge accounting as follows:

- the risk designated as being hedged is the interest rate risk associated with the interbank rate component of interest rates on commercial banking transactions (loans to customers, savings accounts and demand deposits);
- the instruments designated as being hedged correspond, for each maturity band, to a portion of the interest rate gap associated with the hedged underlying;
- the hedging instruments used consist exclusively of "plain vanilla" swaps;
- prospective hedge effectiveness is established by the fact that all derivatives must, on inception, have the effect of reducing interest rate risk in the portfolio of hedged underlying. Retrospectively, a hedge will be disqualified from hedge accounting once a shortfall arises in the underlying specifically associated with that hedge for each maturity band (due to prepayment of loans or withdrawals of deposits).

The accounting treatment of derivatives and hedged items depends on the hedging strategy.

In a fair value hedging relationship, the derivative instrument is remeasured at fair value in the balance sheet, with changes in fair value recognised in profit or loss in "Net gain/loss on financial instruments at fair value through profit or loss", symmetrically with the remeasurement of the hedged item to reflect the hedged risk. In the balance sheet, the fair value remeasurement of the hedged component is recognised in accordance with the classification of the hedged item in the case of a hedge of identified assets and liabilities, or under "Remeasurement adjustment on interest rate risk hedged portfolios" in the case of a portfolio hedging relationship.

If a hedging relationship ceases or no longer fulfils the effectiveness criteria, the hedging instrument is transferred to the trading book and accounted for using the treatment applied to this category. In the case of identified fixed-income instruments, the remeasurement adjustment recognised in the balance sheet is amortised at the effective interest rate over the remaining life of the instrument. In the case of interest rate risk hedged fixed-income portfolios, the adjustment is amortised on a straight-line basis over the remainder of the original term of the hedge. If the hedged item no longer appears in the balance sheet, in particular due to prepayments, the adjustment is taken to the profit and loss account immediately.

In a cash flow hedging relationship, the derivative is measured at fair value in the balance sheet, with changes in fair value taken to shareholders' equity on a separate line, "Changes in fair value recognised directly in equity". The amounts taken to shareholders' equity over the life of the hedge are transferred to the profit and loss account under "Net interest income" as and when the cash flows from the hedged item impact profit or loss. The hedged items continue to be accounted for using the treatment specific to the category to which they belong.

If the hedging relationship ceases or no longer fulfils the effectiveness criteria, the cumulative amounts recognised in shareholders' equity as a result of the remeasurement of the hedging instrument remain in equity until the hedged transaction itself impacts profit or loss, or until it becomes clear that the transaction will not occur, at which point they are transferred to the profit and loss account.

If the hedged item ceases to exist, the cumulative amounts recognised in shareholders' equity are immediately taken to the profit and loss account.

Whatever the hedging strategy used, any ineffective portion of the hedge is recognised in the profit and loss account under "Net gain/loss on financial instruments at fair value through profit or loss".

Hedges of net foreign currency investments in subsidiaries and branches are accounted for in the same way as cash flow hedges. Hedging instruments may be foreign exchange derivatives or any other non-derivative financial instrument.

1.e.10 Determination of fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or most advantageous market, at the measurement date.

The Group determines the fair value of financial instruments either by using prices obtained directly from external data or by using valuation techniques. These valuation techniques are primarily market and income approaches encompassing generally accepted models (e.g. discounted cash flows, Black-Scholes model, and interpolation techniques). They maximize the use of observable inputs and minimize the use of unobservable inputs. They are calibrated to reflect current market conditions and valuation adjustments are applied as appropriate, when some factors such as model, liquidity and credit risks are not captured by the models or their underlying inputs but are nevertheless considered by market participants when setting the exit price.

The unit of measurement is generally the individual financial asset or financial liability but a portfolio-based measurement can be elected, subject to certain conditions. Accordingly, the Group retains this portfolio-based measurement exception to determine the fair value when some group of financial assets and financial liabilities and other contracts within the scope of the standard relating to financial instruments with substantially similar and offsetting market risks or credit risks are managed on the basis of a net exposure, in accordance with the documented risk management strategy.

Assets and liabilities measured or disclosed at fair value are categorised into the three following levels of the fair value hierarchy:

- Level 1: fair values are determined using directly quoted prices in active markets for identical assets and liabilities. Characteristics of an active market include the existence of a sufficient frequency and volume of activity and of readily available prices.
- Level 2: fair values are determined based on valuation techniques for which significant inputs are observable market data, either directly or indirectly. These techniques are regularly calibrated and the inputs are corroborated with information from active markets.
- Level 3: fair values are determined using valuation techniques for which significant inputs are unobservable or cannot be corroborated by market-based observations, due for instance to illiquidity of the instrument and significant model risk. An unobservable input is a parameter for which there are no market data available and that is therefore derived from proprietary assumptions about what other market participants would consider when assessing fair value. The assessment of whether a product is illiquid or subject to significant model risks is a matter of judgment.

The level in the fair value hierarchy within which the asset or liability is categorised in its entirety is based upon the lowest level input that is significant to the entire fair value.

For financial instruments disclosed in Level 3 of the fair value hierarchy, a difference between the transaction price and the fair value may arise at initial recognition. This "Day One Profit" is deferred and released to the profit and loss account over the period during which the valuation parameters are expected to remain non-observable. When parameters that were originally non-observable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the day one profit is released to the profit and loss account.

1.e.11 Derecognition of financial assets and financial liabilities

Derecognition of financial assets

The Group derecognises all or part of a financial asset either when the contractual rights to the cash flows from the asset expire or when the Group transfers the contractual rights to the cash flows from the asset and substantially all the risks and rewards of ownership of the asset. Unless these conditions are fulfilled, the Group retains the asset in its balance sheet and recognises a liability for the obligation created as a result of the transfer of the asset.

Derecognition of financial liabilities

The Group derecognises all or part of a financial liability when the liability is extinguished in full or in part.

Repurchase agreements and securities lending/borrowing

Securities temporarily sold under repurchase agreements continue to be recognised in the Group's balance sheet in the category of securities to which they belong. The corresponding liability is recognised at amortised cost under the appropriate "Financial liabilities at amortised cost" category on the balance sheet, except in the case of repurchase agreements contracted for trading purposes, for which the corresponding liability is recognised in "Financial liabilities at fair value through profit or loss".

Securities temporarily acquired under reverse repurchase agreements are not recognised in the Group's balance sheet. The corresponding receivable is recognised at amortised cost under the appropriate "Financial assets at amortised cost" category in the balance sheet, except in the case of reverse repurchase agreements contracted for trading purposes, for which the corresponding receivable is recognised in "Financial assets at fair value through profit or loss".

Securities lending transactions do not result in derecognition of the lent securities, and securities borrowing transactions do not result in recognition of the borrowed securities on the balance sheet. In cases where the borrowed securities are subsequently sold by the Group, the obligation to deliver the borrowed securities on maturity is recognised on the balance sheet under "financial liabilities at fair value through profit or loss".

1.e.12 Offsetting financial assets and financial liabilities

A financial asset and a financial liability are offset and the net amount presented in the balance sheet if, and only if, the Group has a legally enforceable right to set off the recognised amounts, and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Repurchase agreements and derivatives that meet the two criteria set out in the accounting standard are offset in the balance sheet.

1.f ACCOUNTING STANDARDS SPECIFIC TO INSURANCE ACTIVITIES

The specific accounting policies relating to assets and liabilities generated by insurance contracts and financial contracts with a discretionary participation feature written by fully consolidated insurance companies are retained for the purposes of the consolidated financial statements. These policies comply with IFRS 4.

Financial assets and liabilities of insurance entities fall under IAS 39, as explained in note 1.a.1.

All other insurance company assets and liabilities are accounted for using the policies applied to the Group's assets and liabilities generally, and are included in the relevant balance sheet and profit and loss account headings in the consolidated financial statements.

1.f.1 Profit and loss account

Income and expenses recognised under insurance contracts issued by the Group are presented in the income statement under "Net income from insurance activities".

This heading in the income statement includes premiums earned, net gain in investment contracts with no discretionary participation feature, net investment income (including income on investment property and impairment on shares and other equity instruments), technical changes related to contracts; (including commissions), net charges for ceded reinsurance and policy benefit expenses.

Other income and expenses relating to insurance activities (i.e. recorded by insurance entities) are presented in the other income statement headings according to their nature.

1.f.2 Financial investments of insurance activities

Investments of insurance activities mainly include:

- investments by insurance entities in financial instruments that are recognised in accordance with the principles of IAS 39, which include investments representing technical reserves of insurance activities and notably unit-linked contracts;
- derivative instruments with a positive fair value. Group insurance entities underwrite derivative instruments for hedging purposes;
- investment properties;
- equity method investments;
- and reinsurers' share in liabilities arising from insurance and investment contracts.

Investments in financial instruments

Financial investments held by the Group's insurance entities are classified in one of the four categories provided for in IAS 39: financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets.

Financial assets at fair value through profit or loss

The category of "Financial assets at fair value through profit or loss" includes derivatives and financial assets that the Group has elected to recognise and measure at fair value through profit or loss at inception, in accordance with the option offered by IAS 39.

Financial assets may be designated at fair value through profit or loss in the following cases (in accordance with IAS 39):

- hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- where using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would arise if they were to be classified in separate accounting categories;
- when the group of financial assets and/or financial liabilities is managed and measured on the basis of fair value, in accordance with a documented risk management and investment strategy.

Investments held in respect of insurance or investment contracts where the financial risk is borne by policyholders (unit-linked contracts) are recognised at fair value through profit or loss.

When the Group measures at fair value through profit or loss investments made in respect of its insurance activities in entities over which it exercises significant influence or joint control, these investments are presented under the line "Financial assets at fair value through profit or loss" (see §1.b.2).

Financial instruments classified in this category are initially recognised at their fair value, with transaction costs being directly recognised in the income statement.

At the closing date, they are valued at their fair value.

Changes in value compared to the last valuation, income, dividends and realised gains and losses are presented under "Net income from insurance activities" and under "Net gain on financial instruments at fair value through profit or loss".

Loans and advances

Fixed or determinable -income securities, which are not quoted in an active market, other than those for which the holder may not recover substantially all of its initial investment for reasons other than credit deterioration, are classified as "Loans and receivables" when they do not meet the conditions for classification as financial assets at fair value through profit or loss.

Loans and receivables are initially recognised at their fair value or equivalent, which generally corresponds to the net amount originally paid.

Loans and receivables are subsequently measured at amortised cost using the effective interest method and net of repayments of principal and interest.

Interest is calculated using the effective interest method, which includes interest, transaction costs and commissions included in their initial value and is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost".

Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

Held-to-maturity financial assets

"Held-to-maturity financial assets" include debt securities, with fixed maturity, that the Group has the intention and ability to hold until maturity.

Securities classified in this category are recognised at amortised cost using the effective interest method.

Income received on these securities is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost". Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

Available-for-sale financial assets

The category "Available-for-sale financial assets" includes debt or equity securities that do not fall within the previous three categories.

Assets included in the available-for-sale category are initially recorded at fair value, plus transaction costs where material. At the end of the reporting period, they are valued at their fair value and the changes in the latter, excluding accrued income, are presented under a specific heading of equity. On disposal of the securities, these unrealised gains or losses previously recognised in equity are reclassified in the income statement under the heading "Net income from insurance activities".

Income recognised using the effective interest method on debt securities, dividends received and impairment (in the event of a significant or lasting decline in the value of the securities) of equity securities are presented under "Net income from insurance activities" and under section "Net gain on available-for-sale financial assets". Impairment losses on debt securities are presented under "Cost of risk".

Investment property

Investment property corresponds to buildings held directly by insurance companies and property companies controlled.

Investment property, except for those used for unit-linked contracts, is recognised at cost and follows the accounting methods of the assets described elsewhere.

Investment property, held in respect of unit-linked contracts, is valued at fair value or equivalent, with changes in value recognised in the income statement.

Equity-method investments

Investments in entities or real estate funds over which the Group exercises significant influence or joint control and for which the equity method is applied are recognised in the line "Equity method investments".

1.f.3 Technical reserves and other insurance liabilities

The item "Technical reserves and other insurance liabilities" includes:

- commitments to policyholders and beneficiaries of contracts, which include technical reserves for insurance contracts subject to significant insurance hazard (mortality, longevity, disability, incapacity...) and technical liabilities of investment contracts with a discretionary profit-sharing feature, falling within IFRS 4. The discretionary participation clause grants life insurance policyholders the right to receive, in addition to the guaranteed remuneration, a share of the financial results achieved;
- other insurance liabilities related to unit-linked contracts that fall within the scope of IAS 39 (i.e. investment contracts with no discretionary participating features);
- policyholders' surplus reserve
- liabilities arising from insurance and reinsurance operations, including liabilities due to policyholders;
- financial derivative instruments of insurance activities carried at fair value through profit or loss, the fair value of which is negative. Group insurance entities underwrite derivative instruments for hedging purposes.

Financial liabilities that are not insurance liabilities (e.g. subordinated debt) fall under IAS 39. They are presented in "Financial liabilities at amortised cost".

Insurance and reinsurance contracts and investment contracts with discretionary participating features

Life insurance guarantees cover mainly death risk (term life insurance, annuities, repayment of loans or guaranteed minimum on unit-linked contracts) and, regarding borrowers' insurance, to disability, incapacity and unemployment risks.

For life insurance, technical reserves consist mainly of mathematical reserves that corresponds as a minimum, to the surrender value of contracts and surplus reserve.

The policyholders' surplus reserve also includes amounts resulting from the application of shadow accounting representing the interest of policyholders, mainly within French life insurance subsidiaries, in unrealised gains and losses on assets where the benefit paid under the policy is linked to the return on those assets. This interest is an average derived from stochastic analyses of unrealised gains and losses attributable to policyholders in various scenarios.

A capitalisation reserve is set up in individual statutory accounts of French life-insurance companies on the sale of amortisable securities in order to defer part of the net realised gain and hence maintain the yield to maturity on the portfolio of admissible assets. In the consolidated financial statements, this reserve is reclassified into "Policyholders' surplus" on the liabilities side of the consolidated balance sheet, to the extent that it is highly probable it will be used.

Non-life technical reserves consist of unearned premium reserves (corresponding to the portion of written premiums relating to future periods) and outstanding claims reserves, inclusive of claims handling costs.

At the reporting date, a liability adequacy test is performed: The level of technical reserves (net of acquisition costs outstanding) is compared to the average value of cash flows resulting from stochastic calculations. Related adjustment to technical reserves, if any, is taken to the profit and loss account for the period.

In the event of an unrealised loss on shadow accounted assets, a policyholders' loss reserve is recognised on the assets side of the consolidated balance sheet in an amount equal to the probable deduction from the policyholders' future profit share. The recoverability of the policyholders' loss reserve is assessed prospectively, taking into account policyholders' surplus reserves recognised elsewhere, capital gains on financial assets that are not shadow accounted due to accounting elections made (held-to-maturity financial assets and property investments measured at cost) and the Company's ability and intention to hold the assets carrying the unrealised loss. The policyholders' loss reserve is recognised symmetrically with the corresponding assets and shown on the assets side of the balance sheet under the line item "Accrued income and other assets".

Investment contracts with no discretionary participating features

Investment contracts with no discretionary participating features correspond mainly to unit-linked contracts that do not meet the definition of insurance and investment contracts with discretionary participating features.

Liabilities arising from unit-linked contracts are measured by reference to the fair value of the assets backing these contracts at the closing date.

1.g PROPERTY, PLANT, EQUIPMENT, AND INTANGIBLE ASSETS

Property, plant and equipment and intangible assets shown in the consolidated balance sheet are composed of assets used in operations and investment property.

Assets used in operations are those used in the provision of services or for administrative purposes, and include non-property assets leased by the Group as lessor under operating leases.

Investment property comprises property assets held to generate rental income and capital gains.

Investment property is recognised at cost, with the exception of those representing insurance or investment contracts whose risk is borne by policyholders (unit-linked contracts), which are measured at fair value through profit or loss and presented in the balance sheet under "Financial investments of insurance activities" (note 1.f.2).

Property, plant and equipment and intangible assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed internally by the BNP Paribas Group that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and the labour costs of employees directly attributable to the project.

Subsequent to initial recognition, property, plant and equipment and intangible assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

The depreciable amount of property, plant and equipment and intangible assets is calculated after deducting the residual value of the asset. Only assets leased by the Group as the lessor under operating leases are presumed to have a residual value, as the useful life of property, plant and equipment and intangible assets used in operations is generally the same as their economic life.

Property, plant and equipment and intangible assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense is recognised in the profit and loss account under "Depreciation, amortisation and impairment of property, plant and equipment and intangible assets".

Where an asset consists of a number of components which may require replacement at regular intervals, or which have different uses or generate economic benefits at different rates, each component is recognised separately and depreciated using a method appropriate to that component. The BNP Paribas Group has adopted the component-based approach for property used in operations and for investment property.

The depreciation periods used for office property are as follows: 80 years or 60 years for the shell (for prime and other property respectively); 30 years for facades; 20 years for general and technical installations; and 10 years for fixtures and fittings.

Software is amortised, depending on its type, over periods of no more than 8 years in the case of infrastructure developments and 3 years or 5 years in the case of software developed primarily for the purpose of providing services to customers.

Software maintenance costs are expensed as incurred. However, expenditure that is regarded as upgrading the software or extending its useful life is included in the initial acquisition or production cost.

Depreciable property, plant and equipment and intangible assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment at least annually, using the same method as for goodwill allocated to cash-generating units.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be impaired, an impairment loss is recognised in the profit and loss account. This loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment. Impairment losses are taken to the profit and loss account in "Depreciation, amortisation and impairment of property, plant and equipment and intangible assets".

Gains and losses on disposals of property, plant and equipment and intangible assets used in operations are recognised in the profit and loss account in "Net gain on non-current assets".

Gains and losses on disposals of investment property are recognised in the profit and loss account in "Income from other activities" or "Expense on other activities".

1.h LEASES

Group companies may either be the lessee or the lessor in a lease agreement.

1.h.1 Group company as lessor

Leases contracted by the Group as lessor are categorised as either finance leases or operating leases.

Finance leases

In a finance lease, the lessor transfers substantially all the risks and rewards of ownership of an asset to the lessee. It is treated as a loan made to the lessee to finance the purchase of the asset.

The present value of the lease payments, plus any residual value, is recognised as a receivable. The net income earned from the lease by the lessor is equal to the amount of interest on the loan, and is taken to the profit and loss account under "Interest income". The lease payments are spread over the lease term, and are allocated to reduction of the principal and to interest such that the net income reflects a constant rate of return on the net investment outstanding in the lease. The rate of interest used is the rate implicit in the lease.

Impairments of lease receivables are determined using the same principles as applied to financial assets measured at amortised cost.

Operating leases

An operating lease is a lease under which substantially all the risks and rewards of ownership of an asset are not transferred to the lessee.

The asset is recognised under property, plant and equipment in the lessor's balance sheet and depreciated on a straight-line basis over its useful life. The depreciable amount excludes the residual value of the asset. The lease payments are taken to the profit and loss account in full on a straight-line basis over the lease term. Lease payments and depreciation expenses are taken to the profit and loss account under "Income from other activities" and "Expense on other activities".

1.h.2 Group company as lessee

Leases contracted by the Group as lessee are categorised as either finance leases or operating leases.

Finance leases

A finance lease is treated as an acquisition of an asset by the lessee, financed by a loan. The leased asset is recognised in the balance sheet of the lessee at the lower of its fair value or the present value of the minimum lease payments calculated at the interest rate implicit in the lease. A matching liability, equal to the fair value of the leased asset or the present value of the minimum lease payments, is also recognised in the balance sheet of the lessee. The asset is depreciated using the same method as that applied to owned assets, after deducting the residual value from the amount initially recognised, over the useful life of the asset. If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease term, the asset shall be fully depreciated over the shorter of the lease term and its useful life. The lease obligation is accounted for at amortised cost.

Operating leases

The asset is not recognised in the balance sheet of the lessee. Lease payments made under operating leases are taken to the profit and loss account of the lessee on a straight-line basis over the lease term.

1.i NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Where the Group decides to sell non-current assets or a group of assets and liabilities and it is highly probable that the sale will occur within 12 months, these assets are shown separately in the balance sheet, on the line "Non-current assets held for sale". Any liabilities associated with these assets are also shown separately in the balance sheet, on the line "Liabilities associated with non-current assets held for sale". When the Group is committed to a sale plan involving loss of control of a subsidiary and the sale is highly probable within 12 months, all the assets and liabilities of that subsidiary are classified as held for sale.

Once classified in this category, non-current assets and the group of assets and liabilities are measured at the lower of carrying amount or fair value less costs to sell.

Such assets are no longer depreciated. If an asset or group of assets and liabilities becomes impaired, an impairment loss is recognised in the profit and loss account. Impairment losses may be reversed.

Where a group of assets and liabilities held for sale represents a cash generating unit, it is categorised as a "discontinued operation". Discontinued operations include operations that are held for sale, operations that have been shut down, and subsidiaries acquired exclusively with a view to resell.

In this case, gains and losses related to discontinued operations are shown separately in the profit and loss account, on the line "Post-tax gain/loss on discontinued operations and assets held for sale". This line includes the post-tax profits or losses of discontinued operations, the post-tax gain or loss arising from remeasurement at fair value less costs to sell, and the post-tax gain or loss on disposal of the operation.

1.j EMPLOYEE BENEFITS

Employee benefits are classified in one of four categories:

- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated absences, long-service awards, and other types of cash-based deferred compensation;
- termination benefits;
- post-employment benefits, including top-up banking industry pensions and retirement bonuses in France and pension plans in other countries, some of which are operated through pension funds.

Short-term benefits

The Group recognises an expense when it has used services rendered by employees in exchange for employee benefits.

Long-term benefits

These are benefits, other than short-term benefits, post-employment benefits and termination benefits. This relates, in particular, to compensation deferred for more than 12 months and not linked to the BNP Paribas share price, which is accrued in the financial statements for the period in which it is earned.

The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that the revaluation items are recognised in the profit and loss account and not in equity.

Termination benefits

Termination benefits are employee benefits payable in exchange for the termination of an employee's contract as a result of either a decision by the Group to terminate a contract of employment before the legal retirement age, or a decision by an employee to accept voluntary redundancy in exchange for these benefits. Termination benefits due more than 12 months after the balance sheet date are discounted.

Post-employment benefits

In accordance with IFRS, the BNP Paribas Group draws a distinction between defined-contribution plans and defined-benefit plans.

Defined-contribution plans do not give rise to an obligation for the Group and do not require a provision. The amount of the employer's contributions payable during the period is recognised as an expense.

Only defined-benefit schemes give rise to an obligation for the Group. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether the Group has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take demographic and financial assumptions into account.

The net liability recognised with respect to post-employment benefit plans is the difference between the present value of the defined-benefit obligation and the fair value of any plan assets.

The present value of the defined-benefit obligation is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, specific to each country or Group entity, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate.

When the value of the plan assets exceeds the amount of the obligation, an asset is recognised if it represents a future economic benefit for the Group in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The annual expense recognised in the profit and loss account under "Salaries and employee benefits", with respect to defined-benefit plans includes the current service cost (the rights vested by each employee during the period in return for service rendered), the net interests linked to the effect of discounting the net defined-benefit liability (asset), the past service cost arising from plan amendments or curtailments, and the effect of any plan settlements.

Remeasurements of the net defined-benefit liability (asset) are recognised in shareholders' equity and are never reclassified to profit or loss. They include actuarial gains and losses, the return on plan assets and any change in the effect of the asset ceiling (excluding amounts included in net interest on the defined-benefit liability or asset).

1.k SHARE-BASED PAYMENTS

Share-based payment transactions are payments based on shares issued by the Group, whether the transaction is settled in the form of equity or cash of which the amount is based on trends in the value of BNP Paribas shares.

IFRS 2 requires share-based payments granted after 7 November 2002 to be recognised as an expense. The amount recognised is the value of the share-based payment granted to the employee.

The Group grants employees stock subscription option plans and deferred share-based or share price-linked cash-settled compensation plans, and also offers them the possibility to purchase specially-issued BNP Paribas shares at a discount, on condition that they retain the shares for a specified period.

Stock option and share award plans

The expense related to stock option and share award plans is recognised over the vesting period, if the benefit is conditional upon the grantee's continued employment.

Stock options and share award expenses are recorded under salary and employee benefits expenses, with a corresponding adjustment to shareholders' equity. They are calculated on the basis of the overall plan value, determined at the date of grant by the Board of directors.

In the absence of any market for these instruments, financial valuation models are used that take into account any performance conditions related to the BNP Paribas share price. The total expense of a plan is determined by multiplying the unit value per option or share awarded by the estimated number of options or shares awarded vested at the end of the vesting period, taking into account the conditions regarding the grantee's continued employment.

The only assumptions revised during the vesting period, and hence resulting in a remeasurement of the expense, are those relating to the probability that employees will leave the Group and those relating to performance conditions that are not linked to the price value of BNP Paribas shares.

Share price-linked cash-settled deferred compensation plans

The expense related to these plans is recognised in the year during which the employee rendered the corresponding services.

If the payment of share-based variable compensation is explicitly subject to the employee's continued presence at the vesting date, the services are presumed to have been rendered during the vesting period and the corresponding compensation expense is recognised on a *pro rata* basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take into account any non-fulfilment of the continued presence or performance conditions and the change in BNP Paribas share price.

If there is no continued presence condition, the expense is not deferred, but recognised immediately with a corresponding liability in the balance sheet. This is then revised on each reporting date until settlement to take into account any performance conditions and the change in the BNP Paribas share price.

1.l PROVISIONS RECORDED UNDER LIABILITIES

Provisions recorded under liabilities (other than those relating to financial instruments, employee benefits and insurance contracts) mainly relate to restructuring, claims and litigation, fines and penalties, and tax risks.

A provision is recognised when it is probable that an outflow of resources embodying economic benefits will be required to settle an obligation arising from a past event, and a reliable estimate can be made of the amount of the obligation. The amount of such obligations is discounted, where the impact of discounting is material, in order to determine the amount of the provision.

1.m CURRENT AND DEFERRED TAX

The current income tax charge is determined on the basis of the tax laws and tax rates in force in each country in which the Group operates during the period in which the income is generated.

Deferred taxes are recognised when temporary differences arise between the carrying amount of an asset or liability in the balance sheet and its tax base.

Deferred tax liabilities are recognised for all taxable temporary differences other than:

- taxable temporary differences on initial recognition of goodwill;
- taxable temporary differences on investments in enterprises under the exclusive or joint control of the Group, where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences and unused carryforwards of tax losses only to the extent that it is probable that the entity in question will generate future taxable profits against which these temporary differences and tax losses can be offset.

Deferred tax assets and liabilities are measured using the liability method, using the tax rate which is expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been or will have been enacted by the balance sheet date of that period. They are not discounted.

Deferred tax assets and liabilities are offset when they arise within the same tax group, they fall under the jurisdiction of a single tax authority, and there is a legal right to offset.

Current and deferred taxes are recognised as tax income or expenses in the profit and loss account, except for those relating to a transaction or an event directly recognised in shareholders' equity, which are also recognised in shareholders' equity.

When tax credits on revenues from receivables and securities are used to settle corporate income tax payable for the period, the tax credits are recognised on the same line as the income to which they relate. The corresponding tax expense continues to be carried in the profit and loss account under "Corporate income tax".

1.n CASH FLOW STATEMENT

The cash and cash equivalents balance is composed of the net balance of cash accounts and accounts with central banks, and the net balance of interbank demand loans and deposits.

Changes in cash and cash equivalents related to operating activities reflect cash flows generated by the Group's operations, including those relating to financial investments of insurance activities and negotiable certificates of deposit.

Changes in cash and cash equivalents related to investing activities reflect cash flows resulting from acquisitions and disposals of subsidiaries, associates or joint ventures included in the consolidated group, as well as acquisitions and disposals of property, plant and equipment excluding investment property and property held under operating leases.

Changes in cash and cash equivalents related to financing activities reflect the cash inflows and outflows resulting from transactions with shareholders, cash flows related to bonds and subordinated debt, and debt securities (excluding negotiable certificates of deposit).

1.o USE OF ESTIMATES IN THE PREPARATION OF THE FINANCIAL STATEMENTS

Preparation of the financial statements requires managers of core businesses and corporate functions to make assumptions and estimates that are reflected in the measurement of income and expense in the profit and loss account and of assets and liabilities in the balance sheet, and in the disclosure of information in the notes to the financial statements. This requires the managers in question to exercise their judgement and to make use of information available at the date of the preparation of the financial statements when making their estimates. The actual future results from operations where managers have made use of estimates may in reality differ significantly from those estimates, mainly according to market conditions. This may have a material effect on the financial statements.

This applies in particular to:

- the analysis of the cash flow criterion for specific financial assets;
- the measurement of expected credit losses. This applies in particular to the assessment of significant increase in credit risk, the models and assumptions used to measure expected credit losses, the determination of the different economic scenarios and their weighting;
- the analysis of renegotiated loans;
- the use of internally-developed models to measure positions in financial instruments that are not quoted in active markets;
- calculations of the fair value of unquoted financial instruments classified in "Financial assets at fair value through equity", or in "Financial instruments at fair value through profit or loss", whether as assets or liabilities, and more generally calculations of the fair value of financial instruments subject to a fair value disclosure requirement;
- whether a market is active or inactive for the purposes of using a valuation technique;
- impairment tests performed on intangible assets;
- the appropriateness of the designation of certain derivative instruments such as cash flow hedges, and the measurement of hedge effectiveness;
- estimates of the residual value of assets leased under finance leases or operating leases, and more generally of assets on which depreciation is charged net of their estimated residual value;
- the measurement of provisions for contingencies and charges. In particular, while investigations and litigations are ongoing, it is difficult to foresee their outcome and potential impact. Provision estimation is established by taking into account all available information at the date of the preparation of the financial statements, in particular the nature of the dispute, the underlying facts, the ongoing legal proceedings and court decisions, including those related to similar cases. The Group may also use the opinion of experts and independent legal advisers to exercise its judgement.

This is also the case for assumptions applied to assess the sensitivity of each type of market risk and the sensitivity of valuations to non-observable parameters.

Note 2 IMPACTS OF PRESENTATION CHANGES AND OF THE FIRST TIME ADOPTION OF IFRS 9 AND IFRS 15

As at 31 December 2017, the BNP Paribas Group operated presentation changes and recognised securities at their settlement date:

- financial instruments of insurance entities, which continue to be recognised according to IAS 39 until 31 December 2020, have been grouped on separate lines of the balance sheet, of the profit and loss account and of the statement of net income and changes in assets and liabilities recognised directly in equity;
- ahead of the implementation of IFRS 9 "Financial instruments" as of 1 January 2018, a few item headings have been renamed in the balance sheet, the profit and loss account and in the statement of net income and changes in assets and liabilities recognised directly in equity;
- in order to align the definition of "credit institutions" in the financial statements with the definition used in regulatory reportings, outstanding balances with some counterparties were reclassified from "Loans and advances to credit institutions" to "Loans and advances to customers";
- securities transactions, previously recognised at trade date, are now recognised at settlement date. This new representation of securities converges with rules applied for liquidity ratios.

The impacts of these changes on the balance sheet, the profit and loss account and on the statement of net income and changes in assets and liabilities recognised directly in equity are presented in note 2.a.

Then, as of 1 January 2018, the BNP Paribas Group has applied the new accounting standards IFRS 9 and IFRS 15:

- financial instruments held by non-insurance entities have been classified and measured in accordance with IFRS 9 "Financial instruments";
- IFRS 15 "Revenue from Contracts with Customers" has been applied without any significant change to the balance sheet.

The impacts of the IFRS 9 and IFRS 15 first time adoption are presented in note 2.b.

2.a IMPACTS OF PRESENTATION CHANGES AND OF THE SECURITIES ACCOUNTING AT SETTLEMENT DATE

➤ BALANCE SHEET

In millions of euros	31 December 2017 *IAS 39 former presentation*	Reclassification of financial instruments of insurance entities (a)	Re-labelling of financial instruments items	Other reclassifications	Effects of securities transactions previously recognised at trade date (g)	31 December 2017 *IAS 39 revised presentation*
ASSETS						
Cash and balances at central banks	**178,446**					**178,446**
Financial instruments at fair value through profit or loss						
Securities	**119,452**		470(b)		3,042	**122,964**
Loan and repurchase agreements	**143,558**		224(b)		206	**143,988**
Instruments designated as at fair value through profit or loss	**96,932**	(96,238)	(694)(b)			
Derivative financial instruments	**230,230**	(333)				**229,897**
Derivatives used for hedging purposes	**13,756**	(33)				**13,723**
Available-for-sale financial assets	**231,975**	(114,166)	(117,809)(c)			
Financial assets at fair value through equity						
Debt securities			110,881(c)			**110,881**
Equity securities			6,928(c)			**6,928**
Financial assets at amortised cost						
Loans and advances to credit institutions	**45,670**	(1,134)	(378)(d)	(23,753)(f)		**20,405**
Loans and advances to customers	**727,675**	(1,976)	(14,439)(d)	23,753(f)		**735,013**
Debt securities			15,378(d)			**15,378**
Remeasurement adjustment on interest-rate risk hedged portfolios	**3,064**					**3,064**
Held-to-maturity financial assets	**4,792**	(4,231)	(561)(d)			
Financial investments of insurance activities		227,712				**227,712**
Current and deferred tax assets	**6,568**					**6,568**
Accrued income and other assets	**107,211**	(3,002)			(11,334)	**92,875**
Equity-method investments	**6,812**	(386)				**6,426**
Property, plant and equipment and investment property	**31,213**	(6,213)				**25,000**
Intangible assets	**3,327**					**3,327**
Goodwill	**9,571**					**9,571**
TOTAL ASSETS	**1,960,252**	**-**	**-**	**-**	**(8,086)**	**1,952,166**
LIABILITIES						
Deposit from central banks	**1,471**					**1,471**
Financial instruments at fair value through profit or loss						
Securities	**69,313**				(2,226)	**67,087**
Deposits and repurchase agreements	**172,147**		2,498(b)			**174,645**
Instruments designated as at fair value through profit or loss	**53,441**		(53,441)(b)			
Issued debt securities			50,943(b)		(453)	**50,490**
Derivative financial instruments	**228,019**	(375)				**227,644**
Derivatives used for hedging purposes	**15,682**					**15,682**
Financial liabilities at amortised cost						
Deposits from credit institutions	**76,503**					**76,503**
Deposits from customers	**766,890**	(5,949)				**760,941**
Debt securities	**148,156**					**148,156**
Subordinated debt	**15,951**					**15,951**
Remeasurement adjustment on interest-rate risk portfolios	**2,372**					**2,372**
Current and deferred tax liabilities	**2,466**					**2,466**
Accrued expenses and other liabilities	**86,135**	(734)			(5,407)	**79,994**
Technical reserves and other insurance liabilities	**203,436**	7,058				**210,494**
Provisions for contingencies and charges	**11,061**					**11,061**
TOTAL LIABILITIES	**1,853,043**	**-**	**-**	**-**	**(8,086)**	**1,844,957**
EQUITY						
Share capital, additional paid-in capital and retained earnings	***91,094***		*(68)(e)*			***91,026***
Net income for the period attributable to shareholders	***7,759***					***7,759***
Total capital, retained earnings and net income for the period attributable to shareholders	**98,853**	**-**	**(68)**	**-**	**-**	**98,785**
Changes in assets and liabilities recognized directly in equity that will not be reclassified to profit or loss			68(e)			**68**
Changes in assets and liabilities recognized directly in equity that may be reclassified to profit or loss	**3,130**					**3,130**
SHAREHOLDERS' EQUITY	**101,983**	**-**	**-**	**-**	**-**	**101,983**
Retained earnings and net income for the period attributable to minority interests	**5,352**		30(e)			**5,382**
Changes in assets and liabilities recognized directly in equity that will not be reclassified to profit or loss			(30)(e)			**(30)**
Changes in assets and liabilities recognized directly in equity that may be reclassified to profit or loss	**(126)**					**(126)**
Total minority interests	**5,226**	**-**	**-**	**-**	**-**	**5,226**
TOTAL EQUITY	**107,209**	**-**	**-**	**-**	**-**	**107,209**
TOTAL LIABILITIES AND EQUITY	**1,960,252**	**-**	**-**	**-**	**(8,086)**	**1,952,166**

The balance sheet as at 31 December 2017 has undergone the following presentation changes:

(a) Financial instruments of the Group's insurance entities continue to be recognised and presented in accordance with IAS 39. On the asset side, they amount to EUR 228 billion and are classified in "Financial investments of insurance activities". These assets were mainly presented previously within "Available-for-sale financial assets" (EUR 114 billion) and within "Instruments designated as at fair value through profit or loss" (EUR 96 billion). The amount of financial liabilities reclassified is less material.

The Group renamed balance sheet item headings and details in this table the re-labelling from former headings and to new headings:

(b) "Instruments designated as at fair value through profit or loss", previously presented on specific asset and liability lines, have been broken down by type of instruments within "Financial instruments at fair value through profit or loss". On the liability side of the balance sheet, EUR 53 billion were split between EUR 51 billion of "Debt securities" and EUR 2 billion of "Deposits and repurchase agreements".

(c) "Available-for-sale financial assets" were re-labelled into "Financial assets at fair value through equity".

(d) "Held-to-maturity financial assets" and securities previously included in "Loans and advances to customers" and "Loans and advances to credit institutions" were grouped into the "Debt securities" sub-section of "Financial assets at amortised cost".

(e) Remeasurement gains (losses) related to post-employment benefit plans were presented separately within the new heading "Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss".

(f) In order to align the definition of "credit institutions" in the financial statements and in the FINREP regulatory reports, some counterparties were reclassified from "Loans and advances to credit institutions" to "Loans and advances to customers" for an amount of EUR 24 billion.

Moreover, the settlement date accounting of securities **(g)** led to a decrease in the total balance sheet of EUR 8 billion (mainly due to a EUR 11 billion decrease in "Accrued income and other assets").

PROFIT AND LOSS ACCOUNT

In millions of euros	Year ended 31 Dec. 2017 *IAS 39 former presentation*	Reclassification of income and expense from insurance activities	Re-labelling of financial instruments item headings	Reclassification of interest income and expense on trading instruments	Year ended 31 Dec. 2017 *IAS 39 revised presentation*
Interest income	40,785	(3,485)		(3,734)	33,566
Interest expense	(19,011)	2,995		3,641	(12,375)
Commission income	13,231	(288)			12,943
Commission expense	(5,777)	2,264			(3,513)
Net gains on financial instruments at fair value through profit or loss	5,733	(480)		93	5,346
Net gains on available-for-sale financial assets and other financial assets not measured at fair value	2,338	(572)	(1,766)		
of which net gains on available-for-sale financial instruments	*2,283*	*(572)*	*(1,711)*		
of which net gains on loans and receivables and held-to-maturity financial assets	*55*		*(55)*		
Net gains on financial instruments at fair value through equity			1,711		1,711
Net gains on derecognised amortised-cost financial assets			55		55
Net income from insurance activities		3,813			3,813
Income from other activities	42,041	(30,344)			11,697
Expense on other activities	(36,179)	26,097			(10,082)
REVENUES	**43,161**	**-**	**-**	**-**	**43,161**
Salary and employee benefit expense	(16,496)				(16,496)
Other operating expenses	(11,729)				(11,729)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(1,719)				(1,719)
GROSS OPERATING INCOME	**13,217**	**-**	**-**	**-**	**13,217**
Cost of risk	(2,907)				(2,907)
OPERATING INCOME	**10,310**	**-**	**-**	**-**	**10,310**
Share of earnings of equity-method entities	713				713
Net gain on non-current assets	488				488
Goodwill	(201)				(201)
PRE-TAX INCOME	**11,310**	**-**	**-**	**-**	**11,310**
Corporate income tax	(3,103)				(3,103)
NET INCOME	**8,207**	**-**	**-**	**-**	**8,207**
Net income attributable to minority interests	448				448
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS	**7,759**	**-**	**-**	**-**	**7,759**

Income and expense from insurance activities have been reclassified into "Net income from insurance activities", which amounts to EUR 3,813 million, thus including:

- gross written premiums and changes in unearned premiums from insurance contracts and investment contracts with discretionary participating features according to IFRS 4;
- investments income, net of expense;
- amortisation of deferred acquisition costs;
- claims and benefits expenses;

- net result from reinsurance ceded.

Other income and expense amounts related to insurance entities are grouped, depending on their nature, with amounts presented on other profit or loss headings.

Moreover, interest income and expense from trading instruments, previously presented under "Interest income/expense", are now presented within "Net gain on financial instruments at fair value through profit or loss" (net amount of EUR 93 million for 2017).

STATEMENT OF NET INCOME AND CHANGES IN ASSETS AND LIABILITIES RECOGNISED DIRECTLY IN EQUITY

In millions of euros	Year ended 31 Dec. 2017 *IAS 39 former presentation*	Reclassification of changes in value of investments of insurance activities	Re-labelling of financial instruments item headings	Year ended 31 Dec. 2017 *IAS 39 revised presentation*
Net income for the period	**8,207**	-	-	**8,207**
Changes in assets and liabilities recognised directly in equity	**(3,019)**	-	-	**(3,019)**
Items that are or may be reclassified to profit or loss	**(3,171)**	-	-	**(3,171)**
Changes in exchange rate items	(2,589)			(2,589)
Changes in fair value of financial assets at fair value through equity				
Changes in fair value recognised in equity			679	679
Changes in fair value reclassified to net income			(837)	(837)
Changes in fair value of available-for-sale financial assets, including those reclassified as loans and receivables				
Changes in fair value recognised in equity	436	243	(679)	
Changes in fair value reclassified to net income	(862)	25	837	
Changes in fair value of investments of insurance activities				
Changes in fair value recognised in equity		(243)		(243)
Changes in fair value reclassified to net income		(25)		(25)
Changes in fair value of hedging instruments				
Changes in fair value recognised in equity	(237)			(237)
Changes in fair value reclassified to net income	4			4
Income tax	426			426
Changes in equity-method investments	(349)			(349)
Items that will not be reclassified to profit or loss	**152**	-	-	**152**
Remeasurement gains (losses) related to post-employment benefit plans	177			177
Income tax	(25)			(25)
TOTAL	**5,188**	-	-	**5,188**
Attributable to equity shareholders	4,956			4,956
Attributable to minority interests	232			232

2.b IMPACTS OF THE ADOPTION OF IFRS 9 AND IFRS 15

➤ SYNTHESIS OF IFRS 9 AND IFRS 15 FIRST TIME ADOPTION IMPACTS ON THE BALANCE SHEET AS AT 1 JANUARY 2018

In millions of euros	31 December 2017 *IAS 39 revised presentation*	Impacts of the IFRS 9 adoption			Impacts of the IFRS 15 adoption	1 January 2018 *IFRS 9 & IFRS 15*
		Reclassi-fications	Remeasurements			
			Phase 1	Phase 2		
ASSETS						
Cash and balances at central banks	178,446			(13)		**178,433**
Financial instruments at fair value through profit or loss						
Securities	122,964	7,353	9			**130,326**
Loans and repurchase agreements	143,988	980	(20)			**144,948**
Derivative financial instruments	229,897	(1)				**229,896**
Derivatives used for hedging purposes	13,723	(2)				**13,721**
Financial assets at fair value through equity						
Debt securities	110,881	(57,008)	91	(22)		**53,942**
Equity securities	6,928	(4,598)				**2,330**
Financial assets at amortised cost						
Loans and advances to credit institutions	20,405			(49)		**20,356**
Loans and advances to customers	735,013	(980)		(2,857)		**731,176**
Debt securities	15,378	54,256	(172)	(36)		**69,426**
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064					**3,064**
Financial investments of insurance activities	227,712					**227,712**
Current and deferred tax assets	6,568		30	754	16	**7,368**
Accrued income and other assets	92,875			(12)	98	**92,961**
Equity-method investments	6,426		(62)	(143)		**6,221**
Property, plant and equipment and investment property	25,000					**25,000**
Intangible assets	3,327					**3,327**
Goodwill	9,571					**9,571**
TOTAL ASSETS	**1,952,166**	**-**	**(124)**	**(2,378)**	**114**	**1,949,778**
LIABILITIES						
Deposits from central banks	1,471					**1,471**
Financial instruments at fair value through profit or loss						
Securities	67,087					**67,087**
Deposits and repurchase agreements	174,645					**174,645**
Issued debt securities	50,490					**50,490**
Derivative financial instruments	227,644					**227,644**
Derivatives used for hedging purposes	15,682					**15,682**
Financial liabilities at amortised cost						
Deposits from credit institutions	76,503					**76,503**
Deposits from customers	760,941					**760,941**
Debt securities	148,156					**148,156**
Subordinated debt	15,951					**15,951**
Remeasurement adjustment on interest-rate risk hedged portfolios	2,372					**2,372**
Current and deferred tax liabilities	2,466		5	(245)	8	**2,234**
Accrued income and other assets	79,994				478	**80,472**
Technical reserves and other insurance liabilities	210,494					**210,494**
Provisions for contingencies and charges	11,061			371	(348)	**11,084**
TOTAL LIABILITIES	**1,844,957**	**-**	**5**	**126**	**138**	**1,845,226**
EQUITY						
Share capital, additional paid-in capital and retained earnings	*91,026*	*1,308*	*(12)*	*(2,418)*	*(24)*	***89,880***
Net income for the period attributable to shareholders	*7,759*					***7,759***
Total capital, retained earnings and net income for the period attributable to shareholders	**98,785**	**1,308**	**(12)**	**(2,418)**	**(24)**	**97,639**
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	68	238				**306**
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	3,130	(1,546)	(103)			**1,481**
Shareholders' equity	**101,983**	**-**	**(115)**	**(2,418)**	**(24)**	**99,426**
Retained earnings and net income for the period attributable to minority interests	5,382	18	1	(86)		**5,315**
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	(30)	3				**(27)**
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	(126)	(21)	(15)			**(162)**
Minority interests	**5,226**	**-**	**(14)**	**(86)**	**-**	**5,126**
TOTAL EQUITY	**107,209**	**-**	**(129)**	**(2,504)**	**(24)**	**104,552**
TOTAL LIABILITIES AND EQUITY	**1,952,166**	**-**	**(124)**	**(2,378)**	**114**	**1,949,778**

The application of IFRS 15 mainly consisted in reviewing the accounting treatment applied to commission income and income from other activities. As far as the latter are concerned, the post-tax impact of IFRS 15 adoption on shareholders' equity as at 1 January 2018 amounts to EUR -24 million. This impact is generated by:

- a change in the timing of recognition of revenues derived from maintenance services offered by operating lease entities, previously recognised on a linear basis and now recognised to the extent of the costs incurred;
- a change in the timing of recognition of revenues derived from real estate programmes, due to the land part of sale contracts in the future state of completion, when the control is transferred.

Income from these activities is recognised in the profit and loss account within "Income/expense from other activities".

➤ DETAIL OF THE IMPACTS OF IFRS 9 AND IFRS 15 ADOPTION ON THE BALANCE SHEET

		Reclassification phase 1							
		IAS 39 original categories							
		Available-for-sale financial assets at fair value through equity		Loans and receivables and Held-to-maturity financial assets at amortised cost					
In millions of euros	31 December 2017 IAS 39 *revised presentation*	Debt securities	Equity securities	Debt securities	Loans and receivables	Reclassification of debt remeasurement effect arising from the Group issuer risk	Other reclassifications	TOTAL	Balances after reclassification Phase 1
ASSETS									
Cash and balances at central banks	178,446							-	178,446
Financial instruments at fair value through profit or loss									
Securities	122,964	1,536(b)	4,598(c)	1,216(f)			3	7,353	130,317
Loans and repurchase agreements	143,988				980(f)			980	144,968
Derivative financial instruments	229,897						(1)	(1)	229,896
Derivatives uses for hedging purposes	13,723						(2)	(2)	13,721
Financial assets at fair value through equity									
Debt securities	110,881	(58,500)(a)(b)		1,492(e)				(57,008)	53,873
Equity securities	6,928		(4,598)(c)					(4,598)	2,330
Financial assets at amortised cost									
Loans and advances to credit institutions	20,405							-	20,405
Loans and advances to customers	735,013				(980)(f)			(980)	734,033
Debt securities	15,378	56,964(a)		(2,708)(e)(f)				54,256	69,634
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064							-	3,064
Financial investments of insurance activities	227,712							-	227,712
Current and deferred tax assets	6,568							-	6,568
Accrued income and other assets	92,875							-	92,875
Equity-method investments	6,426							-	6,426
Property, plant and equipment and investment property	25,000							-	25,000
Intangible assets	3,327							-	3,327
Goodwill	9,571							-	9,571
TOTAL ASSETS	**1,952,166**	-	-	-	-	-	-	-	**1,952,166**
TOTAL LIABILITIES	**1,844,957**	-	-	-	-	-	-	-	**1,844,957**
of which current and deferred tax liabilities	2,466							-	2,466
of which accrued expenses and other liabilities	79,994							-	79,994
of which provisions for contingencies and charges	11,061							-	11,061
EQUITY									
Capital, retained earnings and net income for the period attributable to shareholders	98,785	46(b)	938(c)			323(g)	1	1,308	100,093
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	68		561(d)			(323)(g)		238	306
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	3,130	(46)	(1,499)(c)(d)				(1)	(1,546)	1,584
Shareholders' equity	**101,983**	-	-	-	-	-	-	-	**101,983**
Retained earnings and net income for the period attributable to minority interests	5,382	5(b)	14(c)			(1)(g)		18	5,400
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	(30)		2(d)			1(g)		3	(27)
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	(126)	(5)	(16)(c)(d)					(21)	(147)
Total minority interests	**5,226**	-	-	-	-	-	-	-	**5,226**
TOTAL EQUITY	**107,209**	-	-	-	-	-	-	-	**107,209**
TOTAL LIABILITIES AND EQUITY	**1,952,166**	-	-	-	-	-	-	-	**1,952,166**

In millions of euros	Balances after phase 1 reclassifications	Remeasurement - phase 1: From available-for-sale debt securities to amortised cost	From Loans and receivables to Financial assets at fair value through equity	From Loans and receivables to Financial instruments at fair value through profit or loss	Other adjustments	TOTAL	Total phase 1	Impairment adjustments phase 2	TOTAL IFRS 9 Impact	IFRS 15 Impact	1 January 2018
ASSETS											
Cash and balances at central banks	178,446					-	-	(13)	(13)		178,433
Financial instruments at fair value through profit or loss											
Securities	130,317			25(f)	(16)	9	7,362		7,362		130,326
Loans and repurchase agreements	144,968			(10)(f)	(10)	(20)	960		960		144,948
Derivative financial instruments	229,896					-	(1)		(1)		229,896
Derivatives uses for hedging purposes	13,721					-	(2)		(2)		13,721
Financial assets at fair value through equity											
Debt securities	53,873		84(e)		7	91	(56,917)	(22)	(56,939)		53,942
Equity securities	2,330					-	(4,598)		(4,598)		2,330
Financial assets at amortised cost											
Loans and advances to credit institutions	20,405					-	-	(49)	(49)		20,356
Loans and advances to customers	734,033					-	(980)	(2,857)	(3,837)		731,176
Debt securities	69,634	(170)(a)			(2)	(172)	54,084	(36)	54,048		69,426
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064					-	-				3,064
Financial investments of insurance activities	227,712					-	-				227,712
Current and deferred tax assets	6,568	42(a)	(25)(e)	(9)(f)	22	30	30	754	784	16	7,368
Accrued income and other assets	92,875					-	-	(12)	(12)	98	92,961
Equity-method investments	6,426				(62)(h)	(62)	(62)	(143)	(205)		6,221
Property, plant and equipment and investment property	25,000					-	-				25,000
Intangible assets	3,327					-	-				3,327
Goodwill	9,571					-	-				9,571
TOTAL ASSETS	**1,952,166**	**(128)**	**59**	**6**	**(61)**	**(124)**	**(124)**	**(2,378)**	**(2,502)**	**114**	**1,949,778**
TOTAL LIABILITIES	**1,844,957**				**5**	**5**	**5**	**126**	**131**	**138**	**1,845,226**
of which current and deferred tax liabilities	2,466				5	5	5	(245)	(240)	8	2,234
of which accrued expenses and other liabilities	79,994					-	-			478	80,472
of which provisions for contingencies and charges	11,061					-	-	371	371	(348)	11,084
EQUITY											
Capital, retained earnings and net income for the period attributable to shareholders	100,093			5(f)	(17)	(12)	1,296	(2,418)	(1,122)	(24)	97,639
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	306						238		238		306
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	1,584	(111)(a)	59(e)		(51)	(103)	(1,649)		(1,649)		1,481
Shareholders' equity	**101,983**	**(111)**	**59**	**5**	**(68)**	**(115)**	**(115)**	**(2,418)**	**(2,533)**	**(24)**	**99,426**
Retained earnings and net income for the period attributable to minority interests	5,400			1		1	19	(86)	(67)		5,315
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	(27)					-	3		3		(27)
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	(147)	(17)(a)			2	(15)	(36)		(36)		(162)
Total minority interests	**5,226**	**(17)**		**1**	**2**	**(14)**	**(14)**	**(86)**	**(100)**		**5,126**
TOTAL EQUITY	**107,209**	**(128)**	**59**	**6**	**(66)**	**(129)**	**(129)**	**(2,504)**	**(2,633)**	**(24)**	**104,552**
TOTAL LIABILITIES AND EQUITY	**1,952,166**	**(128)**	**59**	**6**	**(61)**	**(124)**	**(124)**	**(2,378)**	**(2,502)**	**114**	**1,949,778**

The adoption of IFRS 9 provisions related to the classification and measurement of financial instruments led to the following impacts as of 1 January 2018:

- Securities previously classified as available-for-sale financial assets recognised at fair value through equity:
  - **(a)** Treasury bills, Government bonds and other debt securities previously recognised as at fair value through equity for which the business model consists of collecting contractual cash flows have been classified at amortised cost for EUR 57 billion; their cumulated changes in value, which were included in equity as at 31 December 2017 were cancelled (EUR 170 million before tax, or EUR 111 million in equity attributable to shareholders). The analysis of the managing model of securities held by Group ALM Treasury led to a split of this portfolio into approximately equivalent in size "collect" and "collect and sell" business models.
  - **(b)** By way of exception, EUR 1.5 billion for which the contractual cash flows do not consist solely of payments relating to principal and interest on the principal are measured at fair value through profit and loss. Within shareholders' equity, this classification triggered the transfer of EUR 46 million (Group share) from "Changes in assets and liabilities recognised directly in equity" to "Retained earnings".
  - **(c)** Investments in equity instruments such as shares were classified as financial instruments at fair value through profit or loss for EUR 4.6 billion. This classification triggered the transfer of EUR 938 million net unrealised gain (Group share) from "Changes in assets and liabilities recognised directly in equity" to "Retained earnings".
  - **(d)** The option of recognising equity securities at fair value through equity was retained for EUR 2.3 billion. This classification triggered the transfer of EUR 561 million net unrealised gain (Group share) from "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss" to "Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss".
- Loans and receivables and assets held to maturity recognised at amortised cost:
  - **(e)** reclassification of debt securities previously included in "Loans and advances" into "Financial assets at fair value through equity" for EUR 1.5 billion, based on their "collect and sell" business model. A EUR 84 million difference (before tax) between the fair value of these securities and their previous net carrying amount was recognised in assets, and a EUR 59 million after tax (Group share) revaluation was recognised in "changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss".
  - **(f)** reclassification of loans and debt securities previously included in "Loans and advances" into "Financial instruments at fair value through profit or loss" for respectively EUR 1 billion and EUR 1.2 billion. It is notably the case for instruments for which the cash flow criterion is not met: instruments indexed on a benchmark rate presenting a modified time value, and securitization junior notes held. Non-significant fair value adjustments have been booked in retained earnings following this reclassification.

With respect to financial liabilities, the main change introduced by IFRS 9 relates to the recognition of changes in fair value attributable to changes in the credit risk of the liabilities designated as at fair value through profit or loss (fair value option), which are recognised on a separate line in shareholders' equity and no longer through profit or loss. Thus, EUR 323 million cumulated changes in value (Group share) were reclassified as of 1 January 2018 from "retained earnings" into "changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss" **(g)**.

The main "other adjustment" is related to the application of the IFRS 9 provisions on classification and measurement of financial instruments by equity-method entities **(h)**.

Reconciliation between IAS 39 and the IAS 37 impairment provisions and the IFRS 9 expected credit losses

The impact of the new impairment model defined by IFRS 9 is an increase in the impairment of financial instruments by EUR 3.3 billion before tax (a decrease in the value of "Loans and advances to customers" by EUR 2.9 billion and an increase in the amount of "Provisions for contingencies and charges" related to financing and guarantee commitments by EUR 0.4 billion). The impairment increase is mainly due to the introduction of EUR 1.7 billion in stage 1, for which the major portion of related assets were not subject to impairment under the IAS 39 model, as well as the consideration of prospective information such as asset sale scenarios, in particular for stage 3 assets.

In millions of euros	31 December 2017 *IAS 39*	From Loans and receivables to Financial instruments at fair value through profit or loss	From available-for-sale debt securities to amortised cost	From available-for-sale debt securities to assets at fair value through equity	From available-for-sale debt securities to assets at fair value through profit or loss	Change in impairment calculation method	Other impacts	1 January 2018 *IFRS 9*
Cash and balances at central banks						13		13
Financial instruments at fair value through profit or loss	89	128			31		(58)	190
Available-for-sale financial assets	146		(5)	(110)	(31)			-
Financial assets at fair value through equity				110		22	(1)	131
Financial assets at amortised cost								
Loans and advances to credit institutions	109					49	(12)	146
Loans and advances to customers	24,686	(128)				2,857	(5)	27,410
Debt securities			5			36	61	102
Other assets	63					12		75
Commitments and other items	906					371		1,277
TOTAL EXPECTED CREDIT LOSSES	**25,999**	**-**	**-**	**-**	**-**	**3,360**	**(15)**	**29,344**
of which collective impairment	3,421							
of which stage 1 impairment								1,678
of which stage 2 impairment								3,972
of which stage 3/specific impairment	22,578							23,694

➤ FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY UNDER IAS 39, RECLASSIFIED AT AMORTISED COST UNDER IFRS 9

IAS 39 accounting categories *In millions of euros*	IFRS 9 accounting categories	Carrying value at 31 December 2018	Fair value at 31 December 2018	Change in value which would have been recognised in equity during the year to 31 Dec. 2018
Available-for-sale financial assets	**Financial assets at amortised cost**			
	Debt securities	44,332	43,866	(599)

Note 3 NOTES TO THE PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2018

3.a NET INTEREST INCOME

The BNP Paribas Group includes in "interest and similar income" and "interest and similar expenses" all income and expense from financial instruments measured at amortised cost (interest, fees and transaction costs) and from financial instruments measured at fair value through equity. These amounts are calculated using the effective interest method.

These items also include the interest income and expense of non-trading financial instruments the characteristics of which do not allow for recognition at amortised cost or at fair value through equity, as well as of financial instruments that the Group has designated as at fair value through profit or loss. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under "Net gain on financial instruments at fair value through profit or loss".

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item. Similarly, interest income and expense arising from derivatives used to hedge transactions designated as at fair value through profit or loss is allocated to the same accounts as the interest income and expense relating to the underlying transactions.

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*			Year to 31 Dec. 2017 *IAS 39*		
	Income	Expense	Net	Income	Expense	Net
Financial instruments at amortised cost	**29,115**	**(10,482)**	**18,633**	**26,923**	**(8,498)**	**18,425**
Deposits, loans and borrowings	26,957	(8,069)	18,888	25,601	(6,502)	19,099
Repurchase agreements	152	(59)	93	132	(62)	70
Finance leases	1,312	(73)	1,239	1,157	(62)	1,095
Debt securities	694		694	33		33
Issued debt securities and subordinated debt		(2,281)	(2,281)		(1,872)	(1,872)
Financial instruments at fair value through equity	**965**	**-**	**965**	**1,331**	**-**	**1,331**
Debt securities	965		965	1,331		1,331
Financial instruments at fair value through profit or loss (Trading securities excluded)	**42**	**(442)**	**(400)**	**64**	**(317)**	**(253)**
Cash flow hedge instruments	**2,941**	**(1,369)**	**1,572**	**3,500**	**(2,004)**	**1,496**
Interest rate portfolio hedge instruments	**2,660**	**(2,368)**	**292**	**1,748**	**(1,556)**	**192**
TOTAL INTEREST INCOME/(EXPENSE)	**35,723**	**(14,661)**	**21,062**	**33,566**	**(12,375)**	**21,191**

Interest on financial instruments at amortised cost includes, for the year ended 31 December 2017, interest income and expenses on held-to-maturity financial assets, customer and interbank items and debt issued by the Group (excluding issues that the Group has designated as at fair value through profit or loss).

Interest on financial instruments at fair value through equity corresponds, for the year ended 31 December 2017, to interest on debt securities available for sale, of which about half of the portfolio (EUR 57 billion) was reclassified at amortised cost as of 1 January 2018. This reclassification mainly explains the variation of interest on debt securities within interest on financial instruments at amortised cost between the two periods.

Interest on financial instruments at fair value through profit or loss corresponds, for the year ended 31 December 2017, to interest income and expenses on financial instruments that the Group designated as at fair value through profit or loss. For the year ended 31 December 2018, this aggregate also includes interest on non-trading financial instruments whose characteristics prevent their classification at amortised cost or at fair value through equity.

The effective interest rate applied on the second series of Targeted Longer-Term Refinancing Operations (TLTRO II) conducted by the European Central Bank takes into account a 40 bp interest incentive.

Interest income on individually impaired loans amounted to EUR 454 million for the year ended 31 December 2018, compared to EUR 547 million for the year ended 31 December 2017.

3.b COMMISSION INCOME AND EXPENSE

In millions of euros	Year to 31 Dec. 2018 IFRS 9 & IFRS 15			Year to 31 Dec. 2017 IAS 39		
	Income	Expense	Net	Income	Expense	Net
Customer transactions	3,901	(1,157)	2,744	3,589	(908)	2,681
Securities and derivatives transactions	1,729	(1,187)	542	2,078	(1,183)	895
Financing and guarantee commitments	1,102	(44)	1,058	1,079	(39)	1,040
Asset management and other services	4,723	(246)	4,477	4,479	(204)	4,275
Others	1,470	(1,084)	386	1,718	(1,179)	539
COMMISSION INCOME/EXPENSE	**12,925**	**(3,718)**	**9,207**	**12,943**	**(3,513)**	**9,430**
of which net commission income related to trust and similar activities through which the Group holds or invests assets on behalf of clients, trusts, pension and personal risk funds or other institutions	*2,834*	*(261)*	*2,573*	*2,743*	*(203)*	*2,540*
of which commission income and expense on financial instruments not measured at fair value through profit or loss	*3,005*	*(427)*	*2,578*	*2,670*	*(343)*	*2,327*

3.c NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Net gain on financial instruments measured at fair value through profit or loss includes all profit and loss items relating to financial instruments managed in the trading book, non-trading equity instruments that the Group did not choose to measure at fair value through equity, financial instruments that the Group has designated as at fair value through profit or loss, as well as debt instruments whose cash flows are not solely repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets.

These income items include dividends on these instruments and exclude interest income and expense from financial instruments designated as at fair value through profit or loss and instruments whose cash flows are not only repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets, which are presented in "interest margin" (note 3.a).

In millions of euros	Year to 31 Dec. 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017 IAS 39
Trading book	**(1,470)**	**7,045**
Interest rate and credit instruments	1,975	1,112
Equity financial instruments	(2,926)	4,961
Foreign exchange financial instruments	1,432	823
Loans and repurchase agreements	(1,126)	(509)
Other financial instruments	(825)	658
Financial instruments designated as at fair value through profit or loss	**6,756**	**(1,781)**
of which debt remeasurement effect arising from BNP Paribas Group issuer risk(1)		*(61)*
Other financial instruments at fair value through profit or loss	**533**	
Debt instruments	(38)	
Equity instruments	571	
Impact of hedge accounting	**(11)**	**82**
Fair value hedging derivatives	134	62
Hedged items in fair value hedge	(145)	20
NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS	**5,808**	**5,346**

(1) *Debt remeasurement effect arising from BNP Paribas Group issuer risk (Own Credit Adjustment – OCA) is recognised as of 1 January 2018 in equity, within "Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss".*

Gains and losses on financial instruments designated as at fair value through profit or loss are mainly related to instruments whose changes in value may be compensated by changes in the value of economic hedging trading book instruments.

Net gains on the trading book in 2018 and 2017 include a non-material amount related to the ineffective portion of cash flow hedges.

Potential sources of ineffectiveness can be the differences between hedging instruments and hedged items, notably generated by mismatches in the terms of hedged and hedging instruments, such as the frequency and timing of interest rates resetting, the frequency of payment and the discounting factors, or when hedging derivatives have a non-zero fair value at inception date of the hedging relationship. Credit valuation adjustments applied to hedging derivatives are also sources of ineffectiveness.

Cumulated changes in fair value related to discontinued cash flow hedge relationships, previously recognised in equity and included in the 2018 profit and loss account are not material, whether the hedged item ceased to exist or not.

3.d NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY AND ON FINANCIAL ASSETS AT AMORTISED COST

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Net gain on debt instruments at fair value through equity	**213**	**325**
Debt securities(1)	213	325
Net gain on equity instruments at fair value through equity	**102**	**1,386**
Dividend income	102	373
Additions to impairment provisions		(268)
Net disposal gains		1,281
NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY	**315**	**1,711**
Net gain on financial instruments at amortised cost	**(5)**	**55**
Loans and receivables	(5)	55
Debt securities(1)	-	-
NET GAIN ON FINANCIAL ASSETS AT AMORTISED COST	**(5)**	**55**

(1) *Interest income from debt instruments is included in "Net interest income" (note 3.a), and impairment losses related to potential issuer default are included in "Cost of risk" (note 3.h).*

For the year ended 31 December 2018, net gain on financial instruments at fair value through equity includes gains and losses from disposals of debt securities at fair value through equity and dividends on equity securities for which the Group applied the fair value through equity option; gains and losses on the latter are no longer recognised in profit and loss, but directly in equity.

For the year ended 31 December 2017, additions to impairment provisions and gains and losses from disposals of equity securities were those recognised under IAS 39 on available-for-sale securities.

Unrealised gains and losses on debt securities previously recorded under "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss" and included in the pre-tax income, amount to a gain of EUR 110 million for the year ended 31 December 2018.

3.e NET INCOME FROM INSURANCE ACTIVITIES

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Premiums earned	27,026	24,964
Net gain from investment contracts with discretionary participation feature and other services	29	19
Net income/(expense) from financial investments	(2,133)	9,031
Technical charges related to contracts	(18,487)	(28,130)
Net charges from ceded reinsurance	(267)	(57)
Policy benefit expenses	(2,104)	(2,014)
NET INCOME FROM INSURANCE ACTIVITIES	**4,064**	**3,813**

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Net gain on available-for-sale financial assets	3,501	3,656
Interest income and dividends	*3,109*	*3,299*
Additions to impairment provisions	*(33)*	*(39)*
Net disposal gains	*425*	*396*
Net gain on financial instruments at fair value through profit or loss	(6,002)	4,998
Net gain on financial instruments at amortised cost	213	328
Investment property income/expense	155	135
Share of earnings of equity-method investments	7	-
Other income/expense	(7)	(86)
NET INCOME/(EXPENSE) FROM FINANCIAL INVESTMENTS	**(2,133)**	**9,031**

3.f NET INCOME FROM OTHER ACTIVITIES

	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*			Year to 31 Dec. 2017 *IAS 39*		
In millions of euros	Income	Expense	Net	Income	Expense	Net
Net income from investment property	165	(69)	96	126	(41)	85
Net income from assets held under operating leases	9,845	(8,406)	1,439	8,823	(7,472)	1,351
Net income from property development activities	898	(676)	222	976	(827)	149
Other net income	1,416	(1,108)	308	1,772	(1,742)	30
TOTAL NET INCOME FROM OTHER ACTIVITIES	**12,324**	**(10,259)**	**2,065**	**11,697**	**(10,082)**	**1,615**

3.g OTHER OPERATING EXPENSES

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
External services and other operating expenses	(10,498)	(10,017)
Taxes and contributions(1)	(1,792)	(1,712)
TOTAL OTHER OPERATING EXPENSES	**(12,290)**	**(11,729)**

(1) *Contributions to European resolution funds, including exceptional contributions, amount to EUR 607 million for the year ended 31 December 2018 compared with EUR 502 million for the year ended 31 December 2017.*

3.h COST OF RISK

The Group general model for impairment described in note 1.e.5 used by the Group relies on the following two steps:

- assessing whether there has been a significant increase in credit risk since initial recognition; and
- measuring impairment allowance as either 12-month expected credit losses or lifetime expected credit losses.

Both steps shall rely on forward looking information.

Significant increase in credit risk

The assessment of increase in credit risk is done at instrument level based on indicators and thresholds that vary depending on the nature of the exposure and the type of the counterparty.

The internal credit rating methodology used by the Group is described in chapter 5, Pillar 3 of the Registration document (section 5.4 *Credit risk*).

Wholesale (Corporates/Financial institutions/ Sovereigns) and bonds

The indicator used for assessing increase in credit risk is the internal counterparty rating of the obligor of the facility.

The deterioration in credit quality is considered significant, and the facility is therefore placed in stage 2, if the difference between the counterparty rating at origination and the one as at the reporting date is equal or superior to 3 notches (for instance, a downgrade from 4- to 5-).

The low risk expedient permitted by IFRS 9 (i.e. whereby bonds with an investment grade rating at reporting date are considered as stage 1, and bonds with a non-investment grade rating at reporting date are considered as stage 2) is used only for debt securities for which no ratings are available at acquisition date.

SME Corporates facilities and Retail

As far as SME Corporates exposures are concerned, the indicator used for assessing increase in credit risk is also the internal counterparty rating of the obligor of the facility. Due to a higher volatility in the rating system applied, deterioration is considered significant, and the facility is therefore placed in stage 2, if the difference between the counterparty rating at origination and the one as at the reporting date is equal or superior to 6 notches.

For retail exposures, two alternative risk indicators of increase in credit risk can be taken into consideration:

- probability of default (PD): Changes in the 1-year probability of default are considered as a reasonable approximation of changes in the lifetime probability of default. Deterioration in credit quality is considered significant, and the facility is therefore placed in stage 2, if the ratio (1-year PD at the reporting date/1 year PD at origination) is higher than 4;
- existence of a past due within the last 12 months: in the consumer credit specialised business, the existence of a past due that has occurred within the last 12 months, even if regularised since, is considered as a significant deterioration in credit risk and the facility is therefore placed into stage 2.

Furthermore, for all portfolios (except consumer credit specialised business):

- the facility is assumed to be in stage 1 when its rating is better than or equal to 4- (or its 1-year PD is below or equal to 0.25%) at reporting date, since changes in PD related to downgrades in this zone are less material, and therefore not considered as "significant";
- when the rating is worse than or equal to 9+ (or the 1 year PD is above 10%) at reporting date considering the Group's practice in terms of credit origination, it is considered as significantly deteriorated and therefore placed into stage 2 (as long as the facility is not credit-impaired).

As a backstop, when an asset becomes 30 days past due, the credit risk is deemed to have increased significantly since initial recognition and the asset is therefore placed into stage 2.

Forward Looking Information

The Group considers forward-looking information both when assessing significant increase in credit risk and when measuring Expected Credit Losses (ECL).

Regarding the assessment of significant increase in credit risk, beyond the rules based on the comparison of risk parameters between initial recognition and reporting date (see "significant increase in credit risk" section), the determination of significant increase in credit risk is supplemented by the consideration of more systemic forward looking factors (such as macro-economic, sectorial or geographical risk drivers) that could increase the credit risk of some exposures. These factors can lead to tighten the transfer criteria into stage 2, resulting in an increase of ECL amounts for exposures deemed vulnerable to these risk drivers.

Regarding the measurement of expected credit losses, the Group has made the choice to use 3 macroeconomic scenarios by geographic area covering a wide range of potential future economic conditions:

- a baseline scenario, consistent with the scenario used for budgeting;
- an adverse scenario, corresponding to the scenario used quarterly in Group stress tests;
- a favourable scenario, allowing to capture situations where the economy performs better than anticipated.

The link between the macro-economic scenarios and the ECL measurement is mainly achieved through a modelling of internal rating (or risk parameter) migration matrices. The probabilities of default determined according to these scenarios are used to measure expected credit losses in each of these situations.

The weighting of the expected credit losses under each scenario is performed as follows:

- 50% for the baseline scenario;
- the weighting of the two alternative scenarios is computed using a relationship with the position in the credit cycle. In this approach, the adverse scenario receives a higher weight when the economy is in strong expansion than in lower growth period in anticipation of a potential downturn of the economy.

In addition, when appropriate, the ECL measurement can take into account scenarios of sale of the assets.

Macro-economic scenarios

The three macroeconomic scenarios correspond to:

- a baseline scenario which describes the most likely path of the economy over the projection horizon. This scenario is updated on a quarterly basis. It is designed by Group Economic Research in collaboration with various experts within the Group. Projections are provided for key markets of the Group, through main macro-economic variables (GDP and its components, unemployment rate, consumer prices, interest rates, foreign exchange rates, oil prices, real estate prices…) which are drivers for risk parameter models used downstream in the credit stress testing process;
- an adverse scenario which describes the impact of the materialisation of some of the risks weighing on the baseline scenario, resulting in a much less favourable economic path. The starting point is a shock on GDP. This shock on GDP is applied with variable magnitudes, but simultaneously among economies when the crisis considered is a global contemporaneous crisis. These assumptions are broadly consistent with those proposed by the regulators. Other variables (unemployment, inflation, interest rate) are deducted on the basis of econometric relationships and expert judgment;
- a favourable scenario which reflects the impact of the materialisation of some of the upside risks for the economy, resulting in a much more favourable economic path. To achieve an unbiased estimation of provisions, the favourable scenario is designed in such a way that the probability of the shock on GDP growth (on average over the cycle) is equal to the probability of the corresponding shock in the adverse scenario. The magnitude of favourable GDP shocks generally corresponds to 80%-95% of the magnitude of adverse GDP shocks. Other variables (unemployment, inflation, interest rate) are deducted in the same way as in the adverse scenario.

➤ COST OF CREDIT RISK FOR THE PERIOD

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Net allowances to impairment	(2,490)	(2,852)
Recoveries on loans and receivables previously written off	483	537
Losses on irrecoverable loans	(757)	(592)
TOTAL COST OF RISK FOR THE PERIOD	**(2,764)**	**(2,907)**

➤ COST OF RISK FOR THE PERIOD BY ACCOUNTING CATEGORIES AND ASSET TYPE

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Cash and balances at central banks	(5)	-
Financial instruments at fair value through profit or loss	(32)	13
Financial assets at fair value through equity(1)	(12)	(101)
Financial assets at amortised cost	(2,690)	(2,792)
Loans and receivables(2)	*(2,648)*	*(2,852)*
Debt securities(3)	*(42)*	*60*
Other assets	(5)	(9)
Financing and guarantee commitments and other items	(20)	(18)
TOTAL COST OF RISK FOR THE PERIOD	**(2,764)**	**(2,907)**
Cost of risk on unimpaired assets and commitments	*195*	*182*
of which stage 1	*(155)*	
of which stage 2	*350*	
Cost of risk on impaired assets and commitments – stage 3	*(2,959)*	*(3,089)*

(1) 2017 figures represent the cost of risk related to fixed-income available-for-sale financial assets.
(2) 2017 figures represent the cost of risk related to loans and receivables to credit institutions and customers.
(3) 2017 figures represent the cost of risk related to securities classified in loans and receivables and to held-to-maturity financial assets.

CREDIT RISK IMPAIRMENT

Change in impairment by accounting category and asset type during the period

In millions of euros	1 January 2018 *IFRS 9 & IFRS 15*	Net allowance to impairment	Impairment provisions used	Effect of exchange rate movements and other	31 December 2018 *IFRS 9 & IFRS 15*
Assets impairment					
Cash and balances at central banks	13	5	-	(3)	15
Financial instruments at fair value through profit or loss	190	(41)	-	42	191
Impairment of assets at fair value through equity	131	12	(1)	(2)	140
Financial assets at amotised cost	27,658	2,527	(5,637)	(186)	24,362
Loans and receivables	*27,556*	*2,489*	*(5,626)*	*(187)*	*24,232*
Debt securities	*102*	*38*	*(11)*	*1*	*130*
Other assets	75	4	(1)	2	80
Total impairment of financial assets	**28,067**	**2,507**	**(5,639)**	**(147)**	**24,788**
of which stage 1	*1,477*	*145*	*(2)*	*(39)*	*1,581*
of which stage 2	*3,707*	*(291)*	*(12)*	*(79)*	*3,325*
of which stage 3	*22,883*	*2,653*	*(5,625)*	*(29)*	*19,882*
Provisions recognised as liabilities					
Provisions for commitments	763	(9)	(66)	87	775
Other provisions	514	(8)	(50)	(39)	417
Total provisions recognised for credit commitments	**1,277**	**(17)**	**(116)**	**48**	**1,192**
of which stage 1	*201*	*10*	*(1)*	*27*	*237*
of which stage 2	*265*	*(49)*	*-*	*4*	*220*
of which stage 3	*811*	*22*	*(115)*	*17*	*735*
TOTAL IMPAIRMENT AND PROVISIONS	**29,344**	**2,490**	**(5,755)**	**(99)**	**25,980**

Change in impairment of amortised cost financial assets during the period

In millions of euros *IFRS 9 & IFRS 15*	Impairment on assets subject to 12-month Expected Credit Losses (Stage 1)	Impairment on assets subject to lifetime Expected Credit Losses (Stage 2)	Impairment on doubtful assets (Stage 3)	Total
AT 1 JANUARY 2018	**1,445**	**3,691**	**22,522**	**27,658**
Net allowance to impairment	**142**	**(300)**	**2,685**	**2,527**
Financial assets purchased or originated during the period	578	348		926
Financial assets derecognised during the period(1)	(179)	(278)	(334)	(791)
Transfer to stage 2	(133)	1,687	(415)	1,139
Transfer to stage 3	(68)	(676)	2,104	1,360
Transfer to stage 1	111	(667)	(98)	(654)
Other allowances/reversals without stage transfer(2)	(167)	(714)	1,428	547
Impairment provisions used	**(2)**	**(12)**	**(5,623)**	**(5,637)**
Effect of exchange rate movements and other items	**(36)**	**(77)**	**(73)**	**(186)**
AT 31 DECEMBER 2018	**1,549**	**3,302**	**19,511**	**24,362**

(1) including disposals.
(2) including amortisation.

3.i CORPORATE INCOME TAX

Reconciliation of the effective tax expense to the theoretical tax expense at standard tax rate in France	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15* in millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15* tax rate	Year to 31 Dec. 2017 *IAS 39* in millions of euros	Year to 31 Dec. 2017 *IAS 39* tax rate
Corporate income tax expense on pre-tax income at standard tax rate in France[(1)]	**(3,280)**	**34.4%**	**(3,718)**	**34.4%**
Impact of differently taxed foreign profits	456	-4.8%	333	-3.1%
Impact of changes in tax rates	-	-	(486)	4.5%
Impact of the securities taxation	362	-3.8%	427	-4.0%
Impact of the non-deductibility of taxes and bank levies[(2)]	(209)	2.2%	(196)	1.8%
Impact of previously unrecognised deferred taxes (tax losses and temporary differences)	86	-0.9%	449	-4.2%
Impact of using tax losses for which no deferred tax asset was previously recognised	-	-	6	-
Other items	382	-4.0%	82	-0.7%
Corporate income tax expense	**(2,203)**	**23.1%**	**(3,103)**	**28.7%**
Current tax expense for the year to 31 December	*(1,691)*		*(1,989)*	
Deferred tax expense for the year to 31 December (note 5.k)	*(512)*		*(1,114)*	

(1) Restated for the share of profits in equity-method entities and goodwill impairment.
(2) Contribution to the Single Resolution Fund and non-deductible systemic bank levies.

Note 4 SEGMENT INFORMATION

The Group is composed of two operating divisions:

- Retail Banking and Services, which covers Domestic Markets and International Financial Services. Domestic Markets include retail banking networks in France (FRB), Italy (BNL banca commerciale), Belgium (BRB), and Luxembourg (LRB), as well as certain specialised retail banking divisions (Personal Investors, Leasing Solutions, Arval and New Digital Businesses). International Financial Services is composed of all BNP Paribas Group Retail Banking businesses out of the Eurozone, split between Europe Mediterranean and BancWest in the United States, as well as Personal Finance and the Insurance and Wealth and Asset Management activities (Wealth Management, Asset Management and Real Estate);
- Corporate and Institutional Banking (CIB), which includes Corporate Banking (Europe, Middle East, Africa, Asia, Americas, and Corporate Finance activities), Global Markets (Fixed Income, Currency and Commodities, as well as Equity and Prime Services), and Securities Services to management companies, financial institutions and other corporations.

Other activities mainly include Principal Investments, activities related to the Group's central treasury function, some costs related to cross-business projects, the residential mortgage lending business of Personal Finance (a significant part of which is managed in run-off), and certain investments.

They also include non-recurring items resulting from applying the rules on business combinations. In order to provide consistent and relevant economic information for each core business, the impact of amortising fair value adjustments recognised in the net equity of entities acquired and restructuring costs incurred in respect to the integration of entities, have been allocated to the "Other Activities" segment. The same applies to transformation costs relating to the Group's cross-business savings programmes.

Inter-segment transactions are conducted at arm's length. The segment information presented comprises agreed inter-segment transfer prices.

The capital allocation is carried out on the basis of risk exposure, taking into account various conventions relating primarily to the capital requirement of the business as derived from the risk-weighted asset calculations required under capital adequacy rules. Normalised equity income by segment is determined by attributing to each segment the income of its allocated equity. The equity allocation to segments is based on 11% of weighted assets. The breakdown of balance sheet by core business follows the same rules as the breakdown of the profit or loss by core business.

➤ INCOME BY BUSINESS SEGMENT

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*						Year to 31 Dec. 2017 *IAS 39*					
	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income
Retail Banking & Services												
Domestic Markets												
French Retail Banking[(1)]	**6,035**	(4,463)	(286)	**1,285**	(1)	**1,284**	**6,071**	(4,510)	(331)	**1,231**		**1,231**
BNL banca commerciale[(1)]	**2,704**	(1,752)	(593)	**359**	(3)	**356**	**2,822**	(1,761)	(870)	**191**	1	**192**
Belgian Retail Banking[(1)]	**3,422**	(2,418)	(42)	**961**	18	**980**	**3,499**	(2,451)	(64)	**985**	28	**1,013**
Other Domestic Markets activities[(1)]	**2,972**	(1,768)	(123)	**1,081**	(17)	**1,064**	**2,772**	(1,601)	(89)	**1,082**	42	**1,124**
International Financial Services												
Personal Finance	**5,533**	(2,764)	(1,186)	**1,583**	64	**1,646**	**4,923**	(2,427)	(1,009)	**1,487**	120	**1,607**
International Retail Banking												
Europe-Mediterranean[(1)]	**2,351**	*(1,600)*	*(308)*	**443**	*241*	**684**	**2,329**	*(1,656)*	*(259)*	**414**	*202*	**616**
BancWest[(1)]	**2,585**	*(1,836)*	*(82)*	**667**	*152*	**819**	**2,939**	*(2,001)*	*(111)*	**827**	*3*	**830**
Insurance	**2,680**	(1,406)	3	**1,276**	203	**1,479**	**2,514**	(1,251)	4	**1,267**	600	**1,867**
Wealth and Asset Management	**3,286**	(2,636)	(6)	**644**	37	**681**	**3,193**	(2,387)	24	**831**	68	**899**
Corporate & Institutional Banking												
Corporate Banking	**3,951**	(2,507)	(31)	**1,413**	57	**1,470**	**4,165**	(2,430)	(70)	**1,665**	37	**1,703**
Global Markets	**4,727**	(3,937)	(19)	**771**	1	**772**	**5,584**	(4,255)	(15)	**1,315**	6	**1,321**
Securities Services	**2,152**	(1,719)	7	**439**		**439**	**1,955**	(1,588)	3	**369**	1	**371**
Other Activities	**120**	(1,776)	(97)	**(1,753)**	287	**(1,466)**	**394**	(1,627)	(121)	**(1,355)**	(110)	**(1,464)**
TOTAL GROUP	**42,516**	**(30,583)**	**(2,764)**	**9,169**	**1,039**	**10,208**	**43,161**	**(29,944)**	**(2,907)**	**10,310**	**1,000**	**11,310**

(1) *French Retail Banking, BNL banca commerciale, Belgian Retail Banking, Luxembourg Retail Banking, Europe-Mediterranean and BancWest after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Turkey and the United States.*

NET COMMISSION INCOME BY BUSINESS SEGMENT, INCLUDING FEES ACCOUNTED FOR UNDER "NET INCOME FROM INSURANCE ACTIVITIES"

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Retail Banking & Services		
Domestic Markets		
French Retail Banking[(1)]	2,573	2,585
BNL banca commerciale[(1)]	1,038	1,037
Belgian Retail Banking[(1)]	801	838
Other Domestic Markets activities[(1)]	362	340
International Financial Services		
Personal Finance	736	692
International Retail Banking	936	1,022
Europe Mediterranean[(1)]	*510*	*530*
BancWest[(1)]	*427*	*492*
Insurance	(3,400)	(3,309)
Wealth and Asset Management	2,192	2,113
Corporate & Institutional Banking		
Corporate Banking	1,441	1,410
Global Markets	(718)	(531)
Securities Services	1,240	1,202
Other activities	**8**	**53**
TOTAL GROUP	**7,208**	**7,454**

(1) French Retail Banking, BNL banca commerciale, Belgian Retail Banking, Luxembourg Retail Banking, Europe-Mediterranean and BancWest after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Turkey and the United States.

ASSETS AND LIABILITIES BY BUSINESS SEGMENT

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	Asset	Liability	Asset	Liability
Retail Banking & Services				
Domestic Markets	465,519	472,763	456,178	459,449
French Retail Banking	193,865	188,781	191,577	183,132
BNL banca commerciale	80,709	65,844	78,714	65,606
Belgian Retail Banking	133,540	162,186	131,772	157,339
Other Domestic Markets activities	57,405	55,952	54,115	53,372
International Financial Services	475,517	420,869	469,038	423,553
Personal Finance	86,178	18,675	77,505	22,871
International Retail Banking	129,455	116,373	137,040	123,279
Europe-Mediterranean	*57,674*	*51,712*	*50,833*	*46,213*
BancWest	*71,781*	*64,661*	*86,207*	*77,066*
Insurance	232,308	222,021	227,712	219,249
Wealth and Asset Management	27,576	63,800	26,781	58,154
Corporate and Institutional Banking	**816,190**	**907,655**	**751,132**	**829,780**
Other Activities	**283,610**	**239,549**	**273,430**	**236,996**
TOTAL GROUP	**2,040,836**	**2,040,836**	**1,949,778**	**1,949,778**

Information by business segment relating to goodwill is presented in note 5.o Goodwill.

Information by geographic area

The geographic split of segment results, assets and liabilities is based on the region in which they are recognised for accounting purposes, adjusted as per the managerial origin of the business activity. It does not necessarily reflect the counterparty's nationality or the location of operational businesses.

➤ REVENUES BY GEOGRAPHIC AREA

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Europe	31,699	31,659
North America	4,654	5,041
Asia & Pacific	3,000	3,203
Others	3,163	3,258
TOTAL GROUP	**42,516**	**43,161**

➤ ASSETS AND LIABILITIES, IN CONTRIBUTION TO THE CONSOLIDATED ACCOUNTS, BY GEOGRAPHIC AREA

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Europe	1,618,039	1,557,956
North America	246,419	219,830
Asia & Pacific	126,595	120,368
Others	49,783	51,624
TOTAL GROUP	**2,040,836**	**1,949,778**

Note 5 NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2018

5.a FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets and liabilities at fair value through profit or loss

Financial assets and financial liabilities at fair value through profit or loss consist of held-for-trading transactions – including derivatives –, of certain liabilities designated by the Group as at fair value through profit or loss at the time of issuance and of non-trading instruments whose characteristics prevent their accounting at amortised cost or at fair value through equity.

In millions of euros	31 December 2018 IFRS 9 & IFRS 15				1 January 2018 IFRS 9 & IFRS 15			
	Trading book	Financial instruments designated as at fair value through profit or loss	Other financial assets at fair value through profit or loss	Total	Trading book	Financial instruments designated as at fair value through profit or loss	Other financial assets at fair value through profit or loss	Total
Securities	114,615		7,339	121,954	122,494		7,832	130,326
Loans and repurchase agreements	182,463		1,253	183,716	143,765		1,183	144,948
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	**297,078**	**-**	**8,592**	**305,670**	**266,259**	**-**	**9,015**	**275,274**
Securities	75,189			75,189	67,087			67,087
Deposits and repurchase agreements	201,705	2,334		204,039	172,147	2,498		174,645
Issued debt securities *(note 5.h)*		54,908		54,908		50,490		50,490
of which subordinated debt		*787*		*787*		*836*		*836*
of which non subordinated debt		*48,964*		*48,964*		*47,034*		*47,034*
of which debt representative of shares of consolidated funds held by third parties		*5,157*		*5,157*		*2,620*		*2,620*
FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS	**276,894**	**57,242**		**334,136**	**239,234**	**52,988**		**292,222**

Detail of these assets and liabilities is provided in note 5.d.

Financial liabilities designated as at fair value through profit or loss

Financial liabilities at fair value through profit or loss mainly consist of debt securities in issue, originated and structured on behalf of customers, where the risk exposure is managed in combination with the hedging strategy. These types of debt securities in issue contain significant embedded derivatives, whose changes in value may be compensated by changes in the value of economic hedging derivatives.

The redemption value of debt issued and designated as at fair value through profit or loss at 31 December 2018 was EUR 56,435 million (EUR 49,919 million at 1 January 2018).

Other financial assets measured at fair value through profit or loss

Other financial assets at fair value through profit or loss are financial assets not held for trading:

- debt instruments that do not meet the criteria defined by IFRS 9 to be classified as financial instruments at "fair value through equity" or at "amortised cost":
  - their business model is not to "collect contractual cash flows" nor "collect contractual cash flows and sell the instruments", and/or
  - their cash flows are not solely repayments of principal and interest on the principal amount outstanding;
- equity instruments that the Group did not choose to classify as at "fair value through equity".

Derivative financial instruments

The majority of derivative financial instruments held for trading are related to transactions initiated for trading purposes. They may result from market-making or arbitrage activities. BNP Paribas actively trades in derivatives. Transactions include trades in "ordinary" instruments such as credit default swaps, and structured transactions with complex risk profiles tailored to meet the needs of its customers. The net position is in all cases subject to limits.

Some derivative instruments are also contracted to hedge financial assets or financial liabilities for which the Group has not documented a hedging relationship, or which do not qualify for hedge accounting under IFRS.

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	Positive market value	Negative market value	Positive market value	Negative market value
Interest rate derivatives	116,438	103,452	122,110	110,804
Foreign exchange derivatives	69,514	68,761	66,550	65,269
Credit derivatives	6,873	7,071	7,553	8,221
Equity derivatives	33,424	39,419	28,797	39,150
Other derivatives	6,646	7,101	4,886	4,200
DERIVATIVE FINANCIAL INSTRUMENTS	**232,895**	**225,804**	**229,896**	**227,644**

The table below shows the total notional amount of trading derivatives. The notional amounts of derivative instruments are merely an indication of the volume of the Group's activities in financial instruments markets, and do not reflect the market risks associated with such instruments.

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*				1 January 2018 *IFRS 9 & IFRS 15*			
	Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total	Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total
Interest rate derivatives	1,553,933	9,189,930	5,193,522	15,937,385	1,398,333	9,348,490	4,913,384	15,660,207
Foreign exchange derivatives	15,547	52,329	4,782,027	4,849,903	1,809	48,028	4,631,422	4,681,259
Credit derivatives		311,726	561,534	873,260		288,459	557,572	846,031
Equity derivatives	1,132,800	1,789	577,816	1,712,405	856,023	940	590,719	1,447,682
Other derivatives	99,510	58,004	94,202	251,716	86,262	26,470	79,264	191,996
DERIVATIVE FINANCIAL INSTRUMENTS	**2,801,790**	**9,613,778**	**11,209,101**	**23,624,669**	**2,342,427**	**9,712,387**	**10,772,361**	**22,827,175**

5.b DERIVATIVES USED FOR HEDGING PURPOSES

The table below shows the notional amounts and the fair value of derivatives used for hedging purposes.

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*			1 January 2018 *IFRS 9 & IFRS 15*		
	Notional amounts	Positive fair value	Negative fair value	Notional amounts	Positive fair value	Negative fair value
Fair value hedges	**639,707**	**8,079**	**10,706**	**723,687**	**11,632**	**14,542**
Interest rate derivatives	630,993	7,871	10,526	713,066	11,454	14,311
Foreign exchange derivatives	8,714	208	180	10,621	178	231
Cash flow hedges	**184,287**	**1,683**	**964**	**207,655**	**2,081**	**1,101**
Interest rate derivatives	58,666	1,233	358	97,865	1,551	449
Foreign exchange derivatives	125,306	439	496	109,489	472	646
Other derivatives	315	11	110	301	58	6
Net foreign investment hedges	**3,806**	**48**	**7**	**4,556**	**8**	**39**
Foreign exchange derivatives	3,806	48	7	4,556	8	39
DERIVATIVES USED FOR HEDGING PURPOSES	**827,800**	**9,810**	**11,677**	**935,898**	**13,721**	**15,682**

Interest rate risk and foreign exchange risk management strategies are described in Chapter 5 - Pillar 3 of the Registration document (section 5.7 - Market risk - Market risk related to banking activities). Quantitative information related to foreign currency borrowings used for net investment hedges is also mentioned in this chapter.

The table below presents the detail of fair value hedge relationships for identified financial instruments and portfolios of financial instruments that are continuing as at 31 December 2018:

	Hedging instruments				Hedged instruments			
In millions of euros, as at 31 December 2018	Notional amounts	Positive fair value	Negative fair value	Cumulated changes in fair value used as the basis for recognising ineffectiveness	Carrying amount – asset	Cumulated changes in fair value - asset	Carrying amount – liability	Cumulated changes in fair value - liability
Fair value hedges of identified instruments	**203,795**	**3,150**	**5,702**	**(1,152)**	**94,412**	**3,131**	**91,100**	**2,323**
Interest rate derivatives hedging the interest rate risk related to	**196,753**	**3,070**	**5,543**	**(1,214)**	**93,045**	**3,116**	**85,948**	**2,253**
Loans and receivables	27,345	82	427	(385)	24,727	415	-	-
Securities	68,129	765	5,006	(2,843)	68,318	2,701	-	-
Deposits	16,155	831	18	823	-	-	16,327	820
Debt securities	85,124	1,392	92	1,191	-	-	69,621	1,433
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**7,042**	**80**	**159**	**62**	**1,367**	**15**	**5,152**	**70**
Loans and receivables	1,270	125	12	(6)	1,270	12	-	-
Securities	100	1	6	(3)	97	3	-	-
Deposits	626	(16)	-	20	-	-	465	17
Debt securities	5,046	(30)	141	51	-	-	4,687	53
Interest-rate risk hedged portfolios	**435,912**	**4,929**	**5,004**	**(419)**	**90,299**	**2,781**	**154,412**	**2,458**
Interest rate derivatives hedging the interest rate risk related to(1)	**434,240**	**4,801**	**4,983**	**(429)**	**88,789**	**2,792**	**154,412**	**2,458**
Loans and receivables	188,047	756	4,259	(2,941)	88,644	2,792	-	-
Securities	148	3	7	(2)	145	-	-	-
Deposits	246,045	4,042	717	2,514	-	-	154,412	2,458
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**1,672**	**128**	**21**	**10**	**1,510**	**(11)**	**-**	**-**
Loans and receivables	1,672	128	21	10	1,510	(11)	-	-
TOTAL FAIR VALUE HEDGE	**639,707**	**8,079**	**10,706**	**(1,571)**	**184,711**	**5,912**	**245,512**	**4,781**

(1) *Are included in this section the notional amounts of hedging derivatives and of swaps that reverse the interest rate positions, thus reducing the hedge relationship, when the hedged item still exists, for respectively EUR 75,126 million for hedges of loans and receivables and EUR 61,689 million for hedges of deposits.*

An asset or a liability or set of assets and liabilities, can be hedged over several periods of time with different derivative financial instruments. Besides, some hedges are achieved by the combination of two derivative instruments (for example, to exchange the variable rate index of the first instrument from Euribor to Eonia). In this case, the notional amounts add up and their total amount is higher than the hedged amount. The first situation is observed more particularly for interest-rate risk hedged portfolios and the second for hedges of issued debt securities.

As regards discontinued fair value hedge relationships where the derivative contract was terminated, the cumulated amount of hedging instrument revaluation remaining to be amortised over the residual life of the hedged instruments amounts to EUR 6 million in assets as at 31 December 2018, and to EUR 12 million in liabilities, for hedges of portfolios of financial instruments.

The notional amount of cash flow hedge derivatives is EUR 184,287 million as at 31 December 2018. Changes in assets and liabilities recognised directly in equity amount to EUR 1,073 million.

The table below presents the nominal amounts of hedging derivatives by maturity:

In millions of euros, as at 31 December 2018	Maturity date			
	Less than 1 year	**Between 1 and 5 years**	**Over 5 years**	**Total**
Fair value hedges	**121,642**	**327,622**	**190,443**	**639,707**
Interest rate derivatives	118,626	323,278	189,089	630,993
Foreign exchange derivatives	3,016	4,344	1,354	8,714
Cash flow hedges	**121,760**	**44,703**	**17,824**	**184,287**
Interest rate derivatives	8,456	37,884	12,326	58,666
Foreign exchange derivatives	113,165	6,643	5,498	125,306
Other derivatives	139	176		315
Net foreign investment hedges	**1,369**	**2,437**	**-**	**3,806**
Foreign exchange derivatives	1,369	2,437		3,806

5.c FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15* Fair value	31 December 2018 *IFRS 9 & IFRS 15* of which changes in value taken directly to equity	1 January 2018 *IFRS 9 & IFRS 15* Fair value	1 January 2018 *IFRS 9 & IFRS 15* of which changes in value taken directly to equity
Debt securities	**53,838**	**77**	**53,942**	**584**
Governments	32,818	243	28,649	549
Other public administrations	14,340	(74)	18,615	63
Credit institutions	4,149	(83)	4,099	(56)
Others	2,531	(9)	2,579	28
Equity securities	**2,151**	**451**	**2,330**	**599**
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY	**55,989**	**528**	**56,272**	**1,183**

Debt securities at fair value through equity include EUR 114 million classified as stage 3 at 31 December 2018 (unchanged compared to 1 January 2018). For these securities, the credit impairment recognised in the profit and loss account has been charged to the negative changes in value recognized in equity for EUR 112 million at 31 December 2018 (EUR 108 million at 1 January 2018).

The option to recognise certain equity instruments at fair value through equity was retained in particular for shares held through strategic partnerships and shares that the Group is required to hold in order to carry out certain activities.

During the year ended 31 December 2018, the Group sold several equity securities measured at fair value through equity. However, the gains and losses thus reclassified into retained earnings were immaterial. No dividend related to these securities was recognised in the profit and loss account during the year ended 31 December 2018.

Changes in value taken directly to equity are detailed as follows:

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15* Debt securities	31 December 2018 Equity securities	31 December 2018 Total	1 January 2018 *IFRS 9 & IFRS 15* Debt securities	1 January 2018 Equity securities	1 January 2018 Total
Non-hedged changes in value of securities, recognised in "Financial assets at fair value through equity"	**77**	**451**	**528**	**584**	**599**	**1,183**
Deferred tax linked to these changes in value	(46)	(34)	(80)	(192)	(36)	(228)
Group share of changes in value of financial assets at fair value through equity owned by equity-method entities, after deferred tax	39	1	40	62		62
Expected credit loss recognised in profit or loss	140		140	130		130
Changes in value of non-current assets held for sale recognised directly in equity, after deferred tax	6		6			
Other variations	(10)		(10)	1		1
Changes in value of assets taken directly to equity under the heading "Financial assets at fair value through equity"	**206**	**418**	**624**	**585**	**563**	**1,148**
Attributable to equity shareholders	201	403	604	589	561	1,150
Attributable to minority interests	5	15	20	(4)	2	(2)

5.d MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

Valuation process

BNP Paribas has retained the fundamental principle that it should have a unique and integrated processing chain for producing and controlling the valuations of financial instruments that are used for the purpose of daily risk management and financial reporting. All these processes are based on a common economic valuation which is a core component of business decisions and risk management strategies.

Economic value is composed of mid-market value, to which add valuation adjustments.

Mid-market value is derived from external data or valuation techniques that maximise the use of observable and market-based data. Mid-market value is a theoretical additive value which does not take account of i) the direction of the transaction or its impact on the existing risks in the portfolio, ii) the nature of the counterparties, and iii) the aversion of a market participant to particular risks inherent in the instrument, the market in which it is traded, or the risk management strategy.

Valuation adjustments take into account valuation uncertainty and include market and credit risk premiums to reflect costs that could be incurred in case of an exit transaction in the principal market. When valuation techniques are used for the purpose of deriving fair value, funding assumptions related to the future expected cash flows are an integral part of the mid-market valuation, notably through the use of appropriate discount rates. These assumptions reflect what the Bank anticipates as being the effective funding conditions of the instrument that a market participant would consider. This notably takes into account the existence and terms of any collateral agreement. In particular, for non- or imperfectly collateralized derivative instruments, they include an explicit adjustment to the interbank interest rate (Funding Valuation Adjustment – FVA).

Fair value generally equals the economic value, subject to limited adjustments, such as own credit adjustments, which are specifically required by IFRS standards.

The main valuation adjustments are presented in the section below.

Valuation adjustments

Valuation adjustments retained by BNP Paribas for determining fair values are as follows:

Bid/offer adjustments: the bid/offer range reflects the additional exit cost for a price taker and symmetrically the compensation sought by dealers to bear the risk of holding the position or closing it out by accepting another dealer's price.

BNP Paribas assumes that the best estimate of an exit price is the bid or offer price, unless there is evidence that another point in the bid/offer range would provide a more representative exit price.

Input uncertainty adjustments: when the observation of prices or data inputs required by valuation techniques is difficult or irregular, an uncertainty exists on the exit price. There are several ways to gauge the degree of uncertainty on the exit price such as measuring the dispersion of the available price indications or estimating the possible ranges of the inputs to a valuation technique.

Model uncertainty adjustments: these relate to situations where valuation uncertainty is due to the valuation technique used, even though observable inputs might be available. This situation arises when the risks inherent in the instruments are different from those available in the observable data, and therefore the valuation technique involves assumptions that cannot be easily corroborated.

Credit valuation adjustment (CVA): the CVA adjustment applies to valuations and market quotations whereby the credit worthiness of the counterparty is not reflected. It aims to account for the possibility that the counterparty may default and that BNP Paribas may not receive the full fair value of the transactions.

In determining the cost of exiting or transferring counterparty risk exposures, the relevant market is deemed to be an inter-dealer market. However, the determination of CVA remains judgemental due to:

- the possible absence or lack of price discovery in the inter-dealer market;
- the influence of the regulatory landscape relating to counterparty risk on the market participants' pricing behaviour; and
- the absence of a dominant business model for managing counterparty risk.

The CVA model is grounded on the same exposures as those used for regulatory purposes. The model attempts to estimate the cost of an optimal risk management strategy based on i) implicit incentives and constraints inherent in the regulations in force and their evolutions, ii) market perception of the probability of default and iii) default parameters used for regulatory purposes.

Own-credit valuation adjustment for debts (OCA) and for derivatives (debit valuation adjustment – DVA): OCA and DVA are adjustments reflecting the effect of credit worthiness of BNP Paribas, on respectively the value of debt securities designated as at fair value through profit or loss and derivatives. Both adjustments are based on the expected future liability profiles of such instruments. The own credit worthiness is inferred from the market-based observation of the relevant bond issuance levels. The DVA adjustment is determined after taking into account the Funding Valuation Adjustment (FVA).

Thus, the carrying value of debt securities designated as at fair value through profit or loss is increased by EUR 244 million as at 31 December 2018, compared with an increase in value of EUR 452 million as at 1 January 2018, i.e. a EUR -208 million variation recognised directly in equity that will not be reclassified to profit or loss.

Instrument classes and Classification within the fair value hierarchy for assets and liabilities measured at fair value

As explained in the summary of significant accounting policies (note 1.e.10), financial instruments measured at fair value are categorised into a fair value hierarchy consisting of three levels.

The disaggregation of assets and liabilities into risk classes is meant to provide further insight into the nature of the instruments:

- securitised exposures are further broken down by collateral type;
- for derivatives, fair values are broken down by dominant risk factor, namely interest rate, foreign exchange, credit and equity. Derivatives used for hedging purposes are mainly interest rate derivatives.

	31 December 2018 *IFRS 9 & IFRS 15*											
	Trading book				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Securities	**89,253**	**25,121**	**241**	**114,615**	**625**	**1,969**	**4,745**	**7,339**	**43,105**	**11,927**	**957**	**55,989**
Governments	41,404	7,733		49,137	3	246		249	29,905	2,913		32,818
Asset Backed Securities	1,584	7,639	6	9,229	-	389	-	389	-	1,104	-	1,104
CDOs/CLOs[(1)]		*92*	*5*	*97*				-				-
Other Asset Backed Securities	*1,584*	*7,547*	*1*	*9,132*		*389*		*389*		*1,104*		*1,104*
Other debt securities	10,696	8,312	142	19,150		796	825	1,621	12,083	7,678	155	19,916
Equities and other equity securities	35,569	1,437	93	37,099	622	538	3,920	5,080	1,117	232	802	2,151
Loans and repurchase agreements	**-**	**182,196**	**267**	**182,463**	**-**	**346**	**907**	**1,253**	**-**	**-**	**-**	**-**
Loans		2,861		2,861		145	907	1,052				
Repurchase agreements		179,335	267	179,602		201		201				
FINANCIAL ASSETS AT FAIR VALUE	**89,253**	**207,317**	**508**	**297,078**	**625**	**2,315**	**5,652**	**8,592**	**43,105**	**11,927**	**957**	**55,989**
Securities	**71,828**	**3,346**	**15**	**75,189**	**-**	**-**	**-**	**-**				
Governments	48,779	631		49,410				-				
Other debt securities	8,394	2,655	11	11,060				-				
Equities and other equity securities	14,655	60	4	14,719				-				
Borrowings and repurchase agreements	**-**	**199,861**	**1,844**	**201,705**	**-**	**1,940**	**394**	**2,334**				
Borrowings		5,408		5,408		1,940	394	2,334				
Repurchase agreements		194,453	1,844	196,297				-				
Issued debt securities *(note 5.h)*	**-**	**-**	**-**	**-**	**4,049**	**36,323**	**14,536**	**54,908**				
Subordinated debt *(note 5.h)*				-		787		787				
Non subordinated debt *(note 5.h)*				-		34,428	14,536	48,964				
Debt representative of shares of consolidated funds held by third parties				-	4,049	1,108		5,157				
FINANCIAL LIABILITIES AT FAIR VALUE	**71,828**	**203,207**	**1,859**	**276,894**	**4,049**	**38,263**	**14,930**	**57,242**				

	1 January 2018 IFRS 9 & IFRS 15											
	Trading book				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Securities	**97,844**	**24,147**	**503**	**122,494**	**713**	**2,417**	**4,702**	**7,832**	**42,697**	**12,726**	**849**	**56,272**
Governments	42,265	7,831		50,096		253		253	26,713	1,935		28,648
Asset Backed Securities	-	7,928	97	8,025	-	555	-	555	-	1,386	-	1,386
CDOs/CLOs[(1)]		*495*	*26*	*521*				-				-
Other Asset Backed Securities		*7,433*	*71*	*7,504*		*555*		*555*		*1,386*		*1,386*
Other debt securities	10,293	7,113	223	17,629		1,295	807	2,102	14,695	9,178	35	23,908
Equities and other equity securities	45,286	1,275	183	46,744	713	314	3,895	4,922	1,289	227	814	2,330
Loans and repurchase agreements	**-**	**143,502**	**263**	**143,765**	**-**	**38**	**1,145**	**1,183**	**-**	**-**	**-**	**-**
Loans		2,047		2,047		38	939	977				
Repurchase agreements		141,455	263	141,718			206	206				
FINANCIAL ASSETS AT FAIR VALUE	**97,844**	**167,649**	**766**	**266,259**	**713**	**2,455**	**5,847**	**9,015**	**42,697**	**12,726**	**849**	**56,272**
Securities	**64,714**	**2,286**	**87**	**67,087**	**-**	**-**	**-**	**-**				
Governments	47,421	249		47,670				-				
Other debt securities	6,150	1,979	85	8,214				-				
Equities and other equity securities	11,143	58	2	11,203				-				
Borrowings and repurchase agreements	**-**	**171,082**	**1,065**	**172,147**	**-**	**2,026**	**472**	**2,498**				
Borrowings		4,500		4,500		2,026	472	2,498				
Repurchase agreements		166,582	1,065	167,647				-				
Issued debt securities *(note 5.h)*	**-**	**-**	**-**	**-**	**1,916**	**35,673**	**12,901**	**50,490**				
Subordinated debt *(note 5.h)*				-		836		836				
Non subordinated debt *(note 5.h)*				-		34,133	12,901	47,034				
Debt representative of shares of consolidated funds held by third parties				-	1,916	704		2,620				
FINANCIAL LIABILITIES AT FAIR VALUE	**64,714**	**173,368**	**1,152**	**239,234**	**1,916**	**37,699**	**13,373**	**52,988**				

(1) *Collateralised Debt Obligations/Collateralised Loan Obligations.*

In millions of euros	31 December 2018 IFRS 9 & IFRS 15							
	Positive market value				Negative market value			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	158	115,046	1,234	116,438	118	101,967	1,367	103,452
Foreign exchange derivatives	1	69,182	331	69,514	1	68,520	240	68,761
Credit derivatives		6,527	346	6,873		6,616	455	7,071
Equity derivatives	11,724	19,057	2,643	33,424	11,092	22,633	5,694	39,419
Other derivatives	990	5,468	188	6,646	1,133	5,628	340	7,101
DERIVATIVE FINANCIAL INSTRUMENTS NOT USED FOR HEDGING PURPOSES	**12,873**	**215,280**	**4,742**	**232,895**	**12,344**	**205,364**	**8,096**	**225,804**
DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING PURPOSES	**-**	**9,810**	**-**	**9,810**	**-**	**11,677**	**-**	**11,677**

In millions of euros	1 January 2018 IFRS 9 & IFRS 15							
	Positive market value				Negative market value			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	271	120,184	1,655	122,110	357	109,033	1,414	110,804
Foreign exchange derivatives	1	66,318	231	66,550		64,938	331	65,269
Credit derivatives		7,347	206	7,553		7,622	599	8,221
Equity derivatives	7,781	19,941	1,075	28,797	5,527	27,088	6,535	39,150
Other derivatives	1,046	3,787	53	4,886	673	3,434	93	4,200
DERIVATIVE FINANCIAL INSTRUMENTS NOT USED FOR HEDGING PURPOSES	**9,099**	**217,577**	**3,220**	**229,896**	**6,557**	**212,115**	**8,972**	**227,644**
DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING PURPOSES	**-**	**13,721**	**-**	**13,721**	**-**	**15,682**	**-**	**15,682**

Transfers between levels may occur when an instrument fulfils the criteria defined, which are generally market and product dependent. The main factors influencing transfers are changes in the observation capabilities, passage of time, and events during the transaction lifetime. The timing of recognising transfers is determined at the beginning of the reporting period.

During the year ended 31 December 2018, transfers between Level 1 and Level 2 were not significant.

Description of main instruments in each level

The following section provides a description of the instruments in each level in the hierarchy. It describes notably instruments classified in Level 3 and the associated valuation methodologies.

For main trading book instruments and derivatives classified in Level 3, further quantitative information is provided about the inputs used to derive fair value.

Level 1

This level encompasses all derivatives and securities that are listed on exchanges or quoted continuously in other active markets.

Level 1 includes notably equity securities and liquid bonds, shortselling of these instruments, derivative instruments traded on organised markets (futures, options,...). It includes shares of funds and UCITS, for which the net asset value is calculated on a daily basis, as well as debt representative of shares of consolidated funds held by third parties.

Level 2

The Level 2 stock of securities is composed of securities which are less liquid than the Level 1 bonds. They are predominantly government bonds, corporate debt securities, mortgage backed securities, fund shares and short-term securities such as certificates of deposit. They are classified in Level 2 notably when external prices for the same security can be regularly observed from a reasonable number of market makers that are active in this security, but these prices do not represent directly tradable prices. This comprises amongst other, consensus pricing services with a reasonable number of contributors that are active market makers as well as indicative runs from active brokers and/or dealers. Other sources such as primary issuance market, collateral valuation and counterparty collateral valuation matching may also be used where relevant.

Repurchase agreements are classified predominantly in Level 2. The classification is primarily based on the observability and liquidity of the repo market, depending on the underlying collateral and the maturity of the repo transaction.

Debts issued designated as at fair value through profit and loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives classified in Level 2 comprise mainly the following instruments:

- vanilla instruments such as interest rate swaps, caps, floors and swaptions, credit default swaps, equity/foreign exchange (FX)/ commodities forwards and options;
- structured derivatives such as exotic FX options, mono- and multi-underlying equity/funds derivatives, single curve exotic interest rate derivatives and derivatives based on structured rates.

The above derivatives are classified in Level 2 when there is a documented stream of evidence supporting one of the following:

- fair value is predominantly derived from prices or quotations of other Level 1 and Level 2 instruments, through standard market interpolation or stripping techniques whose results are regularly corroborated by real transactions;
- fair value is derived from other standard techniques such as replication or discounted cash flows that are calibrated to observable prices, that bear limited model risk and enable an effective offset of the risks of the instrument through trading Level 1 or Level 2 instruments;
- fair value is derived from more sophisticated or proprietary valuation techniques but is directly evidenced through regular back-testing using external market-based data.

Determining of whether an over-the-counter (OTC) derivative is eligible for Level 2 classification involves judgement. Consideration is given to the origin, transparency and reliability of external data used, and the amount of uncertainty associated with the use of models. It follows that the Level 2 classification criteria involve multiple analysis axis within an "observability zone" whose limits are determined by i) a predetermined list of product categories and ii) the underlying and maturity bands. These criteria are regularly reviewed and updated, together with the applicable valuation adjustments, so that the classification by level remains consistent with the valuation adjustment policy.

Level 3

Level 3 securities of the trading book mainly comprise units of funds and unlisted equity shares measured at fair value through profit or loss or through equity.

Unlisted private equities are systematically classified as Level 3, with the exception of UCITS with a daily net asset value which are classified in the Level 1 of the fair value hierarchy.

Shares and other unlisted variable income securities in level 3 are valued using one of the following methods: a share of revalued net book value, multiples of comparable companies, future cash flows method, multi-criteria approach.

***Repurchase agreements**: mainly long-term or structured repurchase agreements on corporate bonds and ABSs*: The valuation of these transactions requires proprietary methodologies given the bespoke nature of the transactions and the lack of activity and price discovery in the long-term repo market. The curves used in the valuation are corroborated using available data such as the implied basis of the relevant benchmark bond pool, recent long-term repo trade data and price enquiry data. Valuation adjustments applicable to these exposures are commensurate with the degree of uncertainty inherent in the modelling choices and amount of data available.

Debts issued designated as at fair value through profit or loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives

Vanilla derivatives are classified in Level 3 when the exposure is beyond the observation zone for rate curves or volatility surfaces, or relates to less liquid markets such as tranches on old credit index series or emerging markets interest rates markets. The main instruments are:

- ***Interest rate derivatives***: exposures mainly comprise swap products in less liquid currencies. Classification is driven by the lower liquidity of some maturities, while observation capabilities through consensus may be available. The valuation technique is standard, and uses external market information and extrapolation techniques.
- ***Credit derivatives (CDS)***: exposures mainly comprise CDSs beyond the maximum observable maturity and, to a much lesser extent, CDSs on illiquid or distressed names and CDSs on loan indices. Classification is driven by the lack of liquidity while observation capabilities may be available notably through consensus. Level 3 exposures also comprise CDS and Total Return Swaps (TRS) positions on securitised assets. These are priced along the same modelling techniques as the underlying bonds, taking into consideration the funding basis and specific risk premium.
- ***Equity derivatives***: exposures essentially comprise long dated forward or volatility products or exposures where there is a limited market for optional products. The marking of the forward curves and volatility surfaces beyond the maximum observable maturity relies on extrapolation techniques. However, when there is no market for model input, volatility or forward is generally determined on the basis of proxy or historical analysis.

Similarly, long-term transactions on equity baskets are also classified in Level 3, based on the absence of equity correlation observability on long maturities.

These vanilla derivatives are subject to valuation adjustments linked to uncertainty on liquidity, specialised by nature of underlying and liquidity bands.

Structured derivatives classified in Level 3 predominantly comprise structured derivatives of which hybrid products (FX/Interest Rates hybrids, Equity hybrids), credit correlation products, prepayment-sensitive products, some stock basket optional products and some interest rate optional instruments. The main exposures are described below, with insight into the related valuation techniques and on the source of uncertainty:

- ***Structured interest rate options*** are classified in Level 3 when they involve currencies where there is not sufficient observation or when they include a quanto feature where the pay-off is measured with a forex forward fixed rate (except for the main currencies). Long term structured derivatives are also classified in Level 3.
- ***Hybrid FX/Interest rate products*** essentially comprise a specific product family known as Power Reverse Dual Currency (PRDC). The valuation of PRDCs requires sophisticated modelling of joint behaviour of FX and interest rate, and is notably sensitive to the unobservable FX/interest rate correlations. PRDCs valuations are corroborated with recent trade data and consensus data.
- ***Securitisation swaps*** mainly comprise fixed rate swaps, cross currency or basis swaps whose notional is indexed to the prepayment behaviour of some underlying portfolio. The estimation of the maturity profile of securitisation swaps is corroborated by statistical estimates using external historical data.
- ***Forward volatility options*** are generally products whose pay-off is indexed to the future variability of a rate index such as volatility swaps. These products involve material model risk as it is difficult to infer forward volatility information from the market-traded instruments. The valuation adjustment framework is calibrated to the uncertainty inherent in the product, and to the range of uncertainty from the existing external consensus data.
- ***Inflation derivatives*** classified in Level 3 mainly comprise swap products on inflation indices that are not associated with a liquid indexed bond market, optional products on inflation indices (such as caps and floors) and other forms of inflation indices involving optionality on the inflation indices or on the inflation annual rate. Valuation techniques used for inflation derivatives are predominantly standard market models. Proxy techniques are used for a few limited exposures. Although the valuations are corroborated through monthly consensus data, these products are classified as Level 3 due to their lack of liquidity and some uncertainties inherent in the calibration.
- The valuation of ***bespoke CDOs*** requires correlation of default events. This information is inferred from the active index tranche market through a proprietary projection technique and involves proprietary extrapolation and interpolation techniques. Multi-geography CDOs further require an additional correlation assumption. Finally, the bespoke CDO model also involves proprietary assumptions and parameters related to the dynamic of the recovery factor. CDO modelling, is calibrated on the observable index tranche markets, and is regularly back-tested against consensus data on standardised pools. The uncertainty arises from the model risk associated with the projection and geography mixing technique, and the uncertainty of associated parameters, together with the recovery modelling.
- ***N to Default baskets*** are other forms of credit correlation products, modelled through standard copula techniques. The main inputs required are the pair-wise correlations between the basket components which can be observed in the consensus and the transactions. Linear baskets are considered observable.
- ***Equity and equity-hybrid correlation products*** are instruments whose pay-off is dependent on the joint behaviour of a basket of equities/indices leading to a sensitivity of the fair value measurement to the correlation amongst the basket components. Hybrid versions of these instruments involve baskets that mix equity and non-equity underlyings such as commodity indices. Only a subset of the Equity/index correlation matrix is regularly observable and traded, while most cross-asset correlations are not active. Therefore, classification in Level 3 depends on the composition of the basket, the maturity, and the hybrid nature of the product. The correlation input is derived from a proprietary model combining historical estimators, and other adjustment factors, that are corroborated by reference to recent trades or external data. The correlation matrix is essentially available from consensus services, and when a correlation between two underlying instruments is not available, it might be obtained from extrapolation or proxy techniques.

These structured derivatives are subject to specific valuation adjustments to cover uncertainties linked to liquidity, parameters and model risk.

Valuation adjustments (CVA, DVA and FVA)

The valuation adjustment for counterparty credit risk (CVA), own-credit risk for derivatives (DVA) and the explicit funding valuation adjustment (FVA) are deemed to be unobservable components of the valuation framework and therefore classified in Level 3. This does not impact, in general cases, the classification of individual transactions into the fair value hierarchy. However, a specific process allows to identify individual deals for which the marginal contribution of these adjustments and related uncertainty is significant. Are particularly concerned some insufficiently collateralized vanilla interest rate instruments with very long residual maturity.

The below table provides the range of values of main unobservable inputs for the valuation of level 3 financial instruments. The ranges displayed correspond to a variety of different underlying instruments and are meaningful only in the context of the valuation technique implemented by BNP Paribas. The weighted averages, where relevant and available, are based on fair values, nominal amounts or sensitivities.

The main unobservable parameters used for the valuation of debt issued in level 3 are equivalent to those of their economic hedge derivative. Information on these derivatives, displayed in the following table, is also applicable to these debts.

Risk classes	Balance Sheet valuation (in millions of euros) Asset	Liability	Main product types composing the Level 3 stock within the risk class	Valuation technique used for the product types considered	Main unobservable inputs for the product types considered	Range of unobservable input across Level 3 population considered	Weighted average
Repurchase agreements	267	1,844	Long-term repo and reverse-repo agreements	Proxy techniques, based amongst other on the funding basis of a benchmark bond pool, that is actively traded and representative of the repo underlying	Long-term repo spread on private bonds (High Yield, High Grade) and on ABSs	0 bp to 124 bp	92 bp[(a)]
Interest rate derivatives	1,234	1,367	Hybrid Forex/Interest rates derivatives	Hybrid Forex interest rate option pricing model	Correlation between FX rate and interest rates. Main currency pairs are EUR/JPY, USD/JPY, AUD/JPY	10% to 50%	39%[(a)]
			Hybrid inflation rates/Interest rates derivatives	Hybrid inflation interest rate option pricing model	Correlation between interest rates and inflation rates mainly in Europe.	0% to 30%	24%
			Floors and caps on inflation rate or on the cumulative inflation (such as redemption floors), predominantly on European and French inflation	Inflation pricing model	Volatility of cumulative inflation	0.7% to 10%	[(b)]
					Volatility of the year on year inflation rate	0.2% to 2.0%	
			Forward Volatility products such as volatility swaps, mainly in euro	Interest rates option pricing model	Forward volatility of interest rates	0.3% to 0.7%	[(b)]
			Balance-guaranteed fixed rate, basis or cross currency swaps, predominantly on European collateral pools	Prepayment modelling Discounted cash flows	Constant prepayment rates	0.1% to 18%	10.2%[(a)]
Credit Derivatives	346	455	Collateralised Debt Obligations and index tranches for inactive index series	Base correlation projection technique and recovery modelling	Base correlation curve for bespoke portfolios	20% to 78%	[(b)]
					Inter-regions default cross correlation	80% to 90%	90%[(c)]
					Recovery rate variance for single name underlyings	0 to 25%	[(b)]
			N-to-default baskets	Credit default model	Default correlation	50% to 85%	60.8%[(a)]
			Single name Credit Default Swaps (other than CDS on ABSs and loans indices)	Stripping, extrapolation and interpolation	Credit default spreads beyond observation limit (10 years)	159 bp to 378 bp[(1)]	369 bp[(c)]
					Illiquid credit default spread curves (across main tenors)	12 bp to 695 bp[(2)]	105 bp[(c)]
Equity Derivatives	2,643	5,694	Simple and complex derivatives on multi-underlying baskets on stocks	Various volatility option models	Unobservable equity volatility	0% to 86%[(3)]	26%[(d)]
					Unobservable equity correlation	17% to 93%	56%[(c)]

(1) The upper part of the range relates to non-material balance sheet position on a European corporate. The other part relates mainly to sovereign issuers.
(2) The upper bound of the range relates to a financial sector issuer that represents an insignificant portion of the balance sheet (CDSs with illiquid underlying instruments).
(3) The upper part of the range relates to three equity instruments representing a non-material portion of the balance sheet on options with equity underlying instruments. Including these inputs, the upper bound of the range would be around 422%.
(a) Weights based on relevant risk axis at portfolio level.
(b) No weighting, since no explicit sensitivity is attributed to these inputs.
(c) Weighting is not based on risks, but on an alternative methodology in relation with the Level 3 instruments (present value or notional).
(d) Simple averaging.

Table of movements in Level 3 financial instruments

For Level 3 financial instruments, the following movements occurred during the year ended 31 December 2018:

In millions of euros	Financial assets				Financial liabilities		
	Financial instruments at fair value through profit or loss held for trading	Financial instruments at fair value through profit or loss not held for trading	Financial assets at fair value through equity	Total	Financial instruments at fair value through profit or loss held for trading	Financial instruments designated as at fair value through profit or loss	Total
AT 1 JANUARY 2018	**3,986**	**5,847**	**849**	**10,682**	**(10,124)**	**(13,373)**	**(23,497)**
Purchases	474	1,000	142	**1,616**			-
Issues				-		(4,113)	**(4,113)**
Sales	(611)	(748)		**(1,359)**	295		**295**
Settlements[(1)]	(158)	(370)	(2)	**(530)**	(746)	2,102	**1,356**
Transfers to level 3	621	129	3	**753**	(451)	(1,860)	**(2,311)**
Transfers from level 3	(1,534)	(421)	(44)	**(1,999)**	662	2,067	**2,729**
Gains (or losses) recognised in profit or loss with respect to transactions expired or terminated during the period	(160)	206	(5)	**41**	(894)	(551)	**(1,445)**
Gains (or losses) recognised in profit or loss with respect to unexpired instruments at the end of the period	2,626	(6)		**2,620**	1,409	903	**2,312**
Changes in fair value of assets and liabilities recognised directly in equity							
Items related to exchange rate movements	6	15		**21**	(110)	(105)	**(215)**
Changes in fair value of assets and liabilities recognised in equity			14	**14**	4		**4**
AT 31 DECEMBER 2018	**5,250**	**5,652**	**957**	**11,859**	**(9,955)**	**(14,930)**	**(24,885)**

(1) For the assets, includes redemptions of principal, interest payments as well as cash inflows and outflows relating to derivatives. For the liabilities, includes principal redemptions, interest payments as well as cash inflows and outflows relating to derivatives the fair value of which is negative.

Transfers out of Level 3 of derivatives at fair value include mainly the update of the observability tenor of certain yield curves, and of market parameters related to repurchase agreements and credit transactions but also the effect of derivatives becoming only or mainly sensitive to observable inputs due to the shortening of their lifetime.

Transfers into Level 3 of instruments at fair value reflect the effect of the regular update of the observability zones.

Transfers have been reflected as if they had taken place at the beginning of the reporting period.

The Level 3 financial instruments may be hedged by other Level 1 and Level 2 instruments, the gains and losses of which are not shown in this table. Consequently, the gains and losses shown in this table are not representative of the gains and losses arising from management of the net risk on all these instruments.

Sensitivity of fair value to reasonably possible changes in level 3 assumptions

The following table summarises those financial assets and financial liabilities classified as Level 3 for which alternative assumptions in one or more of the unobservable inputs would change fair value significantly.

The amounts disclosed are intended to illustrate the range of possible uncertainty inherent to the judgement applied when estimating Level 3 parameters, or when selecting valuation techniques. These amounts reflect valuation uncertainties that prevail at the measurement date, and even though such uncertainties predominantly derive from the portfolio sensitivities that prevailed at that measurement date, they are not predictive or indicative of future movements in fair value, nor do they represent the effect of market stress on the portfolio value.

In estimating sensitivities, BNP Paribas either remeasured the financial instruments using reasonably possible inputs, or applied assumptions based on the valuation adjustment policy.

For the sake of simplicity, the sensitivity on cash instruments that are not relating to securitised instruments was based on a uniform 1% shift in the price. More specific shifts were however calibrated for each class of the Level 3 securitised exposures, based on the possible ranges of the unobservable inputs.

For derivative exposures, the sensitivity measurement is based on the credit valuation adjustment (CVA), the explicit funding valuation adjustment (FVA) and the parameter and model uncertainty adjustments related to Level 3.

Regarding the credit valuation adjustment (CVA) and the explicit funding valuation adjustment (FVA), the uncertainty was calibrated based on prudent valuation adjustments described in the technical standard "Prudent Valuation" published by the European Banking Authority. For other valuation adjustments, two scenarios were considered: a favourable scenario where all or portion of the valuation adjustment is not considered by market participants, and an unfavourable scenario where market participants would require twice the amount of valuation adjustments considered by BNP Paribas for entering into a transaction.

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	Potential impact on income	Potential impact on equity	Potential impact on income	Potential impact on equity
Asset Backed Securities (ABS)			+/-2	
Other debt securities	+/-9	+/-2	+/-10	
Equities and other equity securities	+/-40	+/-8	+/-41	+/-8
Loans and repurchase agreements	+/-25		+/-19	
Derivative financial instruments	+/-593		+/-552	
Interest rate and foreign exchange derivatives	*+/-365*		*+/-357*	
Credit derivatives	*+/-59*		*+/-35*	
Equity derivatives	*+/-167*		*+/-155*	
Other derivatives	*+/-2*		*+/-5*	
SENSITIVITY OF LEVEL 3 FINANCIAL INSTRUMENTS	**+/-667**	**+/-10**	**+/-624**	**+/-8**

Deferred margin on financial instruments measured using techniques developed internally and based on inputs partly unobservable in active markets

Deferred margin on financial instruments ("Day One Profit") only concerns the scope of market activities eligible for Level 3.

The day one profit is calculated after setting aside valuation adjustments for uncertainties as described previously and released to profit or loss over the expected period for which the inputs will be unobservable. The unamortised amount is included under "Financial instruments at fair value through profit or loss" as a reduction in the fair value of the relevant transactions.

In millions of euros	Deferred margin at 1 January 2018	Deferred margin on transactions during the year	Margin taken to the profit and loss account during the year	Deferred margin at 31 December 2018
Interest rate and foreign exchange derivatives	309	117	(124)	302
Credit derivatives	96	66	(70)	92
Equity derivatives	276	208	(217)	267
Other derivatives	5	15	(7)	13
Derivative financial instruments	**686**	**406**	**(418)**	**674**

5.e FINANCIAL ASSETS AT AMORTISED COST

➤ DETAIL OF LOANS AND ADVANCES BY NATURE

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*			1 January 2018 *IFRS 9 & IFRS 15*		
	Gross value	Impairment *(note 3.h)*	Carrying amount	Gross value	Impairment *(note 3.h)*	Carrying amount
Loans and advances to credit institutions	**19,707**	**(151)**	**19,556**	**20,502**	**(146)**	**20,356**
On demand accounts	7,234	(17)	7,217	7,226	(18)	7,208
Loans[(1)]	11,628	(134)	11,494	11,616	(128)	11,488
Repurchase agreements	845	-	845	1,660	-	1,660
Loans and advances to customers	**789,952**	**(24,081)**	**765,871**	**758,586**	**(27,410)**	**731,176**
On demand accounts	41,482	(4,243)	37,239	42,605	(5,308)	37,297
Loans to customers	714,243	(18,681)	695,562	685,019	(20,976)	664,043
Finance leases	33,291	(1,157)	32,134	30,293	(1,126)	29,167
Repurchase agreements	936	-	936	669	-	669
TOTAL LOANS AND ADVANCES AT AMORTISED COST	**809,659**	**(24,232)**	**785,427**	**779,088**	**(27,556)**	**751,532**

(1) Loans and advances to credit institutions include term deposits made with central banks.

➤ DETAIL OF DEBT SECURITIES

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*			1 January 2018 *IFRS 9 & IFRS 15*		
	Gross value	Impairment *(note 3.h)*	Carrying amount	Gross value	Impairment *(note 3.h)*	Carrying amount
Governments	33,254	(16)	33,238	30,891	(17)	30,874
Other public administration	18,534	(3)	18,531	18,463	(5)	18,458
Credit institutions	5,082	(3)	5,079	3,836	(4)	3,832
Others	18,333	(108)	18,225	16,338	(76)	16,262
TOTAL DEBT SECURITIES AT AMORTISED COST	**75,203**	**(130)**	**75,073**	**69,528**	**(102)**	**69,426**

DETAIL OF LOANS AND ADVANCES AND DEBT SECURITIES BY STAGE

In millions of euros	31 December 2018 IFRS 9 & IFRS 15			1 January 2018 IFRS 9 & IFRS 15		
	Gross value	Impairment *(note 3.h)*	Carrying amount	Gross value	Impairment *(note 3.h)*	Carrying amount
Loans and advances to credit institutions	**19,707**	**(151)**	**19,556**	**20,502**	**(146)**	**20,356**
Stage 1	19,128	(13)	19,115	19,640	(9)	19,631
Stage 2	419	(40)	379	706	(41)	665
Stage 3	160	(98)	62	156	(96)	60
Loans and advances to customers	**789,952**	**(24,081)**	**765,871**	**758,586**	**(27,410)**	**731,176**
Stage 1	668,667	(1,515)	667,152	631,760	(1,422)	630,338
Stage 2	87,328	(3,231)	84,097	89,413	(3,626)	85,787
Stage 3	33,957	(19,335)	14,622	37,413	(22,362)	15,051
Debt securities	**75,203**	**(130)**	**75,073**	**69,528**	**(102)**	**69,426**
Stage 1	74,240	(21)	74,219	68,325	(14)	68,311
Stage 2	769	(31)	738	952	(24)	928
Stage 3	194	(78)	116	251	(64)	187

Breakdown of finance leases

In millions of euros	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Gross investment	**35,795**	**34,036**
Receivable within 1 year	*9,525*	*10,466*
Receivable after 1 year but within 5 years	*21,346*	*20,466*
Receivable beyond 5 years	*4,924*	*3,104*
Unearned interest income	(2,504)	(3,743)
Net investment before impairment	**33,291**	**30,293**
Receivable within 1 year	*8,996*	*9,248*
Receivable after 1 year but within 5 years	*19,672*	*18,304*
Receivable beyond 5 years	*4,623*	*2,741*
Impairment provisions	(1,157)	(1,126)
Net investment after impairment	**32,134**	**29,167**

5.f IMPAIRED FINANCIAL ASSETS (STAGE 3)

The following tables present the carrying amounts of impaired financial assets carried at amortised cost and of impaired financing and guarantee commitments, as well as related collateral and other guarantees.

The amounts shown for collateral and other guarantees correspond to the lower of the value of the collateral or other guarantee and the value of the secured assets.

In millions of euros *IFRS 9 and IFRS 15*	31 December 2018			
	Stage 3 assets			Collateral received
	Gross value	Impairment	Net	
Loans and advances to credit institutions *(note 5.e)*	160	(98)	62	132
Loans and advances to customers *(note 5.e)*	33,957	(19,335)	14,622	9,663
Debt securities at amortised cost *(note 5.e)*	194	(78)	116	-
TOTAL AMORTISED-COST IMPAIRED ASSETS (STAGE 3)	**34,311**	**(19,511)**	**14,800**	**9,795**
Financing commitments given	644	(37)	607	148
Guarantee commitments given	1,285	(281)	1,004	250
TOTAL OFF-BALANCE SHEET IMPAIRED COMMITMENTS (STAGE 3)	**1,929**	**(318)**	**1,611**	**398**

In millions of euros *IFRS 9 and IFRS 15*	1 January 2018			
	Stage 3 assets			Collateral received
	Gross value	Impairment	Net	
Loans and advances to credit institutions *(note 5.e)*	156	(96)	60	156
Loans and advances to customers *(note 5.e)*	37,413	(22,362)	15,051	10,407
Debt securities at amortised cost *(note 5.e)*	251	(64)	187	-
TOTAL AMORTISED-COST IMPAIRED ASSETS (STAGE 3)	**37,820**	**(22,522)**	**15,298**	**10,563**
Financing commitments given	909	(39)	870	400
Guarantee commitments given	968	(258)	710	256
TOTAL OFF-BALANCE SHEET IMPAIRED COMMITMENTS (STAGE 3)	**1,877**	**(297)**	**1,580**	**656**

5.g FINANCIAL LIABILITIES AT AMORTISED COST DUE TO CREDIT INSTITUTIONS AND CUSTOMERS

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Deposits from credit institutions	**78,915**	**76,503**
On demand accounts	10,571	9,906
Interbank borrowings(1)	61,859	61,881
Repurchase agreements	6,485	4,716
Deposits from customers	**796,548**	**760,941**
On demand deposits	473,968	450,381
Savings accounts	146,362	146,422
Term accounts and short-term notes	175,665	162,672
Repurchase agreements	553	1,466

(1) Interbank borrowings from credit institutions include term deposits from central banks.

5.h DEBT SECURITIES AND SUBORDINATED DEBT

This note covers all debt securities in issue and subordinated debt measured at amortised cost and designated as at fair value through profit or loss.

➤ DEBT SECURITIES AT FAIR VALUE THROUGH PROFIT OR LOSS (NOTE 5.A)

Issuer/Issue date *In millions of euros*	Currency	Original amount in foreign currency *(millions)*	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment(1)	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Debt securities							48,964	47,034
Subordinated debt							787	836
Redeemable subordinated debt			(2)				118	167
Perpetual subordinated debt							669	669
BNP Paribas Fortis Dec. 2007(3)	EUR	3,000	Dec.-14	3-month Euribor +200 bp		A	669	669

(1) *Conditions precedent for coupon payment:*
A Coupon payments are halted should the issuer have insufficient capital or the underwriters become insolvent or when the dividend declared for Ageas shares falls below a certain threshold.

(2) *After agreement from the banking supervisory authority and at the issuer's initiative, these debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, via public tender offers, or in the case of private placements over the counter. Debt issued by BNP Paribas SA or foreign subsidiaries of the Group via placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days, and is in all cases subject to approval by the banking supervisory authorities.*

(3) *Convertible And Subordinated Hybrid Equity-linked Securities (CASHES) issued by BNP Paribas Fortis (previously Fortis Banque) in December 2007. The CASHES are perpetual securities but may be exchanged for Ageas (previously Fortis SA/NV) shares at the holder's sole discretion at a price of EUR 239.40. However, as of 19 December 2014, the CASHES will be automatically exchanged into Ageas shares if their price is equal to or higher than EUR 359.10 for twenty consecutive trading days. The principal amount will never be redeemed in cash. The rights of the CASHES holders are limited to the Ageas shares held by BNP Paribas Fortis and pledged to them.*
Ageas and BNP Paribas Fortis have entered into a Relative Performance Note (RPN) contract, the value of which varies contractually so as to offset the impact on BNP Paribas Fortis of the relative difference between changes in the value of the CASHES and changes in the value of the Ageas shares.
As at 31 December 2018, the subordinated liability is eligible to Tier 1 capital for EUR 205 million (considering the transitional period).

DEBT SECURITIES MEASURED AT AMORTISED COST

Issuer/Issue date *In millions of euros*	Currency	Original amount in foreign currency *(millions)*	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment[1]	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Debt securities							**151,451**	**148,156**
Debt securities in issue with an initial maturity of less than one year							**70,077**	**72,337**
Negotiable debt securities							70,077	72,337
Debt securities in issue with an initial maturity of more than one year							**81,374**	**75,819**
Negotiable debt securities							50,809	54,756
Bonds							30,565	21,063
Subordinated debt							**17,627**	**15,951**
Redeemable subordinated debt			(2)				**15,876**	**14,116**
Undated subordinated notes							**1,515**	**1,593**
BNP Paribas SA Oct. 85	EUR	305	-	TMO -0.25%	-	B	254	254
BNP Paribas SA Sept. 86	USD	500	-	6 month-Libor +0.075%	-	C	239	228
BNP Paribas Cardif Nov. 14	EUR	1,000	Nov. -25	4.032%	3-month Euribor +393 bp	D	999	1,000
Others							23	111
Participating notes							**222**	**222**
BNP Paribas SA July 84[3]	EUR	337	-	(4)	-		215	215
Others							7	7
Expenses and commission, related debt							**14**	**20**

(1) Conditions precedent for coupon payment:

B Payment of the interest is mandatory, unless the Board of directors decides to postpone these payments after the Shareholders' General Meeting has officially noted that there is no income available for distribution, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume.

C Payment of the interest is mandatory, unless the Board of directors decides to postpone these payments after the Shareholders' General Meeting has validated the decision not to pay out a dividend, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume. The bank has the option of resuming payment of interest arrears, even where no dividend is paid out.

D Payment of the interest is mandatory, except for cases of regulatory deficiency, in agreement with the regulator, or of suspension of payments. Interest payments are cumulative and are payable in full, once coupon payments resume, or, if these events occur before, when the issuance is redeemed or when the issuer is liquidated.

(2) See reference relating to "Debt securities at fair value through profit or loss".

(3) The participating notes issued by BNP Paribas SA may be repurchased as provided for in the law of 3 January 1983. The number of notes in the market is 1,434,092.

(4) Depending on net income subject to a minimum of 85% of the TMO rate and a maximum of 130% of the TMO rate.

5.i FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES

In millions of euros	31 December 2018 Assets not representative of unit-linked insurance contracts	31 December 2018 Assets representative of unit-linked insurance contracts (financial risk supported by policyholders)	31 December 2018 Total	1 January 2018 Assets not representative of unit-linked insurance contracts	1 January 2018 Assets representative of unit-linked insurance contracts (financial risk supported by policyholders)	1 January 2018 Total
Financial instruments designated as at fair value through profit or loss	41,154	61,793	102,947	35,951	60,287	96,238
Derivative financial instruments	907		907	366		366
Available-for-sale financial assets	112,041		112,041	114,166		114,166
Held-to-maturity financial assets	3,720		3,720	4,231		4,231
Loans and receivables	3,605		3,605	3,110		3,110
Equity-method investments	363	-	363	386	-	386
Investment property	2,982	2,872	5,854	3,107	3,106	6,213
TOTAL	**164,772**	**64,665**	**229,437**	**161,317**	**63,393**	**224,710**
Reinsurers' share of technical reserves	2,871	-	2,871	3,002	-	3,002
FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES	**167,643**	**64,665**	**232,308**	**164,319**	**63,393**	**227,712**

Investments in financial instruments of insurance activities are accounted for according to IAS 39 principles.

The fair value of financial assets with contractual cash-flows corresponding only to payments of principal and interest on principal amounts to EUR 107.8 billion as at 31 December 2018. It amounted to EUR 108.0 billion as at 1 January 2018, which represents a variation of EUR -0.2 billion over the period.

The fair value of other financial assets amounts to EUR 121.7 billion, and corresponds to all financial instruments that do not meet the previously mentioned criteria, derivatives and financial assets managed on a market value basis. It amounted to EUR 116.6 billion as at 1 January 2018, which represents a variation of EUR +5.1 billion over the period.

The fair value of investment properties accounted for at amortised cost amounts to EUR 4.0 billion as at 31 December 2018, compared with EUR 3.3 billion as at 1 January 2018.

➤ MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

The criteria for allocating instruments to the levels of the fair value hierarchy, the corresponding valuation methodologies and the principles of transfer between the levels of the hierarchy for insurance investments are similar to those applied for the Group's other financial instruments (note 5.d).

In millions of euros	31 December 2018 Level 1	Level 2	Level 3	Total	1 January 2018 Level 1	Level 2	Level 3	Total
Available-for-sale financial assets	**95,086**	**16,679**	**276**	**112,041**	**98,206**	**14,828**	**1,132**	**114,166**
Equity instruments	4,741	1,093	234	6,068	5,063	1,193	1,091	7,347
Debt securities	90,345	15,586	42	105,973	93,143	13,635	41	106,819
Financial instruments designated as at fair value through profit or loss	**80,097**	**16,315**	**6,535**	**102,947**	**78,444**	**12,213**	**5,581**	**96,238**
Equity instruments	77,989	11,131	6,458	95,578	76,112	7,513	5,434	89,059
Debt securities	2,108	5,184	77	7,369	2,332	4,700	147	7,179
Derivative financial instruments	**-**	**622**	**285**	**907**	**11**	**355**	**-**	**366**
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**175,183**	**33,616**	**7,096**	**215,895**	**176,661**	**27,396**	**6,713**	**210,770**

Level 1: this level comprises equities and liquid bonds, derivative instruments traded on organised markets (futures, options, etc.), units of funds and UCITS for which the net asset value is calculated on a daily basis.

Level 2: this level includes shares, certain Government or corporate bonds, other shares in funds and UCITS and over-the-counter derivatives.

Level 3: this level includes fund units and unlisted shares which are mainly investments in companies and in venture capital funds.

TABLE OF MOVEMENTS IN LEVEL 3 FINANCIAL INSTRUMENTS

For Level 3 financial instruments, the following movements occurred during the period:

	Financial assets		
In millions of euros	Available-for-sale financial instruments	Financial instruments as at fair value through profit or loss	Total
AT 1 JANUARY 2018	**1,132**	**5,581**	**6,713**
Purchases	276	2,392	2,668
Sales	(435)	(1,184)	(1,619)
Settlements	(642)	(281)	(923)
Transfers to Level 3	-	70	70
Transfers from Level 3	(51)	(144)	(195)
Gains recognised in profit or loss	46	373	419
Items related to exchange rate movements	(1)	13	12
Changes in fair value of assets and liabilities recognised in equity	(49)	-	(49)
AT 31 DECEMBER 2018	**276**	**6,820**	**7,096**

During the year ended 31 December 2018, transfers between Level 1 and Level 2 were not significant.

➤ DETAIL OF AVAILABLE-FOR-SALE FINANCIAL ASSETS

In millions of euros	31 December 2018			1 January 2018		
	Debt securities	Equity instruments	Total	Debt securities	Equity instruments	Total
Balance sheet value	**105,973**	**6,068**	**112,041**	**106,819**	**7,347**	**114,166**
of which depreciation	**-**	**(312)**	**(312)**	**-**	**(365)**	**(365)**
of which changes in value recognised directly in equity	**8,461**	**668**	**9,129**	**11,637**	**1,551**	**13,188**
Deferred tax linked to these changes in value	(2,256)	(179)	(2,435)	(3,126)	(414)	(3,540)
Insurance policyholders surplus reserve from insurance entities, after deferred tax	(5,472)	(427)	(5,899)	(7,443)	(1,005)	(8,448)
Group share of changes in value of available-for-sale securities owned, by equity-method entities, after deferred tax and insurance policyholders' surplus reserve	688	54	742	656	129	785
Unamortised changes in value of available-for-sale securities	(1)	-	(1)	-	-	-
Other variations	-	-	-	(1)	-	(1)
Changes in value of assets taken directly to equity under the heading "Financial investments of insurance activities"	**1,420**	**116**	**1,536**	**1,723**	**261**	**1,984**
Attributable to equity shareholders	1,413	116	1,529	1,688	259	1,947
Attributable to minority interests	7	-	7	35	2	37

➤ FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

In millions of euros	31 December 2018					1 January 2018				
	Level 1	Level 2	Level 3	Total	Carrying value	Level 1	Level 2	Level 3	Total	Carrying value
Held-to-maturity financial assets	4,116	-	-	4,116	3,720	4,819	-	-	4,819	4,231
Loans and receivables	125	3,487	21	3,633	3,605	130	2,749	266	3,145	3,110

5.j TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

In millions of euros	31 December 2018	1 January 2018
Technical reserves – Non-Life insurance contracts	**4,590**	**4,565**
Technical reserves – Life insurance contracts	**145,343**	**141,702**
Insurance contracts	84,392	81,990
Unit-linked contracts	60,951	59,712
Technical liabilities – investment contracts	**42,438**	**39,372**
Investments contracts with discretionary participation feature	38,604	35,838
Investment contracts without discretionary participation feature	3,834	3,534
Policyholders' surplus reserve – liability	**17,379**	**21,331**
Total technical reserves and liabilities related to insurance and investment contracts	**209,750**	**206,970**
Debts arising out of insurance and reinsurance operations	3,056	3,149
Derivative financial instruments	885	375
TOTAL TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES	**213,691**	**210,494**

The policyholders' surplus reserve arises from the application of shadow accounting. It represents the interest of policyholders within French and Italian life insurance subsidiaries in unrealised gains and losses and impairment losses on assets where the benefit paid under the policy is linked to the return on those assets. It is obtained from stochastic calculations modelling the unrealised gains and losses attributable to policyholders based on economic scenarios and assumptions as regards rates paid to customers and new business inflows. For France, this resulted in an interest of 90% in 2018, unchanged from 2017.

The change in technical reserves and liabilities related to insurance contracts breaks down as follows:

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Liabilities related to insurance contracts at start of period	**206,970**	**197,250**
Additions to insurance contract technical reserves and deposits taken on financial contracts related to life insurance	20,371	23,219
Claims and benefits paid	(15,493)	(16,830)
Effect of changes in value of admissible investments related to unit-linked business	(5,135)	3,393
Effect of movements in exchange rates	34	(566)
Effect of changes in the scope of consolidation	3,003	504
Liabilities related to insurance contracts at end of period	**209,750**	**206,970**

See note 5.i for details of reinsurers' share of technical reserves.

5.k CURRENT AND DEFERRED TAXES

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Current taxes	1,958	1,777
Deferred taxes	5,262	5,591
Current and deferred tax assets	**7,220**	**7,368**
Current taxes	1,023	887
Deferred taxes	1,232	1,347
Current and deferred tax liabilities	**2,255**	**2,234**

Change in deferred tax by nature over the period:

In millions of euros	1 January 2018	Changes recognised in profit or loss	Changes recognised in equity that may be reclassified to profit or loss	Changes recognised in equity that will not be reclassified to profit or loss	Effects of exchange rates, consolidation scope and other movements	31 December 2018
Financial instruments	(886)	(94)	505	(60)	17	(518)
Provisions for employee benefit obligations	986	(96)	-	(36)	(28)	826
Unrealised finance lease reserve	(395)	6	-	-	8	(381)
Credit risk impairment	3,047	42	-	-	22	3,111
Tax loss carryforwards	1,638	(324)	-	-	16	1,330
Other items	(146)	(46)	-	-	(146)	(338)
NET DEFERRED TAXES	**4,244**	**(512)**	**505**	**(96)**	**(111)**	**4,030**
Deferred tax assets	5,591					5,262
Deferred tax liabilities	(1,347)					(1,232)

In order to determine the amount of the tax loss carryforwards recognised as assets, the Group conducts every year a specific review for each relevant entity based on the applicable tax regime, notably incorporating any time limit rules, and a realistic projection of their future revenue and charges in line with their business plan.

Deferred tax assets recognised on tax loss carryforwards are mainly related to BNP Paribas Fortis for EUR 955 million, with a 6-year expected recovery period (unlimited carryforward period).

Unrecognised deferred tax assets totalled EUR 1,324 million at 31 December 2018, compared with EUR 1,205 million at 1 January 2018.

5.l ACCRUED INCOME/EXPENSE AND OTHER ASSETS/LIABILITIES

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Guarantee deposits and bank guarantees paid	64,988	56,452
Collection accounts	369	654
Accrued income and prepaid expenses	7,355	6,179
Other debtors and miscellaneous assets	30,634	29,676
TOTAL ACCRUED INCOME AND OTHER ASSETS	**103,346**	**92,961**
Guarantee deposits received	48,308	38,918
Collection accounts	2,820	717
Accrued expense and deferred income	10,122	9,195
Other creditors and miscellaneous liabilities	28,312	31,642
TOTAL ACCRUED EXPENSE AND OTHER LIABILITIES	**89,562**	**80,472**

5.m EQUITY-METHOD INVESTMENTS

Cumulated financial information of associates and joint ventures is presented in the following table:

	Year to 31 Dec. 2018			31 December 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017			1 January 2018 *IFRS 9 & IFRS 15*
In millions of euros	*Share of net income*	Share of changes in assets and liabilities recognised directly in equity	Share of net income and changes in assets and liabilities recognised directly in equity	*Equity-method investments*	*Share of net income*	Share of changes in assets and liabilities recognised directly in equity	Share of net income and changes in assets and liabilities recognised directly in equity	Equity-method investments
Joint ventures	*63*	*(74)*	(11)	804	*48*	*(57)*	(9)	893
Associates(1)	*565*	*(62)*	503	4,968	*665*	*(292)*	373	5,328
TOTAL EQUITY-METHOD ENTITIES	***628***	***(136)***	**492**	**5,772**	***713***	***(349)***	**364**	**6,221**

(1) Including controlled but non material entities consolidated under the equity method.

Financing and guarantee commitments given by the Group to joint ventures are listed in the note 8.h Other related parties.

The carrying amount of the Group's investment in the main joint ventures and associates is presented in the following table:

In millions of euros	Country of registration	Activity	Interest (%)	31 December 2018	1 January 2018
Joint ventures					
Bpost banque	Belgium	Retail Banking	50%	249	266
Union de Creditos Inmobiliarios	Spain	Retail mortgage	50%	239	251
Associates					
AG Insurance	Belgium	Insurance	25%	1,647	1,687
Bank of Nanjing	China	Retail Banking	15%	1,372	1,483

5.n PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS USED IN OPERATIONS, INVESTMENT PROPERTY

	31 December 2018 *IFRS 9 & IFRS 15*			1 January 2018 *IFRS 9 & IFRS 15*		
In millions of euros	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount
INVESTMENT PROPERTY	**1,031**	**(316)**	**715**	**1,213**	**(361)**	**852**
Land and buildings	7,084	(2,061)	5,023	7,443	(2,074)	5,369
Equipment, furniture and fixtures	7,130	(5,083)	2,047	6,947	(4,857)	2,090
Plant and equipment leased as lessor under operating leases	24,675	(6,805)	17,870	21,659	(5,870)	15,789
Other property, plant and equipment	2,086	(1,089)	997	1,961	(1,061)	900
PROPERTY, PLANT AND EQUIPMENT	**40,975**	**(15,038)**	**25,937**	**38,010**	**(13,862)**	**24,148**
PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY	**42,006**	**(15,354)**	**26,652**	**39,223**	**(14,223)**	**25,000**
Purchased software	3,703	(2,724)	979	3,366	(2,510)	856
Internally-developed software	4,250	(3,236)	1,014	4,139	(3,189)	950
Other intangible assets	2,334	(544)	1,790	1,990	(469)	1,521
INTANGIBLE ASSETS	**10,287**	**(6,504)**	**3,783**	**9,495**	**(6,168)**	**3,327**

Investment property

Land and buildings leased by the Group as lessor under operating leases are recorded in "Investment property".

The estimated fair value of investment property accounted for at amortised cost at 31 December 2018 is EUR 800 million, compared with EUR 942 million at 1 January 2018.

Operating leases

Operating leases and investment property transactions are in certain cases subject to agreements providing for the following minimum future payments:

In millions of euros	31 December 2018	1 January 2018
Future minimum lease payments receivable under non-cancellable leases	**6,483**	**6,224**
Payments receivable within 1 year	*2,603*	*2,680*
Payments receivable after 1 year but within 5 years	*3,852*	*3,496*
Payments receivable beyond 5 years	*28*	*48*

Future minimum lease payments receivable under non-cancellable leases are payments that the lessee is required to make during the lease term.

Intangible assets

Other intangible assets include leasehold rights, goodwill and trademarks acquired by the Group.

Depreciation, amortisation and impairment

Net depreciation and amortisation expense for the year ended 31 December 2018 was EUR 1,674 million, compared with EUR 1,711 million for the year ended 31 December 2017.

The net increase in impairment on property, plant, equipment and intangible assets taken to the profit and loss account in the year ended 31 December 2018 amounted to EUR 2 million, compared with EUR 8 million for the year ended 31 December 2017.

5.o GOODWILL

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
CARRYING AMOUNT AT START OF PERIOD	**9,571**	**10,216**
Acquisitions	99	292
Divestments	-	(15)
Impairment recognised during the period	(30)	(208)
Loss of control of First Hawaiian Inc (note 8.c)	(1,315)	-
Exchange rate adjustments	159	(714)
Other movements	3	-
CARRYING AMOUNT AT END OF PERIOD	**8,487**	**9,571**
Gross value	11,462	12,560
Accumulated impairment recognised at the end of period	(2,975)	(2,989)

Goodwill by cash-generating unit is as follows:

In millions of euros	Carrying amount		Impairment recognised during the period		Acquisitions during the period	
	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*	Year to *31 Dec. 2018* *IFRS 9 & IFRS 15*	Year to *31 Dec. 2017* *IAS 39*	Year to *31 Dec. 2018* *IFRS 9 & IFRS 15*	Year to *31 Dec. 2017* *IAS 39*
Retail Banking & Services	**7,348**	**8,472**	**(30)**	**(208)**	**69**	**292**
Domestic Markets	**1,428**	**1,415**	**-**	**-**	**17**	**160**
Arval	503	503				
Leasing Solutions	151	135			17	
New Digital Businesses	159	159				159
Personal Investors	609	612				1
Others	6	6				
International Financial Services	**5,920**	**7,057**	**(30)**	**(208)**	**52**	**132**
Asset Management	185	167			15	
Insurance	352	352				57
BancWest	3,008	4,147				
Personal Finance	1,303	1,329				36
Personal Finance – partnership tested individually	318	348	(30)	(36)		
Real Estate	404	406			(2)	39
Turk Ekonomi Bankasi A.S				(172)		
Wealth Management	313	272			39	
Others	37	36				
Corporate & Institutional Banking	**1,136**	**1,096**	**-**	**-**	**30**	**-**
Corporate Banking	276	274				
Global Markets	418	407				
Securities Services	442	415			30	
Other Activities	**3**	**3**	**-**	**-**	**-**	**-**
TOTAL GOODWILL	**8,487**	**9,571**	**(30)**	**(208)**	**99**	**292**
Negative goodwill			83	7		
CHANGE IN VALUE OF GOODWILL RECOGNISED IN THE PROFIT AND LOSS ACCOUNT			**53**	**(201)**		

As at 30 June 2018, the Group considered the loss of control of First Hawaiian Inc within one year to be highly probable and applied the provisions of IFRS 5 on groups of assets and liabilities held for sale. The application of IFRS 5 had the effect of splitting the BancWest homogeneous group of businesses and, as a result, the related goodwill between Bank of the West and FHI (see note 8.c).

The homogeneous groups of businesses to which goodwill is allocated are:

Arval: Specialist in vehicle long-term leasing, Arval offers corporates (from multinational companies to small business clients) tailored solutions that optimise their employees' mobility and outsource the risks associated with fleet management. Recently, clientele was expanded to include individuals.

Leasing Solutions: BNP Paribas Leasing Solutions uses a multi-channel partnership approach (sales *via* referrals, partnerships, direct sales and banking networks) to offer corporate and small business clients an array of leasing and rental solutions, ranging from equipment financing to fleet outsourcing.

New digital businesses: they include in particular the account management service "Nickel", open to all, without any conditions regarding income, deposits or personal wealth, and without any overdraft or credit facility. This service, which operates in real time using the latest technology, is available through over 4,000 tobacconists.

Personal Investors: BNP Paribas Personal Investors is a digital specialist of banking and investment services. Mainly based in Germany, Austria, Spain and India, it provides a wide range of banking, savings and long and short term investment services to individual clients via the internet, and also on the phone and face-to-face. In addition to its activities destined to private clients, Personal Investors offers its services and IT platform to independent financial consultants, asset managers and FinTechs.

Asset Management: BNP Paribas Asset Management is the dedicated asset management business line of the BNP Paribas Group and offers services to individual investors (through internal distributors – BNP Paribas Private and Retail Banking – and external distributors), to corporates and to institutional investors (insurance companies, retirement funds, official institutions, consultants). Its aim is to offer an added value based on a broad range of expertise throughout its active management of equities and bonds, its activity of private debt and real assets management and its multi-asset, quantitative and solutions division.

Insurance: BNP Paribas Cardif, a world leader in personal insurance, has designed, developed and marketed savings and protection products and services to protect individuals, their projects and their assets.

BNP Paribas Cardif has developed new forms of insurance and extended its offer of protection to health insurance, budget insurance, revenue and means of payment insurance, unexpected event protection (unemployment, accident, death, theft or breakage) or the protection of private digital data to meet the evolution of customers' needs.

In 2017, BNP Paribas Cardif and State Bank of India launched an Initial Public Offer on their joint venture, SBI Life, selling 4% of this life insurer in India. BNP Paribas Cardif holds a 22% interest in SBI Life at 31 December 2018.

BancWest: In the United States, the Retail Banking business is henceforth conducted through Bank of the West, which markets a very broad range of Retail Banking products and services to individuals, small businesses and corporate clients, through branches and offices in 23 States, mainly in western and mid-western America. It also has strong positions across the USA in several specialized lending activities, such as marine, recreational vehicles, church lending and agribusiness, and develops its commercial set up particularly in Corporate Banking, Wealth Management and Small and Medium Enterprise businesses.

Personal Finance: BNP Paribas Personal Finance is the Group's consumer credit specialist. Through its brands such as Cetelem, Cofinoga, Findomestic or AlphaCredit, Personal Finance provides a full range of consumer loans at point of sale (retail stores and car dealerships) or through its customer relation centres and online. The consumer credit business also operates within the Group's Retail Banking network in some countries, through the "PF Inside" set-up. Personal Finance offers insurance products tailored to local needs and practices in each of the countries where it operates. In Germany, Bulgaria, France, Hungary and Italy, the lending and insurance offer of Personal Finance has been complemented by savings products.

In 2017, BNP Paribas Personal Finance acquired the automotive finance activity of General Motors in Europe (Opel Vauxhall) with Banque PSA Finance (PSA group) and of 100% of SevenDay Finans AB, consumer credit specialist in Sweden.

Real Estate: BNP Paribas Real Estate serves the needs of its clients, whether institutional investors, corporates, public entities or individuals, at all stages of the life cycle of their property (from the conception of a construction project to its daily management).

In 2017, BNP Paribas Real Estate reinforced its transaction activity with the acquisition of Strutt&Parker, one of UK's largest independent property actors.

Turk Ekonomi Bankasi: Present mostly in Turkey, Turk Ekonomi Bankasi offers its customers (Retail, Corporate and SME) a wide array of financial products and services, including Retail and Private Banking, treasury and capital markets services, and financing.

Wealth Management: Wealth Management encompasses the Private Banking activities of BNP Paribas and serves a clientele of wealthy individuals, shareholder families and entrepreneurs seeking a one-stop shop for all their wealth management and financial needs.

In 2018, BNP Paribas Wealth Management purchased the Private Banking activities of ABN Amro in Luxembourg.

Corporate Banking: Corporate Banking combines financing solutions to corporates, all transaction banking products, corporate finance advisory services in mergers and acquisitions and primary equity activities.

Global Markets: Global Markets provides investment, hedging, financing and research services across asset classes, to corporate and institutional clients – as well as private and Retail Banking networks. The sustainable, long-term business model of Global Markets connects clients to capital markets throughout EMEA (Europe, Middle East & Africa), Asia Pacific and the Americas, with innovative solutions and digital platforms. Global Markets includes activities of Fixed Income, Currencies & Commodities and Equity & Prime Services.

Securities Services: BNP Paribas Securities Services is one of the major global players in securities services and provides integrated solutions for all actors involved in the investment cycle, sell side, buy side and issuers.

In 2018, BNP Paribas Securities Services partnered with Janus Henderson for the acquisition of middle and back-office activities of Janus Henderson in the USA.

Goodwill impairment tests are based on three different methods: observation of transactions related to comparable businesses, share price data for listed companies with comparable businesses, and discounted future cash flows (DCF).

If one of the two comparables-based methods indicates the need for impairment, the DCF method is used to validate the results and determine the amount of impairment required.

The DCF method is based on a number of assumptions in terms of future revenues, expenses and cost of risk (cash flows) based on medium-term business plans over a period of five years. Cash flow projections beyond the 5-year forecast period are based on a growth rate to perpetuity and are normalised when the short-term environment does not reflect the normal conditions of the economic cycle.

The key parameters which are sensitive to the assumptions made are the cost of capital, the cost/income ratio, the cost of risk and the growth rate to perpetuity.

Cost of capital is determined on the basis of a risk-free rate, an observed market risk premium weighted by a risk factor based on comparables specific to each homogeneous group of businesses. The values of these parameters are obtained from external information sources.

Allocated capital is determined for each homogeneous group of businesses based on the "Common Equity Tier One" regulatory requirements for the legal entity to which the homogeneous group of businesses belongs, with a minimum of 7%.

The growth rate to perpetuity used is 2% for mature economies. For CGUs implemented in countries with high levels of inflation, a specific add-on is taken into account (calculated according to inflation rates disclosed by external sources).

The following table shows the sensitivity of cash generating unit valuations to changes in the value of parameters used in the DCF calculation: the cost of capital, the cost/income ratio in terminal value, the cost of risk in terminal value and the growth rate to perpetuity.

In 2017, the downward revision in growth prospects of Turk Ekonomi Bankasi led to the full impairment of the TEB goodwill (EUR 172 million).

➤ SENSITIVITY OF THE MAIN GOODWILL VALUATIONS TO A 10-BASIS POINT CHANGE IN THE COST OF CAPITAL, A 1% CHANGE IN THE COST/INCOME RATIO IN TERMINAL VALUE, A 5% CHANGE OF THE COST OF RISK IN TERMINAL VALUE AND A 50-BASIS POINT CHANGE IN THE GROWTH RATE TO PERPETUITY

In millions of euros	BancWest	Personal Finance
Cost of capital	**8.5%**	**9.4%**
Adverse change (+10 basis points)	(127)	(214)
Positive change (-10 basis points)	131	220
Cost/income ratio	**61.6%**	**47.4%**
Adverse change (+1%)	(217)	(485)
Positive change (-1%)	217	485
Cost of risk	**(163)**	**(2,197)**
Adverse change (+5%)	(181)	(295)
Positive change (-5%)	181	295
Growth rate to perpetuity	**2.0%**	**2.2%**
Adverse change (-50 basis points)	(259)	(451)
Positive change (+50 basis points)	302	517

For the impairment test of the BancWest homogeneous group of businesses, additional scenarios were analysed, based on a 9.5% cost of capital and a 3% growth rate to perpetuity specific to the Californian region. These analyses support the absence of impairment.

5.p PROVISIONS FOR CONTINGENCIES AND CHARGES

➤ PROVISIONS FOR CONTINGENCIES AND CHARGES BY TYPE

In millions of euros	1 January 2018 *IFRS 9 & IFRS 15*	Net additions to provisions	Provisions used	Changes in value recognised directly in equity	Effect of movements in exchange rates and other movements	31 December 2018 *IFRS 9 & IFRS 15*
Provisions for employee benefits	**6,740**	**537**	**(1,022)**	**(129)**	**(87)**	**6,039**
of which post-employment benefits *(note 7.b)*	4,339	225	(347)	(130)	(89)	3,998
of which post-employment healthcare benefits *(note 7.b)*	143	5	(3)	1	(15)	131
of which provision for other long-term benefits *(note 7.c)*	1,170	203	(265)		12	1,120
of which provision for voluntary departure, early retirement plans, and headcount adaptation plan *(note 7.d)*	389	113	(120)		(2)	380
of which provision for share-based payments *(note 7.e)*	699	(9)	(287)		7	410
Provisions for home savings accounts and plans	**156**	**(20)**	**-**	**-**	**-**	**136**
Provisions for credit commitments *(note 3.h)*	**1,277**	**(17)**	**(116)**	**-**	**48**	**1,192**
Provisions for litigations	**1,858**	**(40)**	**(461)**	**-**	**(9)**	**1,348**
Other provisions for contingencies and charges	**1,053**	**118**	**(196)**	**-**	**(70)**	**905**
TOTAL PROVISIONS FOR CONTINGENCIES AND CHARGES	**11,084**	**578**	**(1,795)**	**(129)**	**(118)**	**9,620**

➤ PROVISIONS AND DISCOUNT FOR HOME SAVINGS ACCOUNTS AND PLANS

In millions of euros	31 December 2018	1 January 2018
Deposits collected under home savings accounts and plans	**18,102**	**18,137**
of which deposits collected under home savings plans	15,956	15,934
Aged more than 10 years	*3,824*	*3,914*
Aged between 4 and 10 years	*8,471*	*6,234*
Aged less than 4 years	*3,661*	*5,786*
Outstanding loans granted under home savings accounts and plans	**52**	**76**
of which loans granted under home savings plans	9	13
Provisions and discount recognised for home savings accounts and plans	**137**	**157**
provisions recognised for home savings plans	133	154
provisions recognised for home savings accounts	3	2
discount recognised for home savings accounts and plans	1	1

5.q OFFSETTING OF FINANCIAL ASSETS AND LIABILITIES

The following tables present the amounts of financial assets and liabilities before and after offsetting. This information, required by IFRS 7, aims to enable the comparability with the accounting treatment applicable in accordance with generally accepted accounting principles in the United States (US GAAP), which are less restrictive than IAS 32 as regards offsetting.

"Amounts set off on the balance sheet" have been determined according to IAS 32. Thus, a financial asset and a financial liability are offset and the net amount presented on the balance sheet when, and only when, the Group has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. Amounts set off derive mainly from repurchase agreements and derivative instruments traded with clearing houses.

The "impacts of master netting agreements and similar agreements" are relative to outstanding amounts of transactions within an enforceable agreement, which do not meet the offsetting criteria defined by IAS 32. This is the case of transactions for which offsetting can only be performed in case of default, insolvency or bankruptcy of one of the contracting parties.

"Financial instruments given or received as collateral" include guarantee deposits and securities collateral recognised at fair value. These guarantees can only be exercised in case of default, insolvency or bankruptcy of one of the contracting parties.

Regarding master netting agreements, the guarantee deposits received or given in compensation for the positive or negative fair values of financial instruments are recognised in the balance sheet in accrued income or expenses and other assets or liabilities.

In millions of euros, at 31 December 2018 *IFRS 9 & IFRS 15*	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	121,954		121,954			121,954
Loans and repurchase agreements	283,879	(100,163)	183,716	(37,657)	(135,421)	10,638
Derivative financial instruments (including derivatives used for hedging purposes)	480,745	(238,040)	242,705	(177,352)	(28,676)	36,677
Financial assets at amortised cost	860,567	(67)	860,500	(365)	(1,312)	858,823
of which repurchase agreements	*1,781*		*1,781*	*(365)*	*(1,312)*	*104*
Accrued income and other assets	103,346		103,346		(30,813)	72,533
of which guarantee deposits paid	*64,988*		*64,988*		*(30,813)*	*34,175*
Other assets not subject to offsetting	528,615		528,615			528,615
TOTAL ASSETS	**2,379,106**	**(338,270)**	**2,040,836**	**(215,374)**	**(196,222)**	**1,629,240**

In millions of euros, at 31 December 2018 *IFRS 9 & IFRS 15*	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	75,189		75,189			75,189
Deposits and repurchase agreements	304,202	(100,163)	204,039	(36,754)	(153,961)	13,324
Issued debt securities	54,908		54,908			54,908
Derivative financial instruments (including derivatives used for hedging purposes)	475,521	(238,040)	237,481	(177,352)	(31,226)	28,903
Financial liabilities at amortised cost	875,530	(67)	875,463	(1,268)	(5,311)	868,884
of which repurchase agreements	*7,038*		*7,038*	*(1,268)*	*(5,311)*	*459*
Accrued expense and other liabilities	89,562		89,562		(24,764)	64,798
of which guarantee deposits received	*48,308*		*48,308*		*(24,764)*	*23,544*
Other liabilities not subject to offsetting	398,468		398,468			398,468
TOTAL LIABILITIES	**2,273,380**	**(338,270)**	**1,935,110**	**(215,374)**	**(215,262)**	**1,504,474**

In millions of euros, at 1 January 2018 *IFRS 9 & IFRS 15*	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	130,326		130,326			130,326
Loans and repurchase agreements	276,134	(131,186)	144,948	(29,448)	(107,725)	7,775
Derivative financial instruments (including derivatives used for hedging purposes)	332,931	(89,314)	243,617	(177,227)	(27,164)	39,226
Financial assets at amortised cost	821,819	(861)	820,958	(492)	(1,818)	818,648
of which repurchase agreements	*2,330*		*2,330*	*(492)*	*(1,818)*	*20*
Accrued income and other assets	93,080	(119)	92,961		(31,947)	61,014
of which guarantee deposits paid	*56,452*		*56,452*		*(31,947)*	*24,505*
Other assets not subject to offsetting	516,968		516,968			516,968
TOTAL ASSETS	**2,171,258**	**(221,480)**	**1,949,778**	**(207,167)**	**(168,654)**	**1,573,957**

In millions of euros, at 1 January 2018 *IFRS 9 & IFRS 15*	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	67,087		67,087			67,087
Deposits and repurchase agreements	305,831	(131,186)	174,645	(28,875)	(133,009)	12,761
Issued debt securities	50,490		50,490			50,490
Derivative financial instruments (including derivatives used for hedging purposes)	332,640	(89,314)	243,326	(177,227)	(34,126)	31,973
Financial liabilities at amortised cost	838,305	(861)	837,444	(1,065)	(4,954)	831,425
of which repurchase agreements	*6,182*		*6,182*	*(1,065)*	*(4,954)*	*163*
Accrued expense and other liabilities	80,591	(119)	80,472		(24,287)	56,185
of which guarantee deposits received	*38,918*		*38,918*		*(24,287)*	*14,631*
Other liabilities not subject to offsetting	391,762		391,762			391,762
TOTAL LIABILITIES	**2,066,706**	**(221,480)**	**1,845,226**	**(207,167)**	**(196,376)**	**1,441,683**

5.r TRANSFERS OF FINANCIAL ASSETS

Financial assets that have been transferred but not derecognised by the Group are mainly composed of securities sold temporarily under repurchase agreements or securities lending transactions, as well as securitised assets. The liabilities associated to securities temporarily sold under repurchase agreements consist of debts recognised under the "repurchase agreements" heading. The liabilities associated to securitised assets consist of the securitisation notes purchased by third parties.

➤ SECURITIES LENDING, REPURCHASE AGREEMENTS AND OTHER TRANSACTIONS:

In millions of euros, at	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
Securities lending operations				
Financial instruments at fair value through profit or loss	6,838	-	4,738	-
Financial assets at amortised cost	801	-	801	-
Financial assets at fair value through equity	25	-	71	-
Repurchase agreements				
Financial instruments at fair value through profit or loss	34,871	34,699	28,658	27,930
Financial assets at amortised cost	627	624	2,371	2,371
Financial assets at fair value through equity	1,766	1,766	2,759	2,754
Financial investments of insurance activities	5,979	5,855	4,080	4,080
TOTAL	**50,907**	**42,944**	**43,478**	**37,135**

➤ SECURITISATION TRANSACTIONS PARTIALLY REFINANCED BY EXTERNAL INVESTORS, WHOSE RECOURSE IS LIMITED TO THE TRANSFERRED ASSETS:

In millions of euros, at 31 December 2018 IFRS 9 & IFRS 15	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial instruments at fair value through profit or loss	163	163	163	163	-
Financial assets at amortised cost	14,050	12,913	14,227	12,916	1,311
Financial assets at fair value through equity	21	21	21	21	-
TOTAL	**14,234**	**13,097**	**14,411**	**13,100**	**1,311**

In millions of euros, at 1 January 2018 IFRS 9 & IFRS 15	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial instruments at fair value through profit or loss	186	186	186	186	-
Financial assets at amortised cost	16,602	15,746	17,052	15,820	1,232
Financial assets at fair value through equity	23	23	23	23	-
TOTAL	**16,811**	**15,955**	**17,261**	**16,029**	**1,232**

There have been no significant transfers leading to partial or full derecognition of the financial assets where the Bank has a continuing involvement in them.

Note 6 FINANCING AND GUARANTEE COMMITMENTS

6.a FINANCING COMMITMENTS GIVEN OR RECEIVED

Contractual value of financing commitments given and received by the Group:

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Financing commitments given		
to credit institutions	3,201	2,153
to customers	301,447	283,948
Confirmed financing commitments	*231,109*	*221,268*
Other commitments given to customers	*70,338*	*62,680*
TOTAL FINANCING COMMITMENTS GIVEN	**304,648**	**286,101**
of which stage 1	*292,425*	*271,773*
of which stage 2	*10,511*	*12,684*
of which stage 3	*644*	*909*
of which insurance activities	*1,068*	*735*
Financing commitments received		
from credit institutions	72,484	70,360
from customers	11,244	3,208
TOTAL FINANCING COMMITMENTS RECEIVED	**83,728**	**73,568**

6.b GUARANTEE COMMITMENTS GIVEN BY SIGNATURE

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Guarantee commitments given		
to credit institutions	33,487	33,114
to customers	113,129	109,529
Property guarantees	1,968	1,968
Sureties provided to tax and other authorities, other sureties	54,019	52,088
Other guarantees	57,142	55,473
TOTAL GUARANTEE COMMITMENTS GIVEN	**146,616**	**142,643**
of which stage 1	*138,615*	*135,290*
of which stage 2	*6,713*	*6,385*
of which stage 3	*1,285*	*968*
of which insurance activities	*3*	*-*

6.c SECURITIES COMMITMENTS

In connexion with the settlement date accounting for securities (see note 2.a), commitments representing securities to be delivered or securities to be received are the following:

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Securities to be delivered	14,134	12,282
Securities to be received	12,869	6,241

6.d OTHER GUARANTEE COMMITMENTS

FINANCIAL INSTRUMENTS GIVEN AS COLLATERAL:

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Financial instruments (negotiable securities and private receivables) lodged with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	**104,804**	**102,906**
Used as collateral with central banks	35,216	35,457
Available for refinancing transactions	69,588	67,449
Securities sold under repurchase agreements	**314,705**	**301,764**
Other financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group(1)	**124,148**	**146,322**

(1) Notably including "Société de Financement de l'Économie Française" and "Caisse de Refinancement de l'Habitat" financing.

The fair value of financial instruments given as collateral or transferred under repurchase agreements by the Group that the beneficiary is authorised to sell or reuse as collateral amounted to EUR 396,876 million at 31 December 2018 (EUR 408,380 million at 1 January 2018).

FINANCIAL INSTRUMENTS RECEIVED AS COLLATERAL:

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Financial instruments received as collateral (excluding repurchase agreements)	**162,184**	**128,816**
of which instruments that the Group is authorised to sell and reuse as collateral	*82,543*	*102,543*
Securities received under repurchase agreements	**287,047**	**286,418**

The fair value of financial instruments received as collateral or under repurchase agreements that the Group effectively sold or reused as collateral amounted to EUR 268,973 million at 31 December 2018 (compared with EUR 272,788 million at 1 January 2018).

Note 7 SALARIES AND EMPLOYEE BENEFITS

7.a SALARY AND EMPLOYEE BENEFIT EXPENSE

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Fixed and variable remuneration, incentive bonuses and profit-sharing	12,403	12,402
Employee benefit expense	3,665	3,542
Payroll taxes	549	552
TOTAL SALARY AND EMPLOYEE BENEFIT EXPENSE	**16,617**	**16,496**

7.b POST-EMPLOYMENT BENEFITS

IAS 19 distinguishes between two categories of plans, each handled differently depending on the risk incurred by the entity. When the entity is committed to paying a fixed amount, stated as a percentage of the beneficiary's annual salary, for example, to an external entity handling payment of the benefits based on the assets available for each plan member, it is described as a defined-contribution plan. Conversely, when the entity's obligation is to manage the financial assets funded through the collection of contributions from employees and to bear the cost of benefits itself or to guarantee the final amount subject to future events, it is described as a defined-benefit plan. The same applies, if the entity entrusts management of the collection of premiums and payment of benefits to a separate entity, but retains the risk arising from management of the assets and/or from future changes in the benefits.

Defined-contribution pension plans for Group entities

The BNP Paribas Group has implemented over the past few years a wide campaign of converting defined-benefit plans into defined-contribution plans.

Thus, in France, the BNP Paribas Group pays contributions to various nationwide basic and top-up pension schemes. BNP Paribas SA and certain subsidiaries have set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by nationwide schemes.

Since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of joining defined-contribution pension plans.

The amount paid into defined-contribution post-employment plans in the year ended 31 December 2018 was EUR 612 million, compared with EUR 616 million in the year ended 31 December 2017.

The breakdown by major contributors is determined as follows:

Contribution amount *In millions of euros*	Year to 31 Dec. 2018	Year to 31 Dec. 2017
France	334	315
Italy	63	60
UK	50	48
USA	40	45
Germany	4	8
Turkey	30	38
Others	91	102
TOTAL	**612**	**616**

In Italy, the plan introduced by BNL is funded by employer contributions (4,2% of salaries) and employee contributions (2% of salaries). Employees can also make additional voluntary contributions.

In the United Kingdom, the employer contributes 12% of salaries for the majority of employees; employees can make additional voluntary contributions.

In the US, the bank matches the voluntary contributions made by employees, within certain limits.

Main defined-benefit pension plans for Group entities, of which indemnities payable on retirement

Defined-benefit plans

In Belgium, BNP Paribas Fortis funds a defined-benefit plan, based on final salary and number of years of service, for its management and employees who joined the bank before its pension plans were harmonised on 1 January 2002. Actuarial liabilities under this scheme are pre-funded at 92% at 31 December 2018 (compared with 90% at 31 December 2017) through AG Insurance, in which the BNP Paribas Group owns a 25% equity interest.

BNP Paribas Fortis senior managers are covered by a top-up pension plan, paying a lump sum based on the number of years of service and final salary. This plan is pre-funded at 96% as at 31 December 2018 (97% at 1 January 2018) through insurance companies. Since 1 January 2015, senior managers benefit from a defined-contribution scheme.

The other employees benefit as well from the defined-contribution scheme.

Since there is a legal obligation for the employer to guarantee a minimum return on financial assets invested under defined-benefit pension plans, a provision was recognised for these defined-contribution schemes, as this guarantee is not entirely covered by the insurance company.

In France, BNP Paribas pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees and active employees in service at that date. At 31 December 2018, the Group's residual obligations for these employees were recognised on the balance sheet in full.

The defined-benefit plans previously granted to some Group senior managers have all been closed to new employees and converted into top-up type schemes. The amounts allocated to residual beneficiaries, subject to their presence within the Group at retirement, were fixed when these schemes were closed. At 31 December 2018, 110% of these pension plans were funded through insurance companies (118% at 31 December 2017).

In the United Kingdom, defined-benefit pension plans (pension funds) still exist but are closed to new employees. Under these plans, the defined pension is generally based on final salary and number of years of service. Pension schemes are managed by independent management bodies (Trustees). At 31 December 2018, obligations for all UK entities were 115% covered by financial assets, compared with 107% at 31 December 2017.

In Switzerland, liabilities relate to top-up pension plans based on the principle of defined-contribution schemes with guaranteed returns, paying an annuity under pre-defined terms. These schemes are managed by a foundation. At 31 December 2018, obligations were 89% covered by financial assets, compared with 90% at 31 December 2017.

In the United States, defined-benefit pension plans are based on annual vesting rights to a lump sum comprising a pension expressed as a percentage of annual salary and paying interest at a pre-defined rate. These plans are closed to new entrants and have offered almost no new vesting rights since 2012. At 31 December 2018, the obligation was 83% covered by financial assets, (71% at 31 December 2017).

In Germany, liabilities are mainly related to defined-benefit pension plans, closed to new employees. Under these plans, the defined pension is generally based on the number of years of service and final salary. They offer the payment of an annuity under pre-defined terms. At 31 December 2018, the obligation was 59% covered by financial assets, (58% at 31 December 2017).

In Turkey, the pension plan replaces the national pension scheme (these obligations are measured based on the terms of the eventual transfer to the Turkish State) and offers guarantees exceeding the minimal legal requirements. At the end of 2018, obligations under this plan are fully funded by financial assets held with an external foundation; these financial assets exceed the related obligations, but this surplus is not recognised as an asset by the Group.

Other post-employment benefits

Group employees also receive various other contractual post-employment benefits, such as indemnities payable on retirement, determined according to minimal legal requirements (Labour Code, collective agreements) or according to specific company-level agreements.

In France, the obligations for these benefits are funded through a contract held with a third-party insurer. At 31 December 2018, this obligation was 100% covered by financial assets, compared with 98% at 31 December 2017.

In other countries, the gross obligations of the Group related to these benefits are mainly concentrated in Italy. They are representative of rights vested up to 31 December 2006, when pension reforms changed Italian termination indemnity schemes into defined-contribution plans.

Obligations under defined-benefit plans and other post-employment benefits

➤ ASSETS AND LIABILITIES RECOGNISED ON THE BALANCE SHEET

In millions of euros, at 31 December 2018	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfunded plans*	Present value of defined-benefit obligation	Fair value of plan assets	Fair value of reimbursement rights[1]	Effect of asset ceiling	Net obligation	*of which asset recognised in the balance sheet for defined-benefit plans*	*of which net assets of defined-benefit plans*	*of which fair value of reimbursement rights*	*of which obligation recognised in the balance sheet for defined-benefit plans*
Belgium	*3,049*	*21*	3,070	(93)	(2,838)		139	*(2,838)*		*(2,838)*	*2,977*
UK	*1,488*	*1*	1,489	(1,716)			(227)	*(234)*	*(234)*		*7*
France	*1,193*	*106*	1,299	(1,201)			98	*(61)*	*(61)*		*159*
Switzerland	*1,090*	*9*	1,099	(976)			123				*123*
USA	*538*	*77*	615	(510)			105				*105*
Italy		*357*	357				357				*357*
Germany	*121*	*60*	181	(108)			73				*73*
Turkey	*140*	*29*	169	(366)		226	29				*29*
Others	*503*	*41*	544	(381)	(1)		162	*(6)*	*(5)*	*(1)*	*168*
TOTAL	***8,122***	***701***	**8,823**	**(5,351)**	**(2,839)**	**226**	**859**	***(3,139)***	***(300)***	***(2,839)***	***3,998***

In millions of euros, at 31 December 2017	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfunded plans*	Present value of defined-benefit obligation	Fair value of plan assets	Fair value of reimbursement rights[1]	Effect of asset ceiling	Net obligation	*of which asset recognised in the balance sheet for defined-benefit plans*	*of which net assets of defined-benefit plans*	*of which fair value of reimbursement rights*	*of which obligation recognised in the balance sheet for defined-benefit plans*
Belgium	*3,182*	*21*	3,203	(70)	(2,930)		203	*(2,930)*		*(2,930)*	*3,133*
UK	*1,681*	*1*	1,682	(1,802)			(120)	*(130)*	*(130)*		*10*
France	*1,225*	*117*	1,342	(1,223)			119	*(50)*	*(50)*		*169*
Switzerland	*1,059*	*10*	1,069	(951)			118				*118*
USA	*634*	*179*	813	(575)			238	*(6)*	*(6)*		*244*
Italy		*368*	368				368				*368*
Germany	*122*	*60*	182	(110)			72				*72*
Turkey	*270*	*27*	297	(422)		152	27				*27*
Others	*481*	*134*	615	(421)	(1)		193	*(5)*	*(4)*	*(1)*	*198*
TOTAL	***8,654***	***917***	**9,571**	**(5,574)**	**(2,931)**	**152**	**1,218**	***(3,121)***	***(190)***	***(2,931)***	***4,339***

(1) The reimbursement rights are principally found on the balance sheet of the Group's insurance subsidiaries and associated companies – notably AG Insurance with respect to BNP Paribas Fortis' defined-benefit plan – to hedge their commitments to other Group entities that were transferred to them to cover the post-employment benefits of certain employee categories.

CHANGE IN THE PRESENT VALUE OF THE DEFINED-BENEFIT OBLIGATION

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
PRESENT VALUE OF DEFINED-BENEFIT OBLIGATION AT START OF PERIOD	**9,571**	**9,831**
Current service cost	236	257
Interest cost	136	147
Past service cost	(17)	(1)
Settlements	(32)	(7)
Actuarial (gains)/losses on change in demographic assumptions	(36)	(58)
Actuarial (gains)/losses on change in financial assumptions	(400)	210
Actuarial (gains)/losses on experience gaps	50	51
Actual employee contributions	24	24
Benefits paid directly by the employer	(110)	(106)
Benefits paid from assets/reimbursement rights	(455)	(479)
Exchange rate (gains)/losses on obligation	(11)	(352)
(Gains)/losses on obligation related to changes in the consolidation scope	(133)	54
PRESENT VALUE OF DEFINED-BENEFIT OBLIGATION AT END OF PERIOD	**8,823**	**9,571**

CHANGE IN THE FAIR VALUE OF PLAN ASSETS AND REIMBURSEMENT RIGHTS

	Plan assets		Reimbursement rights	
In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017	Year to 31 Dec. 2018	Year to 31 Dec. 2017
FAIR VALUE OF ASSETS AT START OF PERIOD	**5,574**	**5,572**	**2,931**	**2,926**
Expected return on assets	103	109	27	28
Settlements	(50)	(1)		
Actuarial gains/(losses) on assets	(56)	214	(64)	149
Actual employee contributions	14	14	10	10
Employer contributions	142	139	141	89
Benefits paid from assets	(248)	(259)	(206)	(220)
Exchange rate gains/(losses) on assets	(67)	(329)		
Gains/(losses) on assets related to changes in the consolidation scope	(61)	115		(51)
FAIR VALUE OF ASSETS AT END OF PERIOD	**5,351**	**5,574**	**2,839**	**2,931**

COMPONENTS OF THE COST OF DEFINED-BENEFIT PLANS

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Service costs	**237**	**250**
Current service cost	236	257
Past service cost	(17)	(1)
Settlements	18	(6)
Net financial expense	**19**	**26**
Interest cost	136	147
Interest income on plan asset	13	16
Interest income on reimbursement rights	(103)	(109)
Expected return on asset ceiling	(27)	(28)
TOTAL RECOGNISED IN SALARY AND EMPLOYEE BENEFIT EXPENSE	**256**	**276**

OTHER ITEMS RECOGNISED DIRECTLY IN EQUITY

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Other items recognised directly in equity	**147**	**194**
Actuarial (losses)/gains on plan assets or reimbursement rights	(120)	363
Actuarial (losses)/gains of demographic assumptions on the present value of obligations	36	58
Actuarial (losses)/gains of financial assumptions on the present value of obligations	400	(210)
Experience (losses)/gains on obligations	(50)	(51)
Variation of the effect of assets limitation	(119)	34

MAIN ACTUARIAL ASSUMPTIONS USED TO CALCULATE OBLIGATIONS

In the Eurozone, United Kingdom and United States, the Group discounts its obligations using the yields of high quality corporate bonds, with a term consistent with the duration of the obligations.

The ranges of rates used are as follows:

	31 December 2018		31 December 2017	
In %	Discount rate	Compensation increase rate[(1)]	Discount rate	Compensation increase rate[(1)]
Belgium	0.80%/1.80%	2.90%/3.40%	0.60%/1.90%	2.90%/3.40%
UK	1.80%/3.00%	2.00%/3.55%	1.50%/2.70%	2.00%/4.70%
France	0.40%/1.80%	2.05%/3.30%	0.50%/1.30%	2.15%/3.40%
Switzerland	0.00%/0.90%	1.40%/1.50%	0.00%/0.80%	1.40%/1.50%
USA	3.50%/4.45%	4.00%	2.25%/3.75%	4.00%
Italy	0.80%/1.80%	1.80%/3.10%	0.50%/1.80%	1.80%/2.70%
Germany	1.40%/1.90%	2.00%/3.00%	1.30%/1.80%	2.00%/3.00%
Turkey	16.70%	12.20%	11.80%	6.00%

(1) Including price increases (inflation).

Observed weighted average rates are as follows:

- in the Eurozone: 1.30% at 31 December 2018 (1.06% at 31 December 2017);
- in the United Kingdom: 2.81% at 31 December 2018 (2.41% at 31 December 2017);
- in Switzerland: 0.89% at 31 December 2018 (0.60% at 31 December 2017).

The impact of a 100 bp change in discount rates on the present value of post-employment benefit obligations is as follows:

	31 December 2018		31 December 2017	
Change in the present value of obligations *In millions of euros*	Discount rate -100bp	Discount rate +100bp	Discount rate -100bp	Discount rate +100bp
Belgium	306	(250)	309	(286)
UK	325	(243)	389	(286)
France	144	(121)	144	(122)
Switzerland	187	(145)	105	(143)
USA	69	(57)	95	(82)
Italy	26	(25)	27	(28)
Germany	37	(28)	39	(27)
Turkey	15	(12)	10	(8)

ACTUAL RATE OF RETURN ON PLAN ASSETS AND REIMBURSEMENT RIGHTS OVER THE PERIOD

In %	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Range of value (reflecting the existence of several plans in the same country)	Weighted average rates	Range of value (reflecting the existence of several plans in the same country)	Weighted average rates
Belgium	-2.00%/4.65%	-0.43%	1.25%/5.90%	2.94%
UK	-3.80%/5.70%	-3.05%	2.30%/9.70%	6.55%
France	3.55%	3.55%	3.65%	3.65%
Switzerland	-2.00%/2.80%	-0.66%	6.95%/7.85%	6.96%
USA	-4.55%/1.50%	-0.50%	8.40%/14.20%	11.37%
Germany	-6.50%/1.80%	-3.23%	-1.80%/2.90%	1.07%
Turkey	13.10%	13.10%	10.55%	10.55%

BREAKDOWN OF PLAN ASSETS

In %	31 December 2018						31 December 2017					
	Shares	Govern-mental bonds	Non-Govern-mental bonds	Real-estate	Deposit account	Others	Shares	Govern-mental bonds	Non-Go-vernmental bonds	Real-estate	Deposit account	Others
Belgium	6%	52%	19%	1%	0%	22%	7%	52%	19%	1%	0%	21%
UK	16%	63%	9%	0%	3%	9%	26%	56%	9%	0%	1%	8%
France(1)	7%	67%	18%	8%	0%	0%	6%	68%	18%	8%	0%	0%
Switzerland	31%	29%	4%	20%	1%	15%	32%	29%	4%	18%	2%	15%
USA	26%	44%	14%	0%	11%	5%	33%	36%	18%	0%	8%	5%
Germany	28%	61%	0%	0%	2%	9%	28%	62%	0%	0%	1%	9%
Turkey	0%	0%	0%	5%	94%	1%	0%	0%	0%	5%	93%	2%
Others	10%	11%	12%	1%	6%	60%	9%	13%	11%	1%	15%	51%
GROUP	**13%**	**49%**	**13%**	**4%**	**6%**	**15%**	**16%**	**46%**	**14%**	**4%**	**6%**	**14%**

(1) In France, the breakdown of plan assets reflects the breakdown of the general fund of the insurance company through which the Group's obligations are funded.

The Group introduced an asset management governance for assets backing defined-benefit pension plan commitments, the main objectives of which are the management and control of the risks in terms of investment.

It sets out investment principles, in particular, by defining an investment strategy for plan assets, based on financial objectives and financial risk management, to specify the way in which plan assets have to be managed, via financial management servicing contracts.

The investment strategy is based on an assets and liabilities management analysis that should be realised at least every three years for plans with assets in excess of EUR 100 million.

Post-employment healthcare benefits

The Group offers some healthcare benefit plans for retired employees, mainly in the United States and Belgium. These plans are mainly closed to new entrants.

At the end of 2016, the healthcare benefit plan of Bank of the West in the United States was closed, rights have been frozen and conditions of eligibility have been modified for some employees.

The present value of post-employment healthcare benefit obligations stood at EUR 131 million at 31 December 2018, compared with EUR 143 million at 31 December 2017, i.e. a decrease of EUR 12 million in 2018, of which a EUR 1 million increase recognised directly in shareholders' equity.

7.c OTHER LONG-TERM BENEFITS

BNP Paribas offers its employees various long-term benefits, mainly long-service awards, the ability to save up paid annual leave in time savings accounts, and certain guarantees protecting them in the event they become incapacitated. The net provision amounted to EUR 462 million at 31 December 2018 (unchanged from 31 December 2017).

As part of the Group's variable compensation policy, annual deferred compensation plans are set up for certain high-performing employees or pursuant to special regulatory frameworks. Under these plans, payment is deferred over time and is subject to the performance achieved by the business lines, divisions and Group.

Since 2013, BNP Paribas has introduced a Group loyalty scheme with a cash payment, at the end of a three-year vesting period, which fluctuates according to the Group's intrinsic performance. The aim of this loyalty scheme is to make different categories of managerial staff partners in the Group's development and profitability objectives. These personnel are representative of the Group's talent and the breadth of its managerial framework i.e. senior managers, managers in key positions, line managers and experts, high-potential managers, high-performing young executives with good career development prospects and key contributors to the Group's results.

The amounts allocated under this plan are linked to changes in the Group's operational performance over three years (for 80%) and to the achievement of the Group's corporate social responsibility (CSR) targets (for 20%). These nine targets are in line with the four pillars on which the Group's CSR policy is based. In addition, the final payment is subject to continuous service within the Group between the grant date and the payment date, provided that the Group's operating income and pre-tax income for the year prior to payment are strictly positive. For employees subject to special regulatory frameworks, this loyalty scheme is adjusted in accordance with the CRD 4 European Directive.

The net obligation related to deferred compensation plans and loyalty schemes amounts to EUR 579 million at 31 December 2018 (EUR 619 million at 31 December 2017).

In millions of euros	31 December 2018	31 December 2017
Net provisions for other long-term benefits	**1,040**	**1,081**
Asset recognised in the balance sheet under the other long-term benefits	(80)	(89)
Obligation recognised in the balance sheet under the other long-term benefits	1,120	1,170

7.d TERMINATION BENEFITS

BNP Paribas has implemented a number of voluntary redundancy plans and headcount adaptation plans for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for as soon as a bilateral agreement or a bilateral agreement proposal for a particular plan is made.

In 2016, in France, CIB activities in BNP Paribas SA and BNP Paribas Arbitrage have set up in their respective scope a 3-year voluntary redundancy plan (from October 2016 to December 2018).

In millions of euros	31 December 2018	31 December 2017
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	380	389

7.e SHARE-BASED PAYMENTS

Share-based loyalty, compensation and incentive schemes

Until 2012, BNP Paribas set up several share-based payment schemes for certain employees: performance shares plans and stock subscription or purchase plans.

After 2012, only some cash-settled long term compensation plans are still share price-linked, especially for employees whose activities are likely to have an impact on the Group's risk exposure.

Deferred share price-linked, cash-settled compensation plans

As part of the Group's variable remuneration policy, deferred annual compensation plans offered to certain high-performing employees or set up pursuant to special regulatory frameworks may entitle beneficiaries to variable compensation settled in cash but linked to the share price, payable over several years.

Variable compensation for employees, subject to special regulatory frameworks

Since the publication of the Decree by the French ministry of finance on 13 December 2010, and following the provisions of the European Directive CRD 4 of 26 July 2013 transposed into the French law in the Monetary and Financial Code by the Order of 20 February 2014 as well as the Decrees and Orders of 3 November 2014 and the delegated European regulation of 4 March 2014, the variable compensation plans apply to Group employees performing activities that may have a material impact on the Group's risk profile.

Under these plans, payment is deferred over time and is contingent on the performance achieved by the business lines, core businesses and Group.

Sums will mostly be paid in cash linked to the increase or decrease in the BNP Paribas share price.

Deferred variable compensation for other Group employees

Sums due under the annual deferred compensation plans for high-performing employees are partly paid in cash linked to the increase or decrease in the BNP Paribas share price.

Global Share-Based Incentive Plan (until 2012)

BNP Paribas set up a Global Share-Based Incentive Plan for some Group employees, including stock options and performance share awards.

The option exercise price under these plans is determined at the time of issuance and no discount is offered. The duration of the options granted is 8 years.

Performance shares awarded between 2009 and 2012 vest after a period of 3 or 4 years, depending on the case and provided that the employee is still a member of the Group. The compulsory holding period for performance shares is two years for France-based employees.

Since 2010, the conditional portion granted had been set at 100% of the total award for members of the BNP Paribas Group Executive Committee and senior managers and 20% for other beneficiaries.

Under stock option plans set up between 2003 and 2011, the performance condition was not fully met on seven out of thirty occasions and the adjustments described above were therefore implemented. Under performance share plans awarded between 2009 and 2012, the performance condition was not met on three out of ten occasions and the relevant contingent portion therefore lapsed.

All unexpired plans settle in a potential subscription of BNP Paribas shares.

Valuation of stock option plans and performance share plans

As required under IFRS 2, BNP Paribas attributes a value to stock options and performance shares granted and recognises an expense, determined at the date of grant, calculated respectively on the basis of the fair value of the options and shares concerned. This initial fair value may not subsequently be adjusted for changes in the quoted market price of BNP Paribas shares. The only assumptions that may result in a revision of the fair value during the vesting period, and hence an adjustment in the expense, are those related to the population of beneficiaries (loss of rights) and internal performance conditions. The Group's share-based payment plans are valued by an independent specialist firm.

History of plans granted under the Global Share-Based Incentive Plan

The tables below give details of the characteristics and terms of all unexpired plans at 31 December 2018:

4

STOCK SUBSCRIPTION OPTION PLANS

Characteristics of the plan							Options outstanding at end of period	
Originating company	Date of grant	Number of grantees	Number of options granted	Start date of exercise period	Option expiry date	Adjusted exercise price *(in euros)*	Number of options	Remaining period until expiry of options (years)
BNP Paribas SA[(1)]	05/03/2010	1,820	2,423,700	05/03/2014	02/03/2018	51.20	-	-
BNP Paribas SA[(1)]	04/03/2011	1,915	2,296,820	04/03/2015	04/03/2019	56.45	1,296,508	0.2
TOTAL OPTIONS OUTSTANDING AT END OF PERIOD							**1,296,508**	

(1) The plan is subject to vesting conditions under which a proportion of the options granted to employees is conditional upon the performance of the BNP Paribas share relative to the Dow Jones EURO STOXX Banks index during the applicable holding period.
Based on this relative performance condition, the adjusted exercise price for these options has been set at EUR 67.74 instead of EUR 56.45 for 207,128 options under the 4 March 2011 plan, outstanding at the year-end.

PERFORMANCE SHARE PLANS

At 31 December 2018, 311 BNP Paribas SA shares granted via performance share plans from 2009 to 2012 were not yet delivered to their beneficiaries.

Movements over the past two years

	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Number of options	Weighted average exercise price *(in euros)*	Number of options	Weighted average exercise price *(in euros)*
OPTIONS OUTSTANDING AT 1 JANUARY	**2,277,443**	**55.61**	**4,176,666**	**51.98**
Options exercised during the period	(939,175)	52.07	(1,856,733)	47.64
Options expired during the period	(41,760)		(42,490)	
OPTIONS OUTSTANDING AT 31 DECEMBER	**1,296,508**	**58.25**	**2,277,443**	**55.61**
OPTIONS EXERCISABLE AT 31 DECEMBER	**1,296,508**	**58.25**	**2,277,443**	**55.61**

The average quoted stock market price in 2018 is EUR 64.89 (EUR 62.82 in 2017).

Expense of share-based payment

Expense/(revenue) in millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Prior deferred compensation plans	(204)	82
Deferred compensation plans for the year	195	345
TOTAL	**(9)**	**427**

Note 8 ADDITIONAL INFORMATION

8.a CHANGES IN SHARE CAPITAL AND EARNINGS PER SHARE

At 31 December 2018, the share capital of BNP Paribas SA amounted to EUR 2,499,597,122, and was divided into 1,249,798,561 shares. The nominal value of each share is EUR 2. At 31 December 2017, the share capital amounted to EUR 2,497,718,772 and was divided into 1,248,859,386 shares.

Ordinary shares issued by BNP Paribas and held by the Group

	Proprietary transactions		Trading transactions(1)		Total	
	Number of shares	Carrying amount *(in millions of euros)*	Number of shares	Carrying amount *(in millions of euros)*	Number of shares	Carrying amount *(in millions of euros)*
Shares held at 31 December 2016	**785,318**	**41**	**114,718**	**7**	**900,036**	**48**
Acquisitions	320,794	20			320,794	20
Disposals	(297,794)	(18)			(297,794)	(18)
Shares delivered to employees	(576)				(576)	
Other movements			(272,895)	(17)	(272,895)	(17)
Shares held at 31 December 2017	**807,742**	**43**	**(158,177)**	**(10)**	**649,565**	**33**
Acquisitions	513,568	31			513,568	31
Disposals	(594,068)	(36)			(594,068)	(36)
Shares delivered to employees	(791)				(791)	
Other movements			1,649,512	69	1,649,512	69
Shares held at 31 December 2018	**726,451**	**38**	**1,491,335**	**59**	**2,217,786**	**97**

(1) Transactions realised in the framework of an activity of trading and arbitrage transactions on equity indices.

At 31 December 2018, the BNP Paribas Group was a holder of 2,217,786 BNP Paribas shares representing an amount of EUR 97 million, which was recognised as a decrease in equity.

Under the Bank's market-making agreement relating to the BNP Paribas share on the Italian market made with Exane BNP Paribas, and in line with the Code of Ethics recognised by the AMF, the Bank bought back 513,568 shares in 2018 at an average share price of EUR 60.74, and sold the residual portfolio of 594,068 shares, at an average share price of EUR 59.33, which terminated this market-making agreement.

From 1 January 2018 to 31 December 2018, 791 shares were delivered following the definitive award of performance shares to their beneficiaries.

Preferred shares and Undated Super Subordinated Notes eligible as Tier 1 regulatory capital

Preferred shares issued by the Group's foreign subsidiaries

BNP Paribas Personal Finance made in 2004 two issues of undated non-voting preferred shares through a structured entity governed by UK law and which is exclusively controlled. Since the first call date, these preferred shares are redeemable at par at the issuer's discretion at each quarterly coupon date.

Issuer	Date of issue	Currency	Amount *(in millions of euros)*	Rate and term before 1st call date		Rate after 1st call date
Cofinoga Funding II LP	January and May 2004	EUR	80	TEC 10(1) +1.35%	10 years	TEC 10(1) + 1.35%
TOTAL AT 31 DECEMBER 2018			**73(2)**			

(1) TEC 10 is the daily long-term government bond index, corresponding to the yield-to-maturity of a fictitious 10-year Treasury note.
(2) Value at the date of acquisition of control over the LaSer group.

These issues and the related dividends are recorded under "Minority interests" in the balance sheet.

Undated Super Subordinated Notes issued by BNP Paribas SA

BNP Paribas has issued Undated Super Subordinated Notes which pay a fixed, fixed adjustable or floating rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap rate.

On 13 April 2017, BNP Paribas SA redeemed the April 2007 issue for a total amount of EUR 638 million at the first call date. These notes paid a 5.019% fixed-rate coupon.

On 23 October 2017, BNP Paribas SA redeemed the October 2007 issue, for an amount of GBP 200 million, at the first call date. These notes paid a 7.436% fixed-rate coupon.

On 15 November 2017, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of USD 750 million which pay a 5.125% fixed-rate coupon. These notes could be redeemed at the end of a period of 5 years. If the notes are not redeemed in 2022, a 5-year dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 2 July 2018, BNP Paribas redeemed the June 2008 issue for a total amount of EUR 500 million, at the first call date. These notes paid a 7.781% fixed-rate coupon.

On 16 August 2018, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of USD 750 million which pay a 7% fixed-rate coupon. These notes could be redeemed at the end of a period of 10 years. If the notes are not redeemed in 2028, a 5-year dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 18 September 2018, BNP Paribas SA redeemed the September 2008 issue for an amount of EUR 100 million, at the first call date. These notes paid a 7.57% fixed-rate coupon.

The following table summarises the characteristics of these various issues:

Date of issue	Currency	Amount *(in millions of currency units)*	Coupon payment date	Rate and term before 1st call date		Rate after 1st call date
October 2005	EUR	1,000	annual	4.875%	6 years	4.875%
October 2005	USD	400	annual	6.250%	6 years	6.250%
July 2006	EUR	150	annual	5.450%	20 years	3-month Euribor +1.920%
June 2007	USD	600	quarterly	6.500%	5 years	6.500%
June 2007	USD	1,100	semi-annual	7.195%	30 years	USD 3-month Libor +1.290%
December 2009	EUR	2	quarterly	3-month Euribor +3.750%	10 years	3-month Euribor +4.750%
December 2009	EUR	17	annual	7.028%	10 years	3-month Euribor +4.750%
December 2009	USD	70	quarterly	USD 3-month Libor +3.750%	10 years	USD 3-month Libor +4.750%
December 2009	USD	0.5	annual	7.384%	10 years	USD 3-month Libor +4.750%
June 2015	EUR	750	semi-annual	6.125%	7 years	EUR 5-year swap +5.230%
August 2015	USD	1,500	semi-annual	7.375%	10 years	USD 5-year swap +5.150%
March 2016	USD	1,500	semi-annual	7.625%	5 years	USD 5-year swap +6.314%
December 2016	USD	750	semi-annual	6.750%	5.25 years	USD 5-year swap +4.916%
November 2017	USD	750	semi-annual	5.125%	5 years	USD 5-year swap +2.838%
August 2018	USD	750	semi-annual	7.000%	10 years	USD 5-year swap +3.980%
TOTAL EURO-EQUIVALENT HISTORICAL VALUE AT 31 DECEMBER 2018		**8,230(1)**				

(1) Net of shares held in treasury by Group entities

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated Notes. Unpaid interest is not carried forward.

For the notes issued before 2015, the absence of coupon payment is conditional on the absence of dividend payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated Note equivalents during the previous year. Interest due is payable once dividend payment on BNP Paribas SA ordinary shares resumes.

The contracts relating to these Undated Super Subordinated Notes contain a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up and the nominal value of the notes is increased to its original amount.

The proceeds from these issues are recorded in equity under "Capital and retained earnings". In accordance with IAS 21, issues denominated in foreign currencies are recognised at their historical value based on their translation into euros at the issue date. Interest on the instruments is treated in the same way as dividends.

At 31 December 2018, the BNP Paribas Group held EUR 16 million of Undated Super Subordinated Notes which were deducted from shareholders' equity.

Earnings per share

Basic earnings per share are calculated by dividing the net income for the period attributable to holders of ordinary shares by the weighted average number of ordinary shares outstanding during the period. The net income attributable to ordinary shareholders is determined by deducting the net income attributable to holders of preferred shares.

Diluted earnings per share correspond to the net income for the period attributable to holders of ordinary shares, divided by the weighted average number of shares outstanding as adjusted for the maximum effect of the conversion of dilutive equity instruments into ordinary shares. In-the-money stock subscription options are taken into account in the diluted earnings per share calculation, as are performance shares granted under the Global Share-Based Incentive Plan. Conversion of these instruments would have no effect on the net income figure used in this calculation.

	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Net profit used to calculate basic and diluted earnings per ordinary share *(in millions of euros)*(1)	**7,159**	**7,537**
Weighted average number of ordinary shares outstanding during the year	**1,248,334,552**	**1,246,386,807**
Effect of potentially dilutive ordinary shares	311	296,592
Stock subscription option plan	-	295,245
Performance share attribution plan	311	1,347
Weighted average number of ordinary shares used to calculate diluted earnings per share	**1,248,334,863**	**1,246,683,399**
Basic earnings per share *(in euros)*	**5.73**	**6.05**
Diluted earnings per share *(in euros)*	**5.73**	**6.05**

(1) The net profit used to calculate basic and diluted earnings per share is the net profit attributable to equity shareholders, adjusted for the remuneration on the Undated Super Subordinated Notes issued by BNP Paribas SA (treated as preferred share equivalents), which for accounting purposes is handled as dividends, as well as the related foreign exchange impact recognised directly in shareholders' equity in case of repurchase.

The dividend per share paid in 2018 out of the 2017 net income amounted to EUR 3.02, compared with EUR 2.70 paid in 2017 out of the 2016 net income.

8.b CONTINGENT LIABILITIES: LEGAL PROCEEDINGS AND ARBITRATION

BNP Paribas (the "Bank") is party as a defendant in various claims, disputes and legal proceedings (including investigations by judicial or supervisory authorities) in a number of jurisdictions arising in the ordinary course of its business activities, including *inter alia* in connection with its activities as market counterparty, lender, employer, investor and taxpayer. While the Bank cannot predict the ultimate outcome of all pending and threatened legal and regulatory proceedings, the Bank reasonably believes that they are either without legal merit, can be successfully defended or that the outcome of these actions is not expected to result in a significant loss for the Bank.

The Bank and certain of its subsidiaries are defendants in several actions pending before the United States Bankruptcy Court Southern District of New York brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC ("BLMIS"). These actions, known generally as "clawback claims", are similar to those brought by the BLMIS Trustee against numerous institutions, and seek recovery of amounts allegedly received by the BNP Paribas entities from BLMIS or indirectly through BLMIS-related "feeder funds" in which BNP Paribas entities held interests. The BLMIS Trustee claims in these actions that the amounts which BNP Paribas entities received are avoidable and recoverable under the US Bankruptcy Code and New York state law. In the aggregate, the amount initially sought to be recovered in these actions approximated USD 1.3 billion. BNP Paribas has substantial and credible defenses to these actions and is defending against them vigorously.

In two decisions dated 22 November 2016 and 3 October 2018, the Bankruptcy Court rejected most of the claims brought by the BLMIS Trustee against BNP Paribas entities. An appeal is ongoing as to the 22 November 2016 decision. Oral argument was heard by the Court of Appeals for the Second Circuit on 16 November 2018. The 3 October 2018 decision will be subject to appeal at the conclusion of that suit.

Various litigations and investigations are ongoing relating to the restructuring of the Fortis group, now Ageas, of which BNP Paribas Fortis is no longer part, and to events having occurred before BNP Paribas Fortis became part of the BNP Paribas Group. Among these are litigations brought by shareholders groups in The Netherlands and Belgium against Ageas and, among others, against BNP Paribas Fortis, in relation to its role as global coordinator of Fortis (now Ageas)'s capital increase in October 2007 to partly finance its acquisition of ABN Amro Bank N.V.. These shareholders groups mainly allege that there has been a breach in financial communication, regarding, *inter alia*, the disclosure on the exposure to subprime mortgages. On 13 July 2018, the Amsterdam Court of Appeal has declared binding a settlement between Ageas and representatives of certain shareholders groups who held shares between 28 February 2007 and 14 October 2008. On 21 December 2018, Ageas indicated that it waived its right to terminate the settlement.

BNP Paribas Fortis is one of the releasees under the Ageas Settlement. This means that each eligible shareholder which has not opted out will be deemed to have fully released BNP Paribas Fortis from any claim regarding the events during this time. Litigation was also brought in Belgium by minority shareholders of Fortis against the *Société fédérale de Participations et d'Investissement*, Ageas and BNP Paribas seeking (amongst other things) damages from BNP Paribas as restitution for part of the BNP Paribas Fortis shares that were contributed to BNP Paribas in 2009, on the ground that the transfer of these shares was null and void. On 29 April 2016 the Brussels Commercial court decided to stay the proceedings until the resolution of the pending Fortis criminal proceeding in Belgium. BNP Paribas does not have tangible elements to assess the duration of such suspension.

Like many other financial institutions in the banking, investment, mutual funds and brokerage sectors, the Bank has received or may receive requests for information from supervisory, governmental or self-regulated agencies. The Bank responds to such requests, and cooperates with the relevant authorities and regulators and seeks to address and remedy any issues they may raise.

Regulatory and law enforcement authorities in multiple jurisdictions are conducting investigations or making inquiries of a number of financial institutions regarding trading on the foreign exchange markets. The Bank has been cooperating with the investigations and inquiries and has reponded to the information requests. Regarding the United States, on 24 May 2017, the New York Department of Financial Services ("DFS") announced that it had fined the Bank USD 350 million as part of a consent order for violations of New York banking law arising out of the Bank's global foreign exchange business. On 17 July 2017 the Board of Governors of the Federal Reserve System ("FED") announced that it had fined the Bank and certain of its US subsidiaries USD 246 million as part of a consent order for unsafe and unsound practices in the foreign exchange market. Under these respective consent orders, the Bank has also agreed to improve its internal policies and controls relating to its foreign exchange business and to certain designated market activities, with regard to the FED order. On 25 January 2018, BNP Paribas USA Inc. accepted to plead guilty in front of the US District Court for the Southern District of New York to a single violation of the Sherman Antitrust Act. On 30 May 2018, the court imposed the sentence, as jointly recommended in the plea agreement between BNP Paribas USA Inc. and the Department of Justice ("DOJ"), consisting of (1) a fine of USD 90 million; (2) no probation, and (3) no order of restitution. In reaching the plea agreement with BNP Paribas USA Inc., the DOJ has noted the Bank's substantial efforts relating to compliance and remediation to address and prevent the re-occurrence through its compliance and remediation program of the issues arising from its FX trading business. On 29 August 2018, the US Commodity Futures Trading Commission ("CFTC") announced the imposition of a civil penalty of USD 90 million on and paid by BNP Paribas Securities Corp. as part of a consent order following an investigation in connection with the USD ISDAFIX benchmark. The findings of the order were neither admitted nor denied by BNP Paribas Securities Corp. which, the CFTC noted in its order, had engaged in "significant remedial action [...] independent of the Commission's investigation".

The US regulatory and law enforcement authorities are currently investigating or requesting information in relation to certain activities as reported in the international financial press in relation to the US treasuries market and US Agency bonds. The Bank, which has received some requests for information, is cooperating with investigations and is responding to requests for information. The outcome and potential impact of these investigations or requests for information is difficult to predict before their close and the subsequent discussions with the US authorities. It should be noted that it has been reported that a number of financial institutions are involved in these investigations or requests for information and that it is sometimes the case that reviews carried out in connection therewith may lead to settlements including in particular the payment of fines or significant penalties depending on the circumstances specific to each situation.

8.c BUSINESS COMBINATIONS AND LOSS OF CONTROL

Transactions completed in 2018

First Hawaiian Inc.

On 4 August 2016, BNP Paribas Group launched an initial public offering on its First Hawaiian Inc (FHI) subsidiary on the US market.

Subsequently, four partial sales were made.

Date	Transaction	Interest sold	Residual interest held	Control/Significant influence
4 August 2016	Initial offering	17.4%	82.6%	Control
6 February 2017	1st secondary offering	20.6%	62.0%	Control
8 May 2018	2nd secondary offering	13.2%	48.8%	Control
31 July 2018	3rd secondary offering	15.5%	33.3%	Significant influence
5 September 2018	4th secondary offering	14.9%	18.4%	Significant influence
31 DECEMBER 2018		**81.6%**	**18.4%**	**SIGNIFICANT INFLUENCE**

The first three operations resulted in an increase in the Group's retained earnings of EUR 422 million and in minority interests of EUR 1,363 million.

As at 30 June 2018, the Group considered the loss of control within one year to be highly probable and applied the provisions of IFRS 5 on groups of assets and liabilities held for sale.

The application of IFRS 5 had the effect of splitting the BancWest homogeneous group of businesses and, as a result, the related goodwill (i.e. EUR 4.3 billion) between Bank of the West (BoW) and FHI. This split was determined based on the recoverable amounts of the First Hawaiian Bank and BoW activities, and led to the allocation of a EUR 1.3 billion goodwill to FHI.

In addition, assets and liabilities have been reclassified respectively as non-current assets held for sale and liabilities related to non-current assets held for sale.

Following the sale realised on 31 July 2018, the Group ceased to exercise exclusive control over FHI but retained a significant influence. This loss of control resulted in a decrease of EUR 17.4 billion in the Group's balance sheet and a decrease in retained earnings attributable to minority shareholders of EUR 1,473 million.

This operation and the last partial sale generated an overall gain of EUR 286 million before tax, recognised in the profit and loss acount.

As at 31 December 2018, the Group continues to apply the provisions of IFRS 5.

The effect of IFRS 5 is to assess the equity-method value at the balance sheet date at the lowest value between the book value and the market value. At 31 December 2018, this method resulted in the recognition of a EUR -125 million impairment.

On 29 January 2019, the Group announced the launch of a new secondary offering for 24.9 million ordinary shares of First Hawaiian Inc (FHI). As a result of this transaction, the BNP Paribas Group will have sold its entire 18.4% stake in FHI, which has no effect on the accounts as at 31 December 2018.

ABN Amro Bank Luxembourg

On 3 September 2018, BGL BNP Paribas acquired 100% of ABN Amro Bank Luxembourg (Private Banking activity) and its subsidiary ABN Amro Life SA (insurance activity). As a result of this transaction, the BNP Paribas Group fully consolidates these activities.

The result of this acquisition is to increase the Group's balance sheet at acquisition date by EUR 5.1 billion, including loans and advances to customers for EUR 1.6 billion and financial investments of insurance activities for EUR 2.7 billion.

The goodwill linked to this operation amounts to EUR 39 million.

As at 31 December 2018, ABN Amro Bank Luxembourg merged into BGL BNP Paribas.

Raiffeisen Bank Polska

On 31 October 2018, Bank BGZ BNP Paribas bought the "Core" banking activities of Raiffeisen Bank Polska from Raiffeisen Bank International.

This acquisition resulted in an increase in the Group's balance sheet at acquisition date of EUR 9.5 billion, including loans and advances to customers for EUR 4.3 billion and amortised-cost debt securities for EUR 3.9 billion.

The negative goodwill associated with this operation amounts to EUR 68 million.

Transactions completed in 2017

Financière des Paiements Electroniques

On 13 July 2017, BNP Paribas acquired an 89.2% stake in Financière des Paiements Electroniques, which provides the "Compte-Nickel" payments account. This acquisition led the BNP Paribas Group to fully consolidate this entity.

This acquisition resulted in a EUR 0.4 billion increase of the Group balance sheet at the purchase date.

The goodwill on Financière des Paiements Electroniques amounted to EUR 159 million.

Opel Bank SA

On 1 November 2017, BNP Paribas Personal Finance and Banque PSA Finance (PSA group) closed their joint acquisition of all European activities of GM Financial, covering existing brands Opel Bank, Opel Financial Services and Vauxhall Finance.

BNP Paribas holds 50% of Opel Bank SA, the parent company of the Opel Vauxhall Finance group purchased. This entity is under exclusive control by BNP Paribas and is fully consolidated.

This acquisition resulted in a EUR 10.2 billion increase of the Group balance sheet at the purchase date, of which a EUR 8.3 billion increase in Loans and advances to customers.

The negative goodwill on this acquisition amounts to EUR 15 million.

Cargeas Assicurazioni

On 28 December 2017, BNP Paribas Cardif obtained control of Italian non-life insurer Cargeas Assicurazioni, following the purchase of shares held by Ageas. BNP Paribas Group already had a significant influence on Cargeas Assicurazioni and this entity was consolidated under the equity method. This acquisition led to the full consolidation of this entity.

This acquisition resulted in a EUR 0.8 billion increase of the Group balance sheet at the purchase date.

The goodwill on Cargeas Assicurazioni amounted to EUR 57 million.

8.d MINORITY INTERESTS

In millions of euros	Capital and retained earnings	Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	Minority interests
Capital and retained earnings at 31 December 2016	**4,460**	**-**	**95**	**4,555**
Appropriation of net income for 2016	**(131)**			**(131)**
Share-based payment plans	2			2
Remuneration on preferred shares	(2)			(2)
Impact of internal transactions on minority shareholders	(1)			(1)
Movements in consolidation scope impacting minority shareholders	493			493
Acquisitions of additional interests or partial sales of interests	115		(11)	104
Change in commitments to repurchase minority shareholders' interests	(8)			(8)
Other movements	23			23
Changes in assets and liabilities recognised directly in equity	(6)		(210)	(216)
Net income for 2017	**448**			**448**
Interim dividend payments	(41)			(41)
Capital and retained earnings at 31 December 2017	**5,352**	-	**(126)**	**5,226**
Revised presentation (note 2.a)	30	(30)	-	-
Capital and retained earnings at 31 December 2017 revised presentation	**5,382**	**(30)**	**(126)**	**5,226**
IFRS 9 implementation impacts (note 2.b)	(67)	3	(36)	(100)
Capital and retained earnings at 1 January 2018	**5,315**	**(27)**	**(162)**	**5,126**
Appropriation of net income for 2017	**(160)**			**(160)**
Increases in capital and issues	4			4
Remuneration on preferred shares	(2)			(2)
Impact of internal transactions on minority shareholders	(6)			(6)
Movements in consolidation scope impacting minority shareholders	(1,454)	36	119	(1,299)
Acquisitions of additional interests or partial sales of interests	326	(9)	(10)	307
Change in commitments to repurchase minority shareholders' interests	(165)			(165)
Other movements	11			11
Changes in assets and liabilities recognised directly in equity	-	17	(21)	(4)
Net income for 2018	**479**			**479**
Interim dividend payments	(32)			(32)
Capital and retained earnings at 31 December 2018	**4,316**	**17**	**(74)**	**4,259**

Main minority interests

The assessment of the material nature of minority interests is based on the contribution of the relevant subsidiaries to the Group balance sheet (before elimination of intra-group balances and transactions) and to the Group profit and loss account.

In millions of euros	31 December 2018	Year to 31 Dec. 2018						
	Total assets before elimination of intra-group transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity - attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas Group	84,655	1,519	451	397	34%	145	121	61
Other minority interests						334	354	133
TOTAL						**479**	**475**	**194**

In millions of euros	1 January 2018	Year to 31 Dec. 2017						
	Total assets before elimination of intra-group transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity - attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas Group	76,098	1,495	561	455	34%	187	155	90
Other minority interests						261	77	84
TOTAL						**448**	**232**	**174**

There are no particular contractual restrictions on the assets of BGL BNP Paribas Group related to the presence of the minority shareholder.

INTERNAL RESTRUCTURING THAT LED TO A CHANGE IN MINORITY SHAREHOLDERS' INTEREST IN THE EQUITY OF SUBSIDIARIES

No significant internal restructuring operation occurred during the year ended 31 December 2018, nor during the year ended 31 December 2017.

ACQUISITIONS OF ADDITIONAL INTERESTS AND PARTIAL SALES OF INTERESTS LEADING TO CHANGES IN MINORITY INTERESTS IN THE EQUITY OF SUBSIDIARIES

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Attributable to shareholders	Minority interests	Attributable to shareholders	Minority interests
Bank BGZ BNP Paribas				
Dillutive capital increase, reducing the Group's share to 88.75%	(3)	102		
Cardif Lux Vie				
Additional acquisition of 33.3% of the shares of Cardif Lux Vie	(55)	(97)		
Cardif Life Insurance Japan				
Sale of 25% of the shares of Cardif Life Insurance Japan in the framework of entities restructuring in Japan	17	76		
Austin Finance				
Accretive capital decrease, bringing the Group's share to 100%		(82)		
First Hawaiian Inc *(note 8.c)*				
On 8 May 2018, third offer on First Hawaiian Inc. for 12.1% of its capital, at a 28.35-dollar price per share, and a capital decrease of 1.1%.	85	315		
On 6 February 2017, second offer on First Hawaiian Inc. for 20.6% of its capital at a 32-dollar price per share.			250	588
Cardif IARD				
Dilutive capital increase, which reduced the Group's interest to 66%	30	20		
Dillutive capital increase, reducing the Group interest percentage to 83.26%.			27	5
Financière des Paiements Électroniques				
Additional acquisition, increasing the Group interest percentage to 95%.			(10)	3
Commerz Finanz GmbH				
Sale of 50.1% of the banking activity to Commerz Bank and simultaneous acquisition of 49.9% of the credit activity.			(18)	(488)
Other	**(3)**	**(8)**	**4**	**7**
TOTAL	**71**	**326**	**253**	**115**

Commitments to repurchase minority shareholders' interests

In connection with the acquisition of certain entities, the Group granted minority shareholders put options on their holdings.

The total value of these commitments, which are recorded as a reduction in shareholders' equity, amounts to EUR 540 million at 31 December 2018, compared with EUR 522 million at 1er January 2018.

8.e SIGNIFICANT RESTRICTIONS IN SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Significant restrictions related to the ability of entities to transfer cash to the Group

The ability of entities to pay dividends or to repay loans and advances depends, *inter alia*, on local regulatory requirements for capitalisation and legal reserves, as well as the entities' financial and operating performance. During 2017 and 2018, no BNP Paribas Group entity was subject to significant restrictions other than those related to regulatory requirements.

Significant restrictions relative to the Group's ability to use the assets lodged in consolidated structured entities

Access to the assets of consolidated structured entities in which third-party investors have invested is limited inasmuch as these entities' assets are reserved for the holders of units or securities. These assets total EUR 31 billion as at 31 December 2018 (EUR 24 billion as at 1 January 2018).

Significant restrictions related to the Group's ability to use assets pledged as collateral or under repurchase agreements

The financial instruments pledged by the BNP Paribas Group as collateral or under repurchase agreements are presented in notes 5.r and 6.d.

Significant restrictions related to liquidity reserves

Significant restrictions related to liquidity reserves correspond to the mandatory deposits placed with central banks presented in chapter 5 of the Registration document under "Liquidity risk".

Assets representative of unit-linked insurance contracts

Financial assets representative of unit-linked insurance contracts designated as at fair value through profit or loss, which amount to EUR 62 billion as at 31 December 2018 (compared with EUR 60 billion as at 1 January 2018), are held for the benefit of the holders of these contracts.

8.f STRUCTURED ENTITIES

The BNP Paribas Group is engaged in transactions with sponsored structured entities mainly through its activities of securitisation of financial assets – as either originator or sponsor -, fund management and specialised asset financing.

In addition, the BNP Paribas Group is also engaged in transactions with structured entities that it has not sponsored, notably in the form of investments in funds or securitisation vehicles.

The method for assessing control for structured entities is detailed in note 1.b.2. "Consolidation methods".

Consolidated structured entities

The main categories of consolidated structured entities are:

ABCP (Asset-Backed Commercial Paper) conduits: the ABCP securitisation conduits Starbird, Matchpoint and Scaldis fund securitisation transactions managed by the BNP Paribas Group on behalf of its customers. Details on how these are financed and the Group's risk exposure are presented in chapter 5 of the Registration document under "Securitisation as sponsor on behalf of clients/Short-term refinancing".

Proprietary securitisation: proprietary securitisation positions originated and held by the BNP Paribas Group are detailed in chapter 5 of the Registration document under "Proprietary securitisation activities (originator)".

Funds managed by the Group: the BNP Paribas Group structures different types of funds for which it may act as fund manager, investor, custodian or guarantor. These funds are consolidated when the Group is both the manager and a significant investor, and is therefore exposed to variable returns.

Unconsolidated structured entities

The BNP Paribas Group has entered into relations with unconsolidated structured entities in the course of its business activities to meet the needs of its customers.

Information relative to interests in sponsored structured entities

The main categories of unconsolidated sponsored structured entities are as follows:

Securitisation: the BNP Paribas Group structures securitisation vehicles for the purposes of offering customers financing solutions for their assets, either directly or through consolidated ABCP conduits. Each vehicle finances the purchase of customers' assets (receivables, bonds, etc.) primarily by issuing bonds backed by these assets and whose redemption is linked to their performance.

Funds: the Group structures and manages funds to offer investment opportunities to its customers. Dedicated or public funds are offered to institutional and individual customers, and are distributed and commercially monitored by the BNP Paribas Group. The entities of the BNP Paribas Group responsible for managing these funds may receive management fees and performance commission. The BNP Paribas Group may hold units in these funds, as well as units in funds dedicated to the insurance activity not managed by the BNP Paribas Group.

Asset financing: the BNP Paribas Group establishes and finances structured entities that acquire assets (aircraft, ships, etc.) intended for lease, and the lease payments received by the structured entity are used to repay the financing, which is guaranteed by the asset held by the structured entity. The scope of entities included in this category was refined in 2018.

Other: on behalf of its customers, the Group may also structure entities which invest in assets or are involved in debt restructuring.

An interest in an unconsolidated structured entity is a contractual or non-contractual link that exposes the BNP Paribas Group to variable returns from the performance of the entity.

The Group's assets and liabilities related to the interests held in sponsored structured entities are as follows:

In millions of euros, at 31 December 2018	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	213	806	8	1,015	2,042
Derivatives used for hedging purposes	212	490	163	90	955
Financial instruments at fair value through equity	149	24			173
Financial assets at amortised cost	14,129	224	811	65	15,229
Other assets		142	1		143
Financial investments of insurance activities		21,978		399	22,377
TOTAL ASSETS	**14,703**	**23,664**	**983**	**1,569**	**40,919**
LIABILITIES					
Financial instruments at fair value through profit or loss	53	803		1,544	2,400
Derivatives used for hedging purposes					
Financial liabilities at amortised cost	738	14,113	128	1,079	16,058
Other liabilities		186	85	1	272
TOTAL LIABILITIES	**791**	**15,102**	**213**	**2,624**	**18,730**
MAXIMUM EXPOSURE TO LOSS	**19,641**	**23,853**	**1,559**	**2,005**	**47,058**
SIZE OF STRUCTURED ENTITIES(1)	**99,642**	**253,140**	**3,544**	**13,419**	**369,745**

In millions of euros, at 1 January 2018	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	219	968	11	1,134	2,332
Derivatives used for hedging purposes	201	407	154	40	802
Financial instruments at fair value through equity	24	76	38	92	230
Financial assets at amortised cost	9,929	372	931	76	11,308
Other assets		261	1	22	284
Financial investments of insurance activities		27,948		462	28,410
TOTAL ASSETS	**10,373**	**30,032**	**1,135**	**1,826**	**43,366**
LIABILITIES					
Financial instruments at fair value through profit or loss	34	609		2,287	2,930
Derivatives used for hedging purposes				17	17
Financial liabilities at amortised cost	1,058	16,050	137	1,375	18,620
Other liabilities	2	269	79	33	383
TOTAL LIABILITIES	**1,094**	**16,928**	**216**	**3,712**	**21,950**
MAXIMUM EXPOSURE TO LOSS	**14,784**	**30,570**	**1,872**	**2,392**	**49,618**
SIZE OF STRUCTURED ENTITIES(1)	**99,956**	**251,589**	**3,889**	**11,198**	**366,632**

(1) the size of sponsored structured entities equals the total assets of the structured entity for securitisation vehicles, the net asset value for funds (excluding management mandates) and the structured entity's total assets or the amount of the BNP Paribas Group's commitment for asset financing and other structures.

The BNP Paribas Group's maximum exposure to losses on sponsored structured entities is the carrying amount of the assets, excluding, for financial assets at fair value through equity, changes in value taken directly to equity, as well as the nominal amount of the financing commitments and guarantee commitments given and the notional amount of credit default swaps (CDS) sold.

Information relative to interests in non-sponsored structured entities

The main interests held by the BNP Paribas Group when it acts solely as an investor in non-sponsored structured entities are detailed below:

- *Units in funds that are not managed by the Group, which are held by the Insurance business line:* as part of the asset allocation strategy corresponding to investments related to the premiums for unit-linked contracts or for the general fund, the Insurance business line subscribes to units of structured entities. These short- or medium-term investments are held for their financial performance and meet the risk diversification criteria inherent to the business. They amounted to EUR 30 billion as at 31 December 2018 (EUR 31 billion as at 1 January 2018). Changes in value and the majority of the risks associated with these investments are borne by policyholders in the case of assets representative of unit-linked contracts, and by the insurer in the case of assets representative of the general fund.
- *Other investments in funds not managed by the Group:* as part of its trading business, the BNP Paribas Group invests in structured entities without any involvement in either managing or structuring these entities (investments in mutual funds, securities funds or alternative funds), particularly as economic hedge for structured products sold to customers. The Group also invests in minority holdings in investment funds, in support of companies, as part of its venture capital business. These investments amounted to EUR 8 billion as at 31 December 2018 (unchanged from 1 January 2018).
- *Investments in securitisation vehicles:* the breakdown of the Group's exposure and the nature of the securities held are presented in chapter 5 of the Registration document in the section "Securitisation as investor".

Besides, in the framework of its asset financing activity, the BNP Paribas Group provides financing to structured entities that are established by and for its clients and whose purpose is to acquire assets (aircraft, ships, etc.) intended for lease to those same clients. These financings amount to EUR 9 billion as at 31 December 2018 (EUR 11 billion as at 1 January 2018).

8.g COMPENSATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

The remuneration and benefits policy relating to the Group's corporate officers, as well as the detailed information on an individual basis, are presented in chapter 2 Corporate governance of the Registration document.

➤ REMUNERATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Gross remuneration, including Directors' fees and benefits in kind		
payable for the year	€ 6,060,688	€ 6,236,607
paid during the year	€ 9,428,032	€ 8,152,686
Post-employment benefits		
Retirement bonuses: present value of the benefit obligation (payroll taxes excluded)	€ 243,028	€ 255,440
Defined contribution pension plan: contributions paid by BNP Paribas during the year	€ 5,124	€ 1,295
Welfare benefits: premiums paid by BNP Paribas during the year	€ 12,571	€ 12,461
Share-based payments		
Stock subscription options		
value of stock options granted during the year	Nil	Nil
number of options held at 31 December	28,640	66,840
Performance shares		
value of shares granted during the year	Nil	Nil
number of shares held at 31 December	Nil	Nil
Long-term compensation		
fair value at grant date(*)	€ 463,594	€ 785,765

(*) *Valuation according to the method described in note 7.e.*

As at 31 December 2018, no corporate officer is eligible to a contingent collective defined-benefit top-up pension plan.

Directors' fees paid to members of the Board of directors

The Directors' fees paid in 2018 to all members of the Board of directors amount to EUR 1,300,000, unchanged from 2017. The amount paid in 2018 to members other than corporate officers was EUR 1,176,907, compared with EUR 1,175,312 in 2017.

➤ REMUNERATION AND BENEFITS AWARDED TO DIRECTORS REPRESENTING THE EMPLOYEES

In euros	Year to 31 December 2018	Year to 31 December 2017
Gross remuneration paid during the year	108,077	85,685
Directors' fees (paid to the trade unions)	152,298	182,371
Premiums paid by BNP Paribas during the year into schemes related to Garantie Vie Professionnelle Accidents benefits and healthcare expense coverage	1,658	1,478
Contributions paid by BNP Paribas during the year into the defined-contribution plan	1,204	729

Loans, advances and guarantees granted to the Group's corporate officers

At 31 December 2018, the total outstanding loans granted directly or indirectly to the Group's corporate officers and their spouses amounted to EUR 7,094,958 (EUR 6,881,664 at 31 December 2017). These loans representing normal transactions were carried out on an arm's length basis.

8.h OTHER RELATED PARTIES

Other related parties of the BNP Paribas Group comprise consolidated companies (including entities consolidated under the equity method) and entities managing post-employment benefit plans offered to Group employees (except for multi-employer and multi-industry schemes).

Transactions between the BNP Paribas Group and related parties are carried out on an arm's length basis.

Relations between consolidated companies

A list of companies consolidated by the BNP Paribas Group is provided in note 8.j "Scope of consolidation". Transactions and outstanding balances between fully-consolidated entities are eliminated. The tables below show transactions with entities accounted for under the equity method.

OUTSTANDING BALANCES OF RELATED-PARTY TRANSACTIONS

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	Joint ventures	Associates	Joint ventures	Associates
ASSETS				
On demand accounts	2	171	7	186
Loans	3,784	85	3,675	1,980
Securities	769	-	829	-
Other assets	56	76	2	123
Financial investments of insurance activities	1	3	1	7
TOTAL	**4,612**	**335**	**4,514**	**2,296**
LIABILITIES				
On demand accounts	150	555	74	625
Other borrowings	53	2,084	45	2,303
Other liabilities	43	61	14	37
Technical reserves and other insurance liabilities	-	2	-	4
TOTAL	**246**	**2,702**	**133**	**2,969**
FINANCING COMMITMENTS AND GUARANTEE COMMITMENTS				
Financing commitments given	132	671	164	822
Guarantee commitments given	2,543	44	3,002	111
TOTAL	**2,675**	**715**	**3,166**	**933**

The Group also carries out trading transactions with related parties involving derivatives (swaps, options and forwards, etc.) and financial instruments purchased or underwritten and issued by them (equities, bonds, etc.).

➤ RELATED-PARTY PROFIT AND LOSS ITEMS

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*		Year to 31 Dec. 2017 *IAS 39*	
	Joint ventures	Associates	Joint ventures	Associates
Interest income	17	25	14	33
Interest expense	(2)	(10)	(1)	(16)
Commission income	188	271	3	393
Commission expense	(15)	(18)	(1)	(13)
Services provided	1	16	1	17
Services received	-	-	-	(5)
Lease income	1	-	-	1
Net income from insurance activities	(2)	(1)	-	-
TOTAL	**188**	**283**	**16**	**410**

Group entities managing certain post-employment benefit plans offered to Group employees

In Belgium, BNP Paribas Fortis funds a number of pension schemes managed by AG Insurance in which the BNP Paribas Group has a 25% equity interest.

In other countries, post-employment benefit plans are generally managed by independent fund managers or independent insurance companies, and occasionally by Group companies (in particular BNP Paribas Asset Management, BNP Paribas Cardif, Bank of the West and First Hawaiian Bank). In Switzerland, a dedicated foundation manages pension plans for BNP Paribas Suisse's employees.

At 31 December 2018, the value of plan assets managed by Group companies or by companies over which the Group exercises significant influence was EUR 3,853 million (EUR 3,916 million as at 1 January 2018). Amounts received by Group companies in the year to 31 December 2018 totalled EUR 4,7 million, and were mainly composed of management and custody fees (EUR 4,5 million in 2017).

8.i FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

The information supplied in this note must be used and interpreted with the greatest caution for the following reasons:

- these fair values are an estimate of the value of the relevant instruments as at 31 December 2018. They are liable to fluctuate from day to day as a result of changes in various parameters, such as interest rates and credit quality of the counterparty. In particular, they may differ significantly from the amounts actually received or paid on maturity of the instrument. In most cases, the fair value is not intended to be realised immediately, and in practice might not be realised immediately. Consequently, this fair value does not reflect the actual value of the instrument to BNP Paribas as a going concern;
- most of these fair values are not meaningful, and hence are not taken into account in the management of the commercial banking activities which use these instruments;
- estimating a fair value for financial instruments carried at historical cost often requires the use of modelling techniques, hypotheses and assumptions that may vary from bank to bank. This means that comparisons between the fair values of financial instruments carried at historical cost as disclosed by different banks may not be meaningful;
- the fair values shown below do not include the fair values of finance lease transactions, non-financial instruments such as property, plant and equipment, goodwill and other intangible assets such as the value attributed to demand deposit portfolios or customer relationships. Consequently, these fair values should not be regarded as the actual contribution of the instruments concerned to the overall valuation of the BNP Paribas Group.

In millions of euros, at 31 December 2018	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers(1)		82,358	681,583	763,941	753,293
Debt securities at amortised cost *(note 5.e)*	54,348	17,764	2,840	74,952	75,073
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		876,320		876,320	875,463
Debt securities *(note 5.h)*	49,233	102,511		151,744	151,451
Subordinated debt *(note 5.h)*	10,883	6,494		17,377	17,627

(1) Finance leases excluded.

In millions of euros, at 1 January 2018	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers(1)		82,054	652,520	734,574	722,365
Debt securities at amortised cost *(note 5.e)*	51,649	16,524	1,903	70,076	69,426
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		837,843		837,843	837,444
Debt securities *(note 5.h)*	49,530	100,495		150,025	148,156
Subordinated debt *(note 5.h)*	8,891	7,767		16,658	15,951

(1) Finance leases excluded.

The valuation techniques and assumptions used by BNP Paribas ensure that the fair value of financial assets and liabilities carried at amortised cost is measured on a consistent basis throughout the Group. Fair value is based on prices quoted in an active market when these are available. In other cases, fair value is determined using valuation techniques such as discounting of estimated future cash flows for loans, liabilities and debt securities at amortised cost, or specific valuation models for other financial instruments as described in note 1, "Summary of significant accounting policies applied by the BNP Paribas Group". The description of the fair value hierarchy levels is also presented in the accounting principles (note 1.e.10). In the case of loans, liabilities and debt securities at amortised cost that have an initial maturity of less than one year (including demand deposits) or of most regulated savings products, fair value equates to carrying amount. These instruments have been classified in Level 2, except for loans to customers, which are classified in Level 3.

8.j SCOPE OF CONSOLIDATION

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNP Paribas SA	France								
BNPP SA (Argentina branch)	Argentina	Full	100%	100%		Full	100%	100%	
BNPP SA (Australia branch)	Australia	Full	100%	100%		Full	100%	100%	
BNPP SA (Austria branch)	Austria	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Bahrain branch)	Bahrain	Full	100%	100%		Full	100%	100%	
BNPP SA (Belgium branch)	Belgium	Full	100%	100%		Full	100%	100%	
BNPP SA (Bulgaria branch)	Bulgaria	Full	100%	100%		Full	100%	100%	
BNPP SA (Canada branch)	Canada	Full	100%	100%		Full	100%	100%	
BNPP SA (Cayman Islands branch)	Cayman Islands	Full	100%	100%		Full	100%	100%	
BNPP SA (Czech Republic branch)	Czech Rep.	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Denmark branch)	Denmark	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Finland branch)	Finland	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Germany branch)	Germany	Full	100%	100%		Full	100%	100%	
BNPP SA (Hong Kong branch)	Hong Kong	Full	100%	100%		Full	100%	100%	
BNPP SA (Hungary branch)	Hungary	Full	100%	100%		Full	100%	100%	
BNPP SA (India branch)	India	Full	100%	100%		Full	100%	100%	
BNPP SA (Ireland branch)	Ireland	Full	100%	100%		Full	100%	100%	
BNPP SA (Italy branch)	Italy	Full	100%	100%		Full	100%	100%	
BNPP SA (Japan branch)	Japan	Full	100%	100%		Full	100%	100%	
BNPP SA (Jersey branch)	Jersey	Full	100%	100%		Full	100%	100%	
BNPP SA (Kuwait branch)	Kuwait	Full	100%	100%		Full	100%	100%	
BNPP SA (Luxembourg branch)	Luxembourg	Full	100%	100%		Full	100%	100%	
BNPP SA (Malaysia branch)	Malaysia	Full	100%	100%		Full	100%	100%	
BNPP SA (Monaco branch)	Monaco	Full	100%	100%		Full	100%	100%	
BNPP SA (Netherlands branch)	Netherlands	Full	100%	100%		Full	100%	100%	
BNPP SA (Norway branch)	Norway	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Panama branch)	Panama	Full	100%	100%		Full	100%	100%	
BNPP SA (Philippines branch)	Philippines	Full	100%	100%		Full	100%	100%	
BNPP SA (Poland branch)	Poland	Full	100%	100%		Full	100%	100%	
BNPP SA (Portugal branch)	Portugal	Full	100%	100%		Full	100%	100%	
BNPP SA (Qatar branch)	Qatar	Full	100%	100%		Full	100%	100%	
BNPP SA (Republic of Korea branch)	Rep. of Korea	Full	100%	100%		Full	100%	100%	
BNPP SA (Romania branch)	Romania	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Saudi Arabia branch)	Saudi Arabia	Full	100%	100%		Full	100%	100%	
BNPP SA (Singapore branch)	Singapore	Full	100%	100%		Full	100%	100%	
BNPP SA (South Africa branch)	South Africa	Full	100%	100%		Full	100%	100%	
BNPP SA (Spain branch)	Spain	Full	100%	100%		Full	100%	100%	
BNPP SA (Sweden branch)	Sweden	Full	100%	100%		Full	100%	100%	E2
BNPP SA (Taiwan branch)	Taiwan	Full	100%	100%		Full	100%	100%	
BNPP SA (Thailand branch)	Thailand	Full	100%	100%		Full	100%	100%	
BNPP SA (United Arab Emirates branch)	United Arab Emirates	Full	100%	100%		Full	100%	100%	
BNPP SA (United Kingdom branch)	UK	Full	100%	100%		Full	100%	100%	
BNPP SA (United States branch)	USA	Full	100%	100%		Full	100%	100%	
BNPP SA (Viet Nam branch)	Viet Nam	Full	100%	100%		Full	100%	100%	
Retail Banking & Services									
Domestic Markets									
Retail Banking - France									
B*Capital	France	Full (1)	100%	100%		Full (1)	100%	100%	
Banque de Wallis et Futuna	France	Full (1)	51%	51%		Full (1)	51%	51%	
BNPP Antilles Guyane	France	Full (1)	100%	100%		Full (1)	100%	100%	
BNPP Développement	France	Full	100%	100%		Full	100%	100%	
BNPP Développement Oblig	France	Full	100%	100%	E2				
BNPP Factor	France	Full (1)	100%	100%		Full (1)	100%	100%	
BNPP Factor (Spain branch)	Spain	Full (1)	100%	100%		Full (1)	100%	100%	
BNPP Factor Sociedade Financeira de Credito SA	Portugal	Full	100%	100%		Full	100%	100%	
BNPP Nouvelle Calédonie	France	Full (1)	100%	100%		Full (1)	100%	100%	
BNPP Réunion	France	Full (1)	100%	100%		Full (1)	100%	100%	
Compagnie pour le Financement des Loisirs	France	Equity	46%	46%	V4	Equity	46%	45.8%	E1
Copartis	France	Equity (3)	50%	50%		Equity	50%	50%	E1
Euro Securities Partners	France	Equity (3)	50%	50%	E1				
Partecis	France	Equity (3)	50%	50%	E1				
Portzamparc Société de Bourse	France	Full (1)	94.9%	94.9%	V1	Full (1)	75.5%	75.5%	V1
Protection 24	France	Full	100%	100%	E1				
Société Lairoise de Participations	France	Full	100%	100%	E1				
Retail Banking - Belgium									
Alpha Card SCRL	Belgium								S2
Bancontact Payconiq	Belgium	Equity	22.5%	22.5%	E1				
Banking Funding Company SA	Belgium	Equity	33.5%	33.5%		Equity	33.5%	33.5%	E1
Belgian Mobile ID	Belgium	Equity	15%	15%	E3				

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Commercial Finance Ltd	UK	Full	100%	99.9%		Full	100%	99.9%	
BNPP Factor AB	Sweden	Full	100%	99.9%	E1				
BNPP Factor AS	Denmark	Full	100%	99.9%		Full	100%	99.9%	D1
BNPP Factor Deutschland BV	Netherlands				S4	Full	100%	99.9%	
BNPP Factor GmbH	Germany	Full	100%	99.9%		Full	100%	99.9%	
BNPP Factor NV	Netherlands	Full	100%	99.9%		Full	100%	99.9%	E1
BNPP Factoring Support (Ex- BNPP Factoring Coverage EuropeHolding NV)	Netherlands	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis	Belgium	Full	99.9%	99.9%		Full	99.9%	99.9%	
BNPP Fortis (Austria branch)	Austria								S1
BNPP Fortis (Czech Republic branch)	Czech Rep.				S1	Full	100%	99.9%	
BNPP Fortis (Denmark branch)	Denmark				S1	Full	100%	99.9%	
BNPP Fortis (Finland branch)	Finland								S1
BNPP Fortis (Netherlands branch)	Netherlands								S1
BNPP Fortis (Norway branch)	Norway								S1
BNPP Fortis (Romania branch)	Romania	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis (Spain branch)	Spain	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis (Sweden branch)	Sweden								S1
BNPP Fortis (United States branch)	USA	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis Factor NV	Belgium	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis Film Finance	Belgium	Full	99%	98.9%	E1				
BNPP Fortis Funding SA	Luxembourg	Full	100%	99.9%		Full	100%	99.9%	
BNPP FPE Belgium	Belgium	Full	100%	99.9%		Full	100%	99.9%	
BNPP FPE Expansion	Belgium	Full	100%	99.9%		Full	100%	99.9%	
BNPP FPE Management	Belgium	Full	100%	99.9%		Full	100%	99.9%	D1
Bpost Banque	Belgium	Equity (3)	50%	50%		Equity (3)	50%	50%	
Credissimo	Belgium	Full	100%	99.9%		Full	100%	99.9%	E1
Credissimo Hainaut SA	Belgium	Full	99.7%	99.7%		Full	99.7%	99.7%	E1
Crédit pour Habitations Sociales	Belgium	Full	81.7%	81.6%		Full	81.7%	81.6%	E1
Demetris NV	Belgium				S3	Equity*	100%	99.9%	
Favor Finance	Belgium				S3	Full	51%	51%	E1
Gemma Frisius Fonds KU Leuven	Belgium	FV	40%	40%	E1				
Het Anker NV	Belgium	FV	27.8%	27.8%	E1				
Holding PCS	Belgium	FV	31.7%	31.7%	E1				
Immo Beaulieu	Belgium	Equity	25%	25%	E1				
Immobilière Sauveniere SA	Belgium	Full	100%	99.9%	D1	Equity*	100%	99.9%	
Isabel SA NV	Belgium	Equity	25.3%	25.3%	E1				
Microstart	Belgium	Full	85.5%	66.2%	E1				
Novy Invest	Belgium	FV	33.7%	33.7%	D1	Equity	33.7%	33.7%	E1
Omega Invest	Belgium	FV	28.4%	28.3%	E1				
Penne International	Belgium	FV	74.9%	74.9%	D1	Equity*	74.9%	74.9%	E1
Sowo Invest SA NV	Belgium	Full	87.5%	87.5%	E1				
Studio 100	Belgium	FV	32.5%	32.5%	D1	Equity	32.5%	32.5%	E1
Structured Entities									
BASS Master Issuer NV	Belgium	Full	-	-		Full	-	-	
Esmee Master Issuer	Belgium	Full	-	-		Full	-	-	
Epimede	Belgium	Equity	-	-	E1				
Retail Banking - Luxembourg									
BGL BNPP	Luxembourg	Full	66%	65.9%		Full	66%	65.9%	
BGL BNPP (Germany branch)	Germany	Full	100%	65.9%		Full	100%	65.9%	
BNPP Lease Group Luxembourg SA	Luxembourg	Full	100%	65.9%		Full	100%	65.9%	
Cofhylux SA	Luxembourg	Full	100%	65.9%		Full	100%	65.9%	
Visalux	Luxembourg	Equity	24.8%	15.7%	E1				
Structured Entities									
Elimmo	Luxembourg	Full	-	-	E1				
Retail Banking - Italy (BNL banca commerciale)									
Artigiancassa SPA	Italy	Full	73.9%	73.9%		Full	73.9%	73.9%	
Axepta SPA (Ex- BNL Positivity SRL)	Italy	Full	100%	100%		Full	100%	100%	
Banca Nazionale Del Lavoro SPA	Italy	Full	100%	100%		Full	100%	100%	
BNL Finance SPA	Italy	Full	100%	100%		Full	100%	100%	
Business Partner Italia SCPA	Italy	Full	100%	100%	V4	Full	99.9%	99.8%	
International Factors Italia SPA	Italy	Full	99.7%	99.7%		Full	99.7%	99.7%	
Permicro SPA	Italy	Equity	20.9%	20.9%	E1				
Serfactoring SPA	Italy	Equity	27%	26.9%	E1				
Servizio Italia SPA	Italy	Full	100%	100%	D1	Equity*	100%	100%	
Sviluppo HQ Tiburtina SRL	Italy	Full	100%	100%		Full	100%	100%	
Structured Entities									
EMF IT 2008 1 SRL	Italy	Full	-	-		Full	-	-	
Tierre Securitisation SRL	Italy	Full	-	-		Full	-	-	
Vela ABS SRL	Italy	Full	-	-		Full	-	-	
Vela Consumer 2 SRL	Italy	Full	-	-		Full	-	-	E2
Vela Consumer SRL	Italy	Full	-	-		Full	-	-	

		31 December 2018					31 December 2017				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Vela Home SRL	Italy	Full		-	-		Full		-	-	
Vela Mortgages SRL	Italy	Full		-	-		Full		-	-	
Vela OBG SRL	Italy	Full		-	-		Full		-	-	
Vela RMBS SRL	Italy	Full		-	-		Full		-	-	
Arval											
Annuo Jiutong (Ex- Arval Jiutong Co Ltd)	China					V2/S2	Equity		40%	40%	
Artel	France	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval AB	Sweden	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval AS	Denmark	Full		100%	99.9%		Full		100%	99.9%	D1
Arval Austria GmbH	Austria	Full		100%	99.9%		Full		100%	99.9%	D1
Arval Belgium NV SA	Belgium	Full		100%	99.9%		Full		100%	99.9%	
Arval Benelux BV	Netherlands	Full		100%	99.9%		Full		100%	99.9%	
Arval Brasil Ltda	Brazil	Full		100%	99.9%		Full		100%	99.9%	
Arval BV	Netherlands	Full		100%	99.9%		Full		100%	99.9%	
Arval CZ SRO	Czech Rep.	Full		100%	99.9%		Full		100%	99.9%	
Arval Deutschland GmbH	Germany	Full		100%	99.9%		Full		100%	99.9%	
Arval Fleet Services	France	Full		100%	99.9%		Full		100%	99.9%	
Arval Fleet Services BV	Netherlands										S4
Arval Hellas Car Rental SA	Greece	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval India Private Ltd	India	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval Italy Fleet Services SRL	Italy										S4
Arval LLC	Russia	Full		100%	99.9%		Full		100%	99.9%	
Arval Luxembourg SA	Luxembourg	Full		100%	99.9%		Full		100%	99.9%	D1
Arval Magyarorszag KFT	Hungary	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval Maroc SA	Morocco	Full		100%	89%	D1	Equity*		100%	89%	
Arval OY	Finland	Full		100%	99.9%		Full		100%	99.9%	D1
Arval Relsa SPA	Chile	Equity	(3)	50%	50%	E1					
Arval Schweiz AG	Switzerland	Full		100%	99.9%		Full		100%	99.9%	D1
Arval Service Lease	France	Full		100%	99.9%		Full		100%	99.9%	
Arval Service Lease Aluger Operational Automoveis SA	Portugal	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval Service Lease Italia SPA	Italy	Full		100%	99.9%		Full		100%	99.9%	
Arval Service Lease Polska SP ZOO	Poland	Full		100%	99.9%		Full		100%	99.9%	
Arval Service Lease Romania SRL	Romania	Full		100%	99.9%	D1	Equity*		100%	99.9%	
Arval Service Lease SA	Spain	Full		100%	99.9%		Full		100%	99.9%	
Arval Slovakia SRO	Slovakia	Full		100%	99.9%		Full		100%	99.9%	D1
Arval Trading	France	Full		100%	99.9%		Full		100%	99.9%	D1
Arval UK Group Ltd	UK	Full		100%	99.9%		Full		100%	99.9%	
Arval UK Leasing Services Ltd	UK	Full		100%	99.9%		Full		100%	99.9%	
Arval UK Ltd	UK	Full		100%	99.9%		Full		100%	99.9%	
BNPP Fleet Holdings Ltd	UK	Full		100%	99.9%		Full		100%	99.9%	
Cetelem Renting	France	Full		100%	99.9%	E1					
Cofiparc	France	Full		100%	99.9%		Full		100%	99.9%	
Greenval Insurance DAC	Ireland	Full	(2)	100%	100%		Full	(2)	100%	100%	
Locadif	Belgium	Full		100%	99.9%		Full		100%	99.9%	
Louveo	France	Full		100%	99.9%	E1					
Public Location Longue Durée	France	Full		100%	99.9%		Full		100%	99.9%	D1
TEB Arval Arac Filo Kiralama AS	Turkey	Full		100%	75%		Full		100%	75%	
Leasing Solutions											
Albury Asset Rentals Ltd	UK					S1	Full		100%	83%	
All In One Vermietung GmbH	Austria	Full		100%	83%	E1					
All In One Vermietungsgesellschaft für Telekommunicationsanlagen mbH	Germany										S3
Aprolis Finance	France	Full		51%	42.3%		Full		51%	42.3%	
Arius	France	Full		100%	83%		Full		100%	83%	
Artegy	France	Full		100%	83%		Full		100%	83%	
BNPP Finansal Kiralama AS	Turkey	Full		100%	82.5%		Full		100%	82.5%	
BNPP Lease Group	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Germany branch)	Germany	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Italy branch)	Italy	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Portugal branch)	Portugal	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Spain branch)	Spain	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group Belgium	Belgium	Full		100%	83%		Full		100%	83%	
BNPP Lease Group GmbH & Co KG	Austria	Full		100%	83%	E1					
BNPP Lease Group KFT	Hungary										S3
BNPP Lease Group Leasing Solutions SPA	Italy	Full		100%	95.5%		Full		100%	95.5%	
BNPP Lease Group Lizing RT	Hungary										S3
BNPP Lease Group PLC	UK	Full		100%	83%		Full		100%	83%	
BNPP Lease Group Rentals Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Lease Group SP ZOO	Poland	Full		100%	83%		Full		100%	83%	D1
BNPP Leasing Services	Poland	Full		100%	88.7%	V4	Full		100%	88.3%	E1
BNPP Leasing Solution AS	Norway	Full		100%	83%	E3					
BNPP Leasing Solutions	Luxembourg	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions IFN SA	Romania	Full		100%	83%		Full		100%	83%	D1
BNPP Leasing Solutions Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions NV	Netherlands	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions Suisse SA	Switzerland	Full		100%	83%	D1	Equity*		100%	83%	
BNPP Rental Solutions Ltd	UK	Full		100%	83%		Full		100%	83%	D1
BNPP Rental Solutions SPA	Italy	Full		100%	83%	D1	Equity*		100%	83%	
Claas Financial Services	France	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	V2
Claas Financial Services (Germanybranch)	Germany	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	V3
Claas Financial Services (Italy branch)	Italy	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	V3
Claas Financial Services (Poland branch)	Poland	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	V3
Claas Financial Services (Spain branch)	Spain	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	V3
Claas Financial Services Ltd	UK	Full		51%	42.3%		Full		51%	42.3%	
CMV Mediforce	France	Full	(1)	100%	83%	V3	Full	(1)	100%	100%	
CNH Industrial Capital Europe	France	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Belgium branch)	Belgium	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Germany branch)	Germany	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Italy branch)	Italy	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Poland branch)	Poland	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Spain branch)	Spain	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe BV	Netherlands	Full		100%	41.6%		Full		100%	41.6%	
CNH Industrial Capital Europe GmbH	Austria	Full		100%	41.6%		Full		100%	41.6%	
CNH Industrial Capital Europe Ltd	UK	Full		100%	41.6%		Full		100%	41.6%	
Commercial Vehicle Finance Ltd	UK	Full		100%	83%		Full		100%	83%	
ES-Finance	Belgium	Full		100%	99.9%		Full		100%	99.9%	
Fortis Lease	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
Fortis Lease Belgium	Belgium	Full		100%	83%		Full		100%	83%	
Fortis Lease Deutschland GmbH	Germany	Full		100%	83%		Full		100%	83%	D1
Fortis Lease Iberia SA	Spain	Full		100%	86.6%		Full		100%	86.6%	D1
Fortis Lease Portugal	Portugal	Full		100%	83%		Full		100%	83%	D1
Fortis Lease UK Ltd	UK	Full		100%	83%	D1	Equity*		100%	83%	
Fortis Vastgoedlease BV	Netherlands	Full		100%	83%	D1	Equity*		100%	83%	
Heffiq Heftruck Verhuur BV	Netherlands	Full		50.1%	41.5%	E1					
Humberclyde Commercial Investments Ltd	UK					S1	Full		100%	83%	
JCB Finance	France	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance (Germany branch)	Germany	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance (Italy branch)	Italy	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance Holdings Ltd	UK	Full		50.1%	41.6%		Full		50.1%	41.6%	
Manitou Finance Ltd	UK	Full		51%	42.3%		Full		51%	42.3%	
MFF	France	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Natio Energie 2	France	Full		100%	100%	E1					
Natiocredibail	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
RD Leasing IFN SA	Romania	Full		100%	83%	E3					
RD Portofoliu SRL	Romania										S3
Same Deutz Fahr Finance	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
Same Deutz Fahr Finance Ltd	UK					S1	Full		100%	83%	
SNC Natiocredimurs	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
UCB Bail 2	France	Full		100%	100%		Full		100%	100%	
Structured Entities											
BNPP B Institutional II Short Term	Belgium										S3
BNPP B Institutional II Treasury 17	Belgium					S3	Full		-	-	E1
FL Zeebrugge	Belgium	Full		-	-	D1	Equity*		-	-	E1
Folea Grundstucksverwaltungs und Vermietungs GmbH & Co	Germany	Full		-	-	D1	Equity*		-	-	E1
New Digital Businesses											
Financière des Paiements Electroniques	France	Full		95%	95%		Full		95%	95%	E3
Lyf SA	France	Equity	(3)	46%	46%	V1	Equity	(3)	43.5%	43.5%	E3
Lyf SAS	France	Equity	(3)	45.8%	45.8%	V1	Equity	(3)	43.3%	43.3%	E3
Personal Investors											
Geojit Technologies Private Ltd	India	Equity		35%	35%		Equity		35%	35%	
Hellobank BNPP Austria AG	Austria										S4
Human Value Developers Private Ltd	India	Full		100%	100%		Full		100%	100%	
Sharekhan BNPP Financial Services Private Ltd	India	Full		100%	100%		Full		100%	100%	D1
Sharekhan Commodities Private Ltd	India	Full		100%	100%	E1					
Sharekhan Ltd	India	Full		100%	100%		Full		100%	100%	
International Financial Services											
BNP Paribas Personal Finance											
Alpha Crédit SA	Belgium	Full		100%	99.9%		Full		100%	99.9%	
Autop Ocean Indien	France	Full		100%	97.8%	E1					
Axa Banque Financement	France	Equity		35%	35%		Equity		35%	35%	

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Banco BNPP Personal Finance SA	Portugal	Full	100%	100%		Full	100%	100%	
Banco Cetelem Argentina SA	Argentina	Full	100%	100%		Full	100%	100%	
Banco Cetelem SA	Brazil	Full	100%	100%		Full	100%	100%	
Banco Cetelem SAU	Spain	Full	100%	100%		Full	100%	100%	
Banco de Servicios Financieros SA	Argentina	Equity	40%	40%		Equity	40%	40%	
Banque Solfea	France	Equity (3)	45%	45%		Equity (3)	45%	45%	
BGN Mercantil E Servicos Ltda	Brazil	Full	100%	100%		Full	100%	100%	D1
BNPP Personal Finance	France	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Austria branch)	Austria	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Bulgaria branch)	Bulgaria	Full	100%	100%	E2				
BNPP Personal Finance (Czech Republic branch)	Czech Rep.	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Romania branch)	Romania	Full	100%	100%	E2				
BNPP Personal Finance (Slovakia branch)	Slovakia	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance BV	Netherlands	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance EAD	Bulgaria				S4	Full	100%	100%	
BNPP Personal Finance South Africa Ltd	South Africa	Full	100%	100%		Full	100%	100%	
Cafineo	France	Full (1)	51%	50.8%		Full (1)	51%	50.8%	
Carrefour Banque	France	Equity	40%	40%		Equity	40%	40%	
Cetelem Algérie	Algeria	Full	100%	100%	E1				
Cetelem America Ltda	Brazil	Full	100%	100%		Full	100%	100%	
Cetelem Bank LLC	Russia	Equity	20.8%	20.8%		Equity	20.8%	20.8%	
Cetelem Gestion AIE	Spain	Full	100%	96.5%	E1				
Cetelem IFN	Romania				S4	Full	100%	100%	
Cetelem SA de CV (Ex- BNPP Personal Finance SA de CV)	Mexico	Full	100%	100%		Full	100%	100%	
Cetelem Servicios Informaticos AIE	Spain	Full	100%	81.5%	E1				
Cetelem Servicos Ltda	Brazil	Full	100%	100%	D1	Equity*	100%	100%	
Cofica Bail	France	Full (1)	100%	100%		Full (1)	100%	100%	
Cofiplan	France	Full (1)	100%	100%		Full (1)	100%	100%	
Commerz Finanz	Germany								S4
Creation Consumer Finance Ltd	UK	Full	100%	100%		Full	100%	100%	
Creation Financial Services Ltd	UK	Full	100%	100%		Full	100%	100%	
Crédit Moderne Antilles Guyane	France	Full (1)	100%	100%		Full (1)	100%	100%	
Crédit Moderne Océan Indien	France	Full (1)	97.8%	97.8%		Full (1)	97.8%	97.8%	
Direct Services EAD	Bulgaria								S4
Domofinance	France	Full (1)	55%	55%		Full (1)	55%	55%	
Effico	France	Equity	24.5%	24.5%		Equity	24.5%	24.5%	V2
Ekspres Bank AS	Denmark	Full	100%	100%		Full	100%	100%	
Ekspres Bank AS (Norway branch)	Norway	Full	100%	100%		Full	100%	100%	
Ekspres Bank AS (Sweden branch)	Sweden	Full	100%	100%	E2				
Eos Aremas Belgium SA NV	Belgium	Equity	50%	49.9%		Equity	50%	49.9%	
Fidecom	France								S4
Findomestic Banca SPA	Italy	Full	100%	100%		Full	100%	100%	
Findomestic Banka AD	Serbia								S2
GCC Consumo Establecimiento Financiero de Credito SA	Spain	Full	51%	51%		Full	51%	51%	D1
Genius Auto Finance Co Ltd	China	Equity (3)	20%	20%		Equity (3)	20%	20%	E1
Gesellschaft für Capital & Vermögensverwaltung GmbH	Germany				S3	Equity*	100%	99.9%	
Inkasso Kodat GmbH & Co KG	Germany				S3	Equity*	100%	99.9%	
International Development Resources AS Services SA	Spain				S3	Equity*	100%	100%	
Laser ABS 2017 Holding Ltd	UK	Full	100%	100%		Full	100%	100%	E1
Leval 20	France	Full	100%	100%		Full	100%	100%	
Loisirs Finance	France	Full (1)	51%	51%		Full (1)	51%	51%	
Magyar Cetelem Bank ZRT	Hungary	Full	100%	100%		Full	100%	100%	
Neuilly Contentieux	France	Full	96%	95.7%	E1				
Norrsken Finance	France	Full (1)	100%	100%		Full (1)	100%	100%	
Olympia SAS	France	Full	50%	50%		Full	50%	50%	E2
Oney Magyarorszag ZRT	Hungary	Equity	40%	40%		Equity	40%	40%	
Opel Bank	France	Full	50%	50%		Full	50%	50%	E3
Opel Bank GmbH	Germany	Full	100%	50%		Full	100%	50%	E3
Opel Bank GmbH (Greece branch)	Greece	Full	100%	50%		Full	100%	50%	E3
Opel Bank GmbH (Ireland branch)	Ireland	Full	100%	50%		Full	100%	50%	E3
Opel Bank GmbH (Spain branch)	Spain	Full	100%	50%	E2				
Opel Finance AB	Sweden	Full	100%	50%	D1	Equity*	100%	50%	E3
Opel Finance BVBA	Belgium	Full	100%	50%	D1	Equity*	100%	50%	E3
Opel Finance Germany Holdings GmbH	Germany				S4	Full	100%	50%	E3
Opel Finance International BV	Netherlands	Full	100%	50%		Full	100%	50%	E3
Opel Finance NV	Netherlands	Full	100%	50%	D1	Equity*	100%	50%	E3
Opel Finance NV (Belgium branch)	Belgium				S1	Equity*	100%	50%	E3
Opel Finance SA	Switzerland	Full	100%	50%	D1	Equity*	100%	50%	E3
Opel Finance SPA	Italy	Full	100%	50%		Full	100%	50%	E3

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Opel Leasing GmbH	Germany	Full	100%	50%		Full	100%	50%	E3
Opel Leasing GmbH (Austria branch)	Austria	Full	100%	50%		Full	100%	50%	E3
OPVF Europe Holdco Ltd	UK				S4	Full	100%	50%	E3
OPVF Holdings UK Ltd	UK				S1	Full	100%	50%	E3
Prêts et Services SAS	France								S4
Projeo	France	Full (1)	100%	100%		Full (1)	100%	100%	
RCS Cards Pty Ltd	South Africa	Full	100%	100%		Full	100%	100%	
Retail Mobile Wallet	France								S4
Servicios Financieros Carrefour EFC SA	Spain	Equity	37.3%	40%		Equity	37.3%	40%	
Sevenday Finans AB	Sweden				S4	Full	100%	100%	E3
Sundaram BNPP Home Finance Ltd	India	Equity (3)	49.9%	49.9%		Equity (3)	49.9%	49.9%	
Suning Consumer Finance Co Ltd	China	Equity	15%	15%		Equity	15%	15%	
Sygma Funding Two Ltd	UK	Full	100%	100%		Full	100%	100%	
Symag	France	Full	100%	100%		Full	100%	100%	
TEB Finansman AS	Turkey	Full	100%	92.8%		Full	100%	92.8%	
UCB Ingatlanhitel ZRT	Hungary	Full	100%	100%		Full	100%	100%	
Union de Creditos Inmobiliarios SA	Spain	Equity (3)	50%	50%		Equity (3)	50%	50%	
United Partnership	France	Equity (3)	50%	50%	E1				
Vauxhall Finance PLC	UK	Full	100%	50%		Full	100%	50%	E3
Von Essen Bank GmbH	Germany	Full	100%	99.9%		Full	100%	99.9%	
Structured Entities									
B Carat	Belgium				S1	Equity*	-	-	E3
Cartolarizzazione Auto Receivable's SRL	Italy				S3	Full	-	-	E3
Cofinoga Funding Two LP	UK	Full	-	-		Full	-	-	
Ecarat SA	Luxembourg	Full	-	-		Full	-	-	E3
Ecarat UK [(a)]	UK	Full	-	-		Full	-	-	
FCC Retail ABS Finance Noria 2009	France								S1
FCT F Carat	France				S1	Full	-	-	E3
Florence 1 SRL	Italy				S1	Full	-	-	
Florence SPV SRL	Italy	Full	-	-		Full	-	-	
I Carat SRL	Italy				S1	Full	-	-	E3
Laser ABS 2017 PLC	UK	Full	-	-		Full	-	-	E1
Noria 2015	France								S1
Noria 2018-1	France	Full	-	-	E2				
Phedina Hypotheken 2010 BV	Netherlands	Full	-	-		Full	-	-	
Phedina Hypotheken 2013 I BV	Netherlands	Full	-	-		Full	-	-	
Securely Transferred Auto Receivables II SA	Luxembourg				S3	Full	-	-	E3
Securitisation funds Autonoria [(c)]	France	Full	-	-		Full	-	-	
Securitisation funds Domos [(d)]	France	Full	-	-		Full	-	-	
Securitisation funds UCI and RMBS Prado [(b)]	Spain	Equity (3)	-	-		Equity (3)	-	-	
Vault Funding Ltd	UK				S3	Full	-	-	E3
Warf 2012 Ltd	UK				S3	Full	-	-	E3
International Retail Banking - BancWest									
1897 Services Corp.	USA	Full	100%	100%		Full	100%	100%	
BancWest Corp.	USA	Full	100%	100%		Full	100%	100%	
BancWest Holding Inc.	USA	Full	100%	100%		Full	100%	100%	
BancWest Investment Services Inc.	USA	Full	100%	100%		Full	100%	100%	
Bank of the West	USA	Full	100%	100%		Full	100%	100%	
Bishop Street Capital Management Corp.	USA				V3/S2	Full	100%	61.9%	V3
BNPP Leasing Solutions Canada Inc.	Canada	Full	100%	100%	E1				
Center Club Inc.	USA				V3/S2	Full	100%	61.9%	V3
CFB Community Development Corp.	USA	Full	100%	100%		Full	100%	100%	
Claas Financial Services LLC	USA	Full	51%	51%		Full	51%	51%	
Commercial Federal Affordable Housing Inc.	USA	Full	100%	100%		Full	100%	100%	
Commercial Federal Community Development Corp.	USA	Full	100%	100%		Full	100%	100%	
Commercial Federal Insurance Corp.	USA	Full	100%	100%		Full	100%	100%	
Commercial Federal Investment Service Inc.	USA	Full	100%	100%		Full	100%	100%	
FHB Guam Trust Co	USA								S1
FHL SPC One Inc.	USA				V3/S2	Full	100%	61.9%	V3
First Hawaiian Bank	USA				V3/S2	Full	100%	61.9%	V3
First Hawaiian Inc.	USA	Equity	18.4%	18.4%	V2	Full	61.9%	61.9%	V2
First Hawaiian Leasing Inc.	USA				V3/S2	Full	100%	61.9%	V3
Liberty Leasing Co	USA	Full	100%	100%		Full	100%	100%	
Mountain Falls Acquisition Corp.	USA	Full	100%	100%		Full	100%	100%	
Real Estate Delivery 2 Inc.	USA				V3/S2	Full	100%	61.9%	V3
Riverwalk Village Three Holdings LLC	USA								S1
Santa Rita Townhomes Acquisition LLC	USA								S1
The Bankers Club Inc.	USA				V3/S2	Full	100%	61.9%	V3
Ursus Real Estate Inc.	USA	Full	100%	100%		Full	100%	100%	
Structured Entities									
Bank of the West Auto Trust 2014-1	USA				S1	Full	-	-	
Bank of the West Auto Trust 2015-1	USA				S2	Full	-	-	

Name	Country	31 December 2018					31 December 2017				
		Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Bank of the West Auto Trust 2017-1	USA					S2	Full		-	-	
Bank of the West Auto Trust 2018-1 (Ex- Bank of the West Auto Trust 2016-2)	USA	Full		-	-		Full		-	-	
Bank of the West Auto Trust 2018-2	USA	Full		-	-	E2					
BOW Auto Receivables LLC	USA	Full		-	-		Full		-	-	
BWC Opportunity Fund Inc.	USA	Full		-	-	E2					
First Bancorp	USA	Full		-	-		Full		-	-	
First National Bancorporation	USA	Full		-	-		Full		-	-	
First Santa Clara Corp.	USA	Full		-	-		Full		-	-	
Glendale Corporate Center Acquisition LLC	USA					S2	Full		-	-	
LACMTA Rail Statutory Trust FH1	USA					V3/S2	Full		-	-	
ST 2001 FH 1 Statutory Trust	USA					V3/S2	Full		-	-	
VTA 1998 FH	USA					S1	Full		-	-	
International Retail Banking - Europe-Mediterranean											
Bank BGZ BNPP SA	Poland	Full		88.8%	88.7%	V4	Full		88.3%	88.3%	
Bank of Nanjing	China	Equity		15%	15%	V2	Equity		18.2%	18.2%	V2
Banque Internationale pour le Commerce et l'Industrie de la Côte d'Ivoire	Ivory Coast	Full		59.8%	59.8%		Full		59.8%	59.8%	
Banque Internationale pour le Commerce et l'Industrie de la Guinée	Guinea	Full		55.6%	55.6%		Full		55.6%	55.6%	
Banque Internationale pour le Commerce et l'Industrie du Burkina Faso	Burkina Faso	Full		51%	51%		Full		51%	51%	
Banque Internationale pour le Commerce et l'Industrie du Gabon	Gabon	Equity		47%	47%		Equity		47%	47%	
Banque Internationale pour le Commerce et l'Industrie du Mali	Mali	Full		85%	85%		Full		85%	85%	
Banque Internationale pour le Commerce et l'Industrie du Sénégal	Senegal	Full		54.1%	54.1%		Full		54.1%	54.1%	
Banque Marocaine pour le Commerce et l'Industrie	Morocco	Full		67%	67%		Full		67%	67%	
Banque Marocaine pour le Commerce et l'Industrie Banque Offshore	Morocco	Full		100%	67%		Full		100%	67%	
Banque pour l'Industrie et le Commerce des Comores	Comoros	Full		51%	51%	E1					
Bantas Nakit AS	Turkey	Equity	(3)	33.3%	16.7%	E1					
BGZ BNPP Faktoring Spolka ZOO	Poland	Full		100%	100%		Full		100%	100%	E1
BICI Bourse	Ivory Coast	Full		90%	53.5%	D1	Equity*		90%	53.5%	
BMCI Asset Management	Morocco										S3
BMCI Assurance SARL	Morocco										S3
BMCI Leasing	Morocco	Full		86.9%	58.2%		Full		86.9%	58.2%	
BNPP El Djazair	Algeria	Full		100%	100%		Full		100%	100%	
BNPP Fortis Yatirimlar Holding AS	Turkey	Full		100%	99.9%		Full		100%	99.9%	
BNPP IRB Participations	France	Full		100%	100%		Full		100%	100%	
BNPP Solutions Spolka ZOO	Poland	Full		100%	88.7%	E3					
BNPP Yatirimlar Holding AS	Turkey	Full		100%	100%		Full		100%	100%	
IC Axa Insurance JSC	Ukraine	Equity		49.8%	29.9%		Equity		49.8%	29.9%	
TEB Faktoring AS	Turkey	Full		100%	72.5%		Full		100%	72.5%	
TEB Holding AS	Turkey	Full		50%	50%		Full		50%	50%	
TEB Portfoy Yonetimi AS	Turkey	Full		54.8%	39.7%	V3	Full		100%	72.5%	
TEB SH A	Serbia	Full		100%	50%		Full		100%	50%	
TEB Yatirim Menkul Degerler AS	Turkey	Full		100%	72.5%		Full		100%	72.5%	
Turk Ekonomi Bankasi AS	Turkey	Full		100%	72.5%		Full		100%	72.5%	
UkrSibbank Public JSC	Ukraine	Full		60%	60%		Full		60%	60%	
Union Bancaire pour le Commerce et l'Industrie	Tunisia	Full		50.1%	50.1%		Full		50.1%	50.1%	
Structured Entities											
BGZ Poland ABS1 DAC	Ireland	Full		-	-		Full		-	-	E1
Insurance											
AG Insurance	Belgium	Equity		25%	25%		Equity		25%	25%	
Agathe Retail France	France	FV		33.3%	33.3%	E1					
Batipart Participations SAS	Luxembourg	FV		29.7%	29.7%	E3					
BNPP Cardif	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif BV	Netherlands	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif Compania de Seguros y Reaseguros SA	Peru	Equity*		100%	100%		Equity*		100%	100%	E1
BNPP Cardif Emeklilik AS	Turkey	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif General Insurance Co Ltd	Rep. of Korea	Equity*		90%	90%		Equity*		90%	90%	V1
BNPP Cardif Hayat Sigorta AS	Turkey	Equity*		100%	100%		Equity*		100%	100%	E1
BNPP Cardif Levensverzekeringen NV	Netherlands	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif Pojistovna AS	Czech Rep.	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif Schadeverzekeringen NV	Netherlands	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif Seguros de Vida SA	Chile	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif Seguros Generales SA	Chile	Full	(2)	100%	100%		Full	(2)	100%	100%	
BNPP Cardif Servicios y Asistencia Ltda	Chile	Equity*		100%	100%		Equity*		100%	100%	
BNPP Cardif Sigorta AS	Turkey	Equity*		100%	100%	E1					
BNPP Cardif TCB Life Insurance Co Ltd	Taiwan	Equity		49%	49%		Equity		49%	49%	
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Italy	Full	(2)	100%	100%		Full	(2)	100%	100%	
BOB Cardif Life Insurance Co Ltd	China	Equity		50%	50%		Equity		50%	50%	
Cardif Assurance Vie	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Austria branch)	Austria	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Belgium branch)	Belgium	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Bulgaria branch)	Bulgaria	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Germany branch)	Germany	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Italy branch)	Italy	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Japan branch)	Japan	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Portugal branch)	Portugal	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Romania branch)	Romania	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Spain branch)	Spain	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Switzerland branch)	Switzerland	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurance Vie (Taiwan branch)	Taiwan	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Austria branch)	Austria	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Belgium branch)	Belgium	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Bulgaria branch)	Bulgaria	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Germany branch)	Germany	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Italy branch)	Italy	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Japan branch)	Japan	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Luxembourg branch)	Luxembourg	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Poland branch)	Poland	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Portugal branch)	Portugal	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Romania branch)	Romania	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Spain branch)	Spain	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Switzerland branch)	Switzerland	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Assurances Risques Divers (Taiwan branch)	Taiwan	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Biztosito Magyarorszag ZRT	Hungary	Equity*		100%	100%	E1					
Cardif Colombia Seguros Generales SA	Colombia	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Courtage (Ex- Cardif I Services)	France										S3
Cardif do Brasil Seguros e Garantias SA	Brazil	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif do Brasil Vida e Previdencia SA	Brazil	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif El Djazair	Algeria	Equity*		100%	100%		Equity*		100%	100%	
Cardif Forsakring AB	Sweden	Equity*		100%	100%		Equity*		100%	100%	
Cardif Forsakring AB (Denmark branch)	Denmark	Equity*		100%	100%		Equity*		100%	100%	
Cardif Forsakring AB (Norway branch)	Norway	Equity*		100%	100%		Equity*		100%	100%	
Cardif IARD	France	Full	(2)	66%	66%	V3/D1	Equity*		83.3%	83.3%	E1
Cardif Insurance Co LLC	Russia	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Life	Luxembourg	Full	(2)	100%	88.6%	E3/V4					
Cardif Life Insurance Co Ltd	Rep. of Korea	Full	(2)	85%	85%		Full	(2)	85%	85%	
Cardif Life Insurance Japan	Japan	Full	(2)	75%	75%	E1					
Cardif Livforsakring AB	Sweden	Equity*		100%	100%		Equity*		100%	100%	
Cardif Livforsakring AB (Denmark branch)	Denmark	Equity*		100%	100%		Equity*		100%	100%	
Cardif Livforsakring AB (Norway branch)	Norway	Equity*		100%	100%		Equity*		100%	100%	
Cardif Ltda	Brazil	Equity*		100%	100%	E1					
Cardif Lux Vie	Luxembourg	Full	(2)	100%	88.6%	V1	Full	(2)	66.7%	55.3%	
Cardif Mexico Seguros de Vida SA de CV	Mexico	Equity*		100%	100%		Equity*		100%	100%	

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Cardif Mexico Seguros Generales SA de CV	Mexico	Equity*	100%	100%		Equity*	100%	100%	
Cardif Non Life Insurance Japan	Japan	Full (2)	100%	75%	E1				
Cardif Nordic AB	Sweden	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Osiguranje Dionicko Drustvo ZA	Croatia								S2
Cardif Pinnacle Insurance Holdings PLC	UK	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Pinnacle Insurance Management Services PLC	UK	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Poland	Equity*	100%	100%		Equity*	100%	100%	
Cardif Seguros SA	Argentina	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Servicios SA	Argentina	Equity*	100%	100%		Equity*	100%	100%	E1
Cardif Servicios SAC	Peru	Equity*	100%	100%	E1				
Cardimmo	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cargeas Assicurazioni SPA	Italy	Full (2)	100%	100%		Full (2)	100%	100%	V1
Carma Grand Horizon SARL	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
CB UK Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
CFH Algonquin Management Partners France Italia	Italy	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Bercy	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Bercy Hotel	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Bercy Intermédiaire	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Boulogne	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Cap d'Ail	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Milan Holdco SRL	Italy	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Montmartre	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
CFH Montparnasse	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
Corosa	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
Darnell DAC	Ireland	Full (2)	100%	100%		Full (2)	100%	100%	
Défense CB3 SAS	France	FV	25%	25%	E1				
Fleur SAS	France	FV	33.3%	33.3%	E1				
Fonds d'Investissements Immobiliers pour le Commerce et la Distribution	France	FV	25%	25%	E1				
GIE BNPP Cardif	France	Full (2)	100%	100%	V4	Full (2)	100%	99%	
Harewood Helena 2 Ltd	UK	Full (2)	100%	100%	E1				
Hibernia France	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
Icare	France	Full (2)	100%	100%		Full (2)	100%	100%	
Icare Assurance	France	Full (2)	100%	100%		Full (2)	100%	100%	
Luizaseg	Brazil	Equity	50%	50%		Equity	50%	50%	
Natio Assurance	France	Full (2)	100%	100%	V1	Equity	50%	50%	
NCVP Participacoes Societarias SA	Brazil	Full (2)	100%	100%		Full (2)	100%	100%	
Pinnacle Insurance PLC	UK	Full (2)	100%	100%		Full (2)	100%	100%	
Poistovna Cardif Slovakia AS	Slovakia	Equity*	100%	100%		Equity*	100%	100%	
Reumal Investissements	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
Rueil Ariane	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SAS HVP	France	Full (2)	100%	98.4%	V3	Full (2)	100%	98.6%	E1
SCI 68/70 rue de Lagny - Montreuil	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Alpha Park	France	FV	50%	50%	E1				
SCI BNPP Pierre I	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI BNPP Pierre II	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Bobigny Jean Rostand	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Bouleragny	France	FV	50%	50%	E1				
SCI Cardif Logement	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Citylight Boulogne	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Clichy Nuovo	France	FV	50%	50%	E1				
SCI Défense Étoile	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Défense Vendôme	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Étoile du Nord	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Fontenay Plaisance	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Imefa Velizy	France	FV	21.8%	21.8%	E1				
SCI Le Mans Gare	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Liberté	France	FV	50%	50%	E1				
SCI Nanterre Guilleraies	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Nantes Carnot	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Odyssée	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Pantin Les Moulins	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Paris Batignolles	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Paris Cours de Vincennes	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Portes de Claye	France	Equity	45%	45%		Equity	45%	45%	
SCI Rue Moussorgski	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Rueil Caudron	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Saint Denis Landy	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Saint Denis Mitterrand	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI Saint-Denis Jade (Ex- SCI Porte d'Asnières)	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
SCI SCOO	France	Equity	46.4%	46.4%		Equity	46.4%	46.4%	
SCI Vendôme Athènes	France	FV	50%	50%	E1				
SCI Villeurbanne Stalingrad	France	Full (2)	100%	100%		Full (2)	100%	100%	E1

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Secar	France	FV	59%	59%	E1				
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Germany	FV	35%	31%	E3				
Seniorenzentrum Butzbach Objekt GmbH	Germany	FV	35%	31%	E3				
Seniorenzentrum Heilbronn Objekt GmbH	Germany	FV	35%	31%	E3				
Seniorenzentrum Kassel Objekt GmbH	Germany	FV	35%	31%	E3				
Seniorenzentrum Wolfratshausen Objekt GmbH	Germany	FV	35%	31%	E3				
Société Francaise d'Assurances sur la Vie	France	Equity	50%	50%		Equity	50%	50%	E1
Société Immobilière du Royal Building SA	Luxembourg	Full (2)	100%	88.6%	V4	Full (2)	100%	55.3%	
State Bank of India Life Insurance Co Ltd	India	Equity	22%	22%		Equity	22%	22%	V2
Valeur Pierre Épargne	France	Full (2)	100%	100%		Full (2)	100%	100%	E1
Velizy SAS	France	FV	33.3%	33.3%	E1				
Vietcombank Cardif Life Insurance Co Ltd	Viet Nam	Equity	43%	43%	E1				
Structured Entities									
AEW Immocommercial	France	FV	-	-	E1				
Ambrosia Avril 2025	France	Full (4)	-	-	E1				
BNPP ABS Europe AAA	France	Full (4)	-	-	E1				
BNPP ABS Europe IG	France	Full (4)	-	-	E1				
BNPP ABS Opportunities	France	Full (4)	-	-	E1				
BNPP Actions Entrepreneurs (Ex-Camgestion Euro Mid Cap)	France	Full (4)	-	-	E1				
BNPP Actions Euroland	France	Full (4)	-	-		Full (4)	-	-	
BNPP Actions Monde	France	Full (4)	-	-	E1				
BNPP Actions PME	France	Full (4)	-	-	E1				
BNPP Aqua	France	Full (4)	-	-		Full (4)	-	-	
BNPP Convictions	France	Full (4)	-	-		Full (4)	-	-	
BNPP CP Cardif Alternative	France	Full (2)	-	-		Full (4)	-	-	E1
BNPP CP Cardif Private Debt	France	Full (2)	-	-		Full (4)	-	-	E1
BNPP Développement Humain	France	Full (4)	-	-		Full (4)	-	-	
BNPP Diversipierre	France	Full (2)	-	-		Full (2)	-	-	E1
BNPP Euro Valeurs Durables	France	Full (4)	-	-	E1				
BNPP France Crédit	France	Full (2)	-	-		Full (4)	-	-	E1
BNPP Global Senior Corporate Loans	France	Full (4)	-	-		Full (4)	-	-	
BNPP Indice Amérique du Nord	France	Full (4)	-	-	E1				
BNPP Indice Euro	France	Full (4)	-	-		Full (4)	-	-	E1
BNPP L1	Luxembourg	Full (4)	-	-	E1				
BNPP Midcap France	France	Full (4)	-	-	E1				
BNPP Monétaire Assurance	France	Full (4)	-	-	E1				
BNPP Perspectives	France	Full (4)	-	-	E1				
BNPP Protection Monde	France	Full (4)	-	-	E1				
BNPP Sélection Dynamique Monde	France	Full (4)	-	-	E1				
BNPP Sélection Flexible	France	Full (4)	-	-	E1				
C Santé	France	Full (2)	-	-	E1				
Camgestion Actions Croissance	France	Full (4)	-	-	E1				
Camgestion Actions Euro	France	Full (4)	-	-	E1				
Camgestion Obliflexible	France	Full (2)	-	-		Full (4)	-	-	E1
Camgestion Rendactis	France	Full (4)	-	-	E1				
Capital France Hotel	France	Full (2)	-	-		Full (2)	-	-	E1
Cardif Alternatives Part I	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Convertibles World	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Equity Frontier Markets	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Signatures	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Smid Cap Euro	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Smid Cap Europe	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif CPR Global Return (Ex- Cardif CPR Base Credit)	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif Edrim Signatures	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif Vita Convex Fund Eur	France	Full (2)	-	-		Full (4)	-	-	E1
Cedrus Carbon Initiative Trends	France	Full (2)	-	-		Full (4)	-	-	E1
EP L	France	Full (2)	-	-		Full (2)	-	-	E1
Foncière Partenaires	France	FV	-	-	E1				
FP Cardif Convex Fund USD	France	Full (2)	-	-		Full (4)	-	-	E1
Fundamenta	Italy	Full (2)	-	-		Full (2)	-	-	E1
Fundquest	France	Full (4)	-	-	E1				
G C Thematic Opportunities II	Ireland	Full (2)	-	-		Full (4)	-	-	E1
Natio Fonds Ampère 1	France	Full (4)	-	-		Full (4)	-	-	
Natio Fonds Athenes Investissement N 5	France	Full (2)	-	-	V4	Full (4)	-	-	E1
Natio Fonds Colline International	France	Full (2)	-	-		Full (4)	-	-	E1
Natio Fonds Collines Investissement N 1	France	Full (2)	-	-		Full (4)	-	-	E1
Natio Fonds Collines Investissement N 3	France	Full (2)	-	-		Full (4)	-	-	E1

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
New Alpha Cardif Incubator Fund	France	Full (2)	-	-		Full (4)	-	-	E1
Opéra Rendement	France	Full (2)	-	-		Full (2)	-	-	E1
Parvest	Luxembourg	Full (4)	-	-	E1				
Parworld	Luxembourg	Full (4)	-	-	E1				
Permal Cardif Co Investment Fund	France	Full (2)	-	-		Full (4)	-	-	E1
Preim Healthcare SAS	France	FV	-	-	E1				
PWH	France	FV	-	-	E1				
Rubin SARL	Luxembourg	FV	-	-	E1				
Seniorenzentren Deutschland Holding SARL	Luxembourg	FV	-	-	E1				
Theam Quant	Luxembourg	Full (4)	-	-	E1				
Tikehau Cardif Loan Europe	France	Full (2)	-	-		Full (4)	-	-	E1
Valtitres FCP	France	Full (2)	-	-		Full (4)	-	-	E1
Wealth Management									
BNPP Espana SA	Spain	Full	99.7%	99.7%		Full	99.7%	99.7%	
BNPP Wealth Management Monaco	Monaco	Full (1)	100%	100%		Full (1)	100%	100%	
SNC Conseil Investissement	France								S3
Asset Management (Ex- Investment Partners)									
Alfred Berg Asset Management AB	Sweden				S4	Full	100%	98.3%	
Alfred Berg Asset Management AB (Finland branch)	Finland								S1
Alfred Berg Asset Management AB (Norway branch)	Norway								S1
Alfred Berg Fonder AB	Sweden								S3
Alfred Berg Kapitalforvaltning AB	Sweden	Full	100%	98.2%	V3	Full	100%	98.3%	
Alfred Berg Kapitalforvaltning AS	Norway	Full	100%	98.2%	V3	Full	100%	98.3%	
Alfred Berg Kapitalforvaltning Finland AB	Finland								S2
Alfred Berg Rahastoyhtio OY	Finland								S2
Bancoestado Administradora General de Fondos SA	Chile	Equity	50%	49.1%	V3	Equity	50%	49.1%	
BNPP Asset Management Asia Ltd	Hong Kong	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Australia Ltd	Australia								S3
BNPP Asset Management Be Holding	Belgium	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Belgium	Belgium	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Belgium (Germany branch)	Germany	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Brasil Ltda	Brazil	Full	100%	99.5%	V3	Full	100%	99.6%	
BNPP Asset Management France	France	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management France (Austria branch)	Austria	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management France (Italy branch)	Italy	Full	100%	98.2%	E2				
BNPP Asset Management Holding	France	Full	99.9%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management India Private Ltd	India	Full	100%	98.2%	D1	Equity*	100%	98.3%	
BNPP Asset Management Japan Ltd	Japan	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Luxembourg	Luxembourg	Full	99.7%	97.9%	V3	Full	99.7%	98%	
BNPP Asset Management Nederland NV	Netherlands	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Netherlands NV	Netherlands	Full	100%	98.3%		Full	100%	98.3%	
BNPP Asset Management NL Holding NV	Netherlands	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management Services Grouping	France	Full	100%	98.2%	E1/V3				
BNPP Asset Management Singapore Ltd	Singapore								S3
BNPP Asset Management UK Ltd	UK	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Asset Management USA Holdings Inc.	USA	Full	100%	100%		Full	100%	100%	
BNPP Asset Management USA Inc.	USA	Full	100%	100%		Full	100%	100%	
BNPP Capital Partners	France	Full	100%	100%	D1	Equity*	100%	100%	
BNPP Dealing Services	France	Full (1)	100%	98.2%	V3	Full (1)	100%	98.3%	V3
BNPP Dealing Services (United Kingdom branch)	UK				S1	Full (1)	100%	98.3%	V3
BNPP Dealing Services Asia Ltd	Hong Kong								S3
BNPP Investment Partners Argentina SA	Argentina								S3
BNPP Investment Partners Australia Holdings Pty Ltd	Australia								S3
BNPP Investment Partners Latam SA de CV	Mexico								S3
BNPP Investment Partners PT	Indonesia	Full	100%	98.2%	V3	Full	100%	98.3%	
BNPP Investment Partners SGR SPA	Italy				S4	Full	100%	98.3%	V3
Camgestion	France								S4
Elite Asset Management PLC	Finland	Equity	19%	18.7%	V3	Equity	19%	18.7%	E3
EMZ Partners	France	Equity	24.9%	24.9%	E1				
Fund Channel	Luxembourg	Equity (3)	50%	49.1%	V3	Equity (3)	50%	49.1%	
Fundquest Advisor	France	Full	100%	98.2%	D1/V3	Equity*	100%	98.3%	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Fundquest Advisor (United Kingdom branch)	UK	Full	100%	98.2%	D1/V3	Equity*	100%	98.3%	
Gambit Financial Solutions	Belgium	Full	86%	84.4%	E1/V3				
Groeivermogen NV	Netherlands	Full	100%	98.2%	E1				
Haitong Fortis Private Equity Fund Management Co Ltd	China	Equity	33%	32.4%		Equity	33%	32.4%	
Harewood Helena 1 Ltd	UK	Full	100%	100%	E1				
HFT Investment Management Co Ltd	China	Equity	49%	48.1%	V3	Equity	49%	48.2%	
Impax Asset Management Group PLC	UK	Equity	24.5%	24%	V3	Equity	25%	24.6%	E1
Services Épargne Entreprise	France	Equity	37.1%	37.1%	E1				
Shinhan BNPP Asset Management Co Ltd	Rep. of Korea	Equity	35%	34.4%	V3	Equity	35%	34.4%	
Theam	France								S4
Structured Entities									
SME Alternative Financing DAC	Ireland	Full	-	-	E1				
Real Estate Services									
99 West Tower GmbH & Co KG	Germany	Full	100%	100%		Full	100%	100%	E3
99 West Tower GP GmbH	Germany	Full	100%	100%		Full	100%	100%	E3
Auguste Thouard Expertise	France	Full	100%	100%		Full	100%	100%	
BNPP Immobilier Promotion Immobilier d'Entreprise	France	Full	100%	100%		Full	100%	100%	
BNPP Immobilier Promotion Résidentiel	France				S4	Full	100%	100%	
BNPP Immobilier Résidences Services	France	Full	100%	100%		Full	100%	100%	
BNPP Immobilier Résidentiel	France	Full	100%	100%		Full	100%	100%	
BNPP Immobilier Résidentiel Service Clients	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate (United Arab Emirates branch)	United Arab Emirates	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory & Property Management Luxembourg SA	Luxembourg	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory & Property Management UK Ltd	UK	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory and Property Management Ireland Ltd	Ireland	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Belgium SA	Belgium	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Italy SPA	Italy	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Netherlands BV	Netherlands	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory SA	Romania	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Spain SA	Spain	Full	100%	100%		Full	100%	100%	
BNPP Real Estate APM CR SRO	Czech Rep.	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Conseil Habitation & Hospitality (Ex- BNPP Immobilier Résidentiel Transaction & Conseil)	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Consult France	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Consult GmbH	Germany	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Facilities Management Ltd	UK	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Financial Partner	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate GmbH	Germany	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Holding Benelux SA	Belgium	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Holding GmbH	Germany	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Holding Netherlands BV	Netherlands				S4	Full	100%	100%	
BNPP Real Estate Hotels France	France								S4
BNPP Real Estate Investment Management Belgium	Belgium	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management France	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Germany GmbH	Germany	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Italy	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Spain	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management International GmbH	Germany	Full	100%	100%	E2				
BNPP Real Estate Investment Management Italy SPA	Italy	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Ltd	UK	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Luxembourg SA	Luxembourg	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Spain SA	Spain	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management UK Ltd	UK	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Services	France				S4	Full	100%	100%	

Name	Country	31 December 2018					31 December 2017				
		Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
BNPP Real Estate Italy SRL	Italy	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Jersey Ltd	Jersey										S2
BNPP Real Estate Magyarorszag Tanacsado Es Ingatlankezelo ZRT	Hungary	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Poland SP ZOO	Poland	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Development UK Ltd	UK	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Developpement Italy SPA	Italy	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Management Belgium	Belgium	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Management France SAS	France	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Management GmbH	Germany	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Management Italy SRL	Italy	Full		100%	100%		Full		100%	100%	
BNPP Real Estate Property Management Spain SA	Spain					S4	Full		100%	100%	
BNPP Real Estate Transaction France	France	Full		96%	96%	V2	Full		96.1%	96.1%	V2
BNPP Real Estate Valuation France	France	Full		100%	100%		Full		100%	100%	
Construction-Sale Companies (Real Estate programmes) [e]	France	Full / Equity		-	-		Full / Equity		-	-	
FG Ingénierie et Promotion Immobilière	France										S4
GIE Siège Issy	France	Full		100%	100%		Full		100%	100%	
Horti Milano SRL	Italy	Full		100%	100%		Full		100%	100%	E1
Immobilière des Bergues	France										S4
Lifizz	France	Full		100%	100%	E2					
Locchi SRL	Italy					S3	Full		100%	100%	
Parker Tower Ltd	UK	Full		100%	100%		Full		100%	100%	
Partner's & Services	France	Full		100%	100%		Full		100%	100%	
Pyrotex GB 1 SA	Luxembourg					S4	Full		100%	100%	
Pyrotex SARL	Luxembourg	Full		100%	100%		Full		100%	100%	
REPD Parker Ltd	UK	Full		100%	100%		Full		100%	100%	
Société Auxiliaire de Construction Immobilière	France	Full		100%	100%		Full		100%	100%	
Sviluppo Residenziale Italia SRL	Italy	Full		100%	100%		Full		100%	100%	
Corporate & Institutional Banking											
Securities Services											
BNPP Financial Services LLC	USA	Full		100%	100%	E1					
BNPP Fund Administration Services Ireland Ltd	Ireland	Full		100%	100%		Full		100%	100%	
BNPP Fund Services Australasia Pty Ltd	Australia	Full		100%	100%	D1	Equity*		100%	100%	
BNPP Fund Services Australasia Pty Ltd (New zealand branch)	New Zealand	Full		100%	100%	D1	Equity*		100%	100%	
BNPP Global Securities Operations Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP Securities Services	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Australia branch)	Australia	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Belgium branch)	Belgium	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Germany branch)	Germany	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Greece branch)	Greece	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Guernsey branch)	Guernsey	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Hong kong branch)	Hong Kong	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Hungary branch)	Hungary	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Ireland branch)	Ireland	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Italy branch)	Italy	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Jersey branch)	Jersey	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Luxembourg branch)	Luxembourg	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Netherlands branch)	Netherlands	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Poland branch)	Poland	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Portugal branch)	Portugal	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Singapore branch)	Singapore	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Spain branch)	Spain	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Switzerland branch)	Switzerland	Full	(1)	100%	100%		Full	(1)	100%	100%	

Name	Country	31 December 2018					31 December 2017				
		Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
BNPP Securities Services (United Kingdom branch)	UK	Full	(1)	100%	100%		Full	(1)	100%	100%	
Services Logiciels d'Intégration Boursière	France	Equity	(3)	66.6%	66.6%	E1					
CIB EMEA (Europe, Moyen Orient, Afrique)											
France											
BNPP Arbitrage	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Arbitrage (United Kingdom branch)	UK					S1	Full	(1)	100%	100%	
Esomet	France	Full		100%	100%		Full		100%	100%	
Eurotitrisation	France	Equity		23%	23%	E1					
Financière du Marché Saint Honoré	France	Full		100%	100%		Full		100%	100%	
Laffitte Participation 22	France	Full		100%	100%		Full		100%	100%	
Opéra Trading Capital	France	Full		100%	100%		Full		100%	100%	
Opéra Trading Capital (Hong Kong branch)	Hong Kong	Full		100%	100%		Full		100%	100%	
Opéra Trading Capital (United Kingdom branch)	UK	Full		100%	100%		Full		100%	100%	
Parilease	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
SNC Taitbout Participation 3	France	Full		100%	100%		Full		100%	100%	
Verner Investissements	France	Equity		40%	50%		Equity		40%	50%	
Structured Entities											
Auseter Real Estate Opportunities SARL	Luxembourg	Full		-	-	E1					
Atargatis	France	Full		-	-		Full		-	-	
Austin Finance	France	Full		-	-		Full		-	-	
Compagnie d'Investissement Italiens	France	Full		-	-		Full		-	-	
Compagnie d'Investissement Opéra	France	Full		-	-		Full		-	-	
FCT Juice	France	Full		-	-	E2					
Financière des Italiens	France	Full		-	-		Full		-	-	
Financière Paris Haussmann	France	Full		-	-		Full		-	-	
Financière Taitbout	France	Full		-	-		Full		-	-	
Mediterranea	France	Full		-	-		Full		-	-	
Optichamps	France	Full		-	-		Full		-	-	
Participations Opéra	France	Full		-	-		Full		-	-	
Other European countries											
Alpha Murcia Holding BV	Netherlands					S1	Equity*		100%	99.9%	
BNP PUK Holding Ltd	UK	Full		100%	100%		Full		100%	100%	
BNPP Bank JSC	Russia	Full		100%	100%		Full		100%	100%	
BNPP Commodity Futures Ltd	UK	Full		100%	100%		Full		100%	100%	
BNPP Emissions- Und Handels- GmbH	Germany	Full		100%	100%		Full		100%	100%	
BNPP Invest Holdings BV	Netherlands	Full		100%	100%		Full		100%	100%	E1
BNPP Ireland Unlimited Co	Ireland	Full		100%	100%		Full		100%	100%	
BNPP Islamic Issuance BV	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP Issuance BV	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP Net Ltd	UK	Full		100%	100%	D1	Equity*		100%	100%	
BNPP Prime Brokerage International Ltd	Ireland	Full		100%	100%		Full		100%	100%	
BNPP UK Holdings Ltd	UK	Full		100%	100%		Full		100%	100%	
BNPP UK Ltd	UK					S3	Full		100%	100%	
BNPP Vartry Reinsurance DAC	Ireland	Full		100%	100%	D1	Equity*		100%	100%	
Diamante Re SRL	Italy	Full		100%	100%	E1					
Financière Hime SA	Luxembourg	Equity		22.5%	22.5%		Equity		22.5%	22.5%	E1
FScholen	Belgium	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Greenstars BNPP	Luxembourg	Equity*		100%	100%		Equity*		100%	100%	
Harewood Holdings Ltd	UK	Full		100%	100%		Full		100%	100%	
Hime Holding 1 SA	Luxembourg	Equity		26.4%	26.4%		Equity		26.4%	26.4%	E1
Hime Holding 2 SA	Luxembourg	Equity		21%	21%		Equity		21%	21%	E1
Hime Holding 3 SA	Luxembourg	Equity		20.6%	20.6%		Equity		20.6%	20.6%	E1
Landspire Ltd	UK	Full		100%	100%		Full		100%	100%	
Ribera Del Loira Arbitrage	Spain	Full		100%	100%	E1					
SC Nueva Condo Murcia SL	Spain										S2
Utexam Logistics Ltd	Ireland	Full		100%	100%		Full		100%	100%	
Utexam Solutions Ltd	Ireland	Full		100%	100%		Full		100%	100%	
Structured Entities											
Alectra Finance PLC	Ireland	Full		-	-		Full		-	-	
Aquarius + Investments PLC	Ireland	Full		-	-		Full		-	-	
Aries Capital DAC	Ireland	Full		-	-		Full		-	-	E1
BNPP International Finance Dublin Unlimited Company	Ireland	Full		-	-		Full		-	-	
BNPP Investments N 1 Ltd	UK					S1	Full		-	-	
BNPP Investments N 2 Ltd	UK					S1	Full		-	-	
Boug BV	Netherlands	Full		-	-		Full		-	-	
Boug BV (United Kingdom branch)	UK	Full		-	-		Full		-	-	
Madison Arbor Ltd	Ireland	Full		-	-		Full		-	-	
Matchpoint Finance PLC	Ireland	Full		-	-		Full		-	-	
Omega Capital Funding Ltd	Ireland										S1
Omega Capital Investments PLC	Ireland										S1
Scaldis Capital Ltd	Jersey	Full		-	-		Full		-	-	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Middle East									
BNPP Investment Co KSA	Saudi Arabia	Full	100%	100%	D1	Equity*	100%	100%	
Africa									
BNPP Securities South Africa Holdings Pty Ltd	South Africa								S3
BNPP Securities South Africa Pty Ltd	South Africa								S3
CIB Americas									
Banco BNPP Brasil SA	Brazil	Full	100%	100%		Full	100%	100%	
Banexi Holding Corp.	USA				S4	Full	100%	100%	
BNPP Canada Corp.	Canada	Full	100%	100%		Full	100%	100%	
BNPP Canada Valeurs Mobilières Inc.	Canada								S3
BNPP Capital Services Inc.	USA	Full	100%	100%		Full	100%	100%	
BNPP CC Inc.	USA				S4	Full	100%	100%	
BNPP Colombia Corporacion Financiera SA	Colombia	Full	100%	100%		Full	100%	100%	D1
BNPP Energy Trading GP	USA	Full	100%	100%		Full	100%	100%	
BNPP Energy Trading Holdings Inc.	USA	Full	100%	100%		Full	100%	100%	
BNPP Energy Trading LLC	USA	Full	100%	100%		Full	100%	100%	
BNPP FS LLC	USA	Full	100%	100%		Full	100%	100%	
BNPP IT Solutions Canada Inc.	Canada	Full	100%	100%		Full	100%	100%	D1
BNPP Leasing Corp.	USA								S1
BNPP Prime Brokerage Inc.	USA				S4	Full	100%	100%	
BNPP RCC Inc.	USA	Full	100%	100%		Full	100%	100%	
BNPP Securities Corp.	USA	Full	100%	100%		Full	100%	100%	
BNPP US Wholesale Holdings Corp.	USA	Full	100%	100%		Full	100%	100%	
BNPP USA Inc.	USA	Full	100%	100%		Full	100%	100%	
Dale Bakken Partners 2012 LLC	USA	FV	23.8%	23.8%	E1				
French American Banking Corp.	USA								S1
FSI Holdings Inc.	USA	Full	100%	100%		Full	100%	100%	
Via North America Inc.	USA				S4	Full	100%	100%	
Structured Entities									
BNPP EQD Brazil Fund Fundo de Investmento Multimercado	Brazil	Full	-	-		Full	-	-	
BNPP Proprietario Fundo de Investimento Multimercado	Brazil	Full	-	-		Full	-	-	
BNPP VPG Adonis LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Brookfin LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Brookline Cre LLC	USA	Full	-	-		Full	-	-	
BNPP VPG CT Holdings LLC	USA	Full	-	-		Full	-	-	
BNPP VPG EDMC Holdings LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Express LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Freedom CommunicationsLLC	USA				S1	Full	-	-	
BNPP VPG Legacy Cabinets LLC	USA				S1	Full	-	-	
BNPP VPG Mark IV LLC	USA				S1	Full	-	-	
BNPP VPG Master LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Medianews Group LLC	USA				S1	Full	-	-	
BNPP VPG Northstar LLC	USA				S1	Full	-	-	
BNPP VPG Pacex LLC	USA				S1	Full	-	-	
BNPP VPG PCMC LLC	USA				S1	Full	-	-	
BNPP VPG SBX Holdings LLC	USA				S1	Full	-	-	
BNPP VPG SDI Media Holdings LLC	USA								S1
Decart Re Ltd	Bermuda	Full (2)	-	-	E1				
Ozcar Multi Strategies LLC	USA								S3
Starbird Funding Corp.	USA	Full	-	-		Full	-	-	
VPG SDI Media LLC	USA								S1
CIB Pacific Asia									
Bank BNPP Indonesia PT	Indonesia	Full	100%	100%		Full	100%	100%	
BNP Pacific Australia Ltd	Australia				S3	Full	100%	100%	
BNPP Amber Holdings Pty Ltd	Australia	Full	100%	100%		Full	100%	100%	E1
BNPP Arbitrage Hong Kong Ltd	Hong Kong	Full	100%	100%		Full	100%	100%	
BNPP China Ltd	China	Full	100%	100%		Full	100%	100%	
BNPP Commodities Trading Shanghai Co Ltd	China	Full	100%	100%		Full	100%	100%	
BNPP Finance Hong Kong Ltd	Hong Kong	Full	100%	100%		Full	100%	100%	
BNPP India Holding Private Ltd	India	Full	100%	100%		Full	100%	100%	
BNPP India Solutions Private Ltd	India	Full	100%	100%		Full	100%	100%	
BNPP Malaysia Berhad	Malaysia	Full	100%	100%		Full	100%	100%	
BNPP Securities Asia Ltd	Hong Kong	Full	100%	100%		Full	100%	100%	
BNPP Securities India Private Ltd	India	Full	100%	100%		Full	100%	100%	
BNPP Securities Japan Ltd	Japan	Full	100%	100%		Full	100%	100%	
BNPP Securities Korea Co Ltd	Rep. of Korea	Full	100%	100%		Full	100%	100%	
BNPP Securities Singapore Pte Ltd	Singapore	Full	100%	100%		Full	100%	100%	
BNPP Securities Taiwan Co Ltd	Taiwan	Full	100%	100%		Full	100%	100%	
BNPP Sekuritas Indonesia PT	Indonesia	Full	99%	99%		Full	99%	99%	
BNPP SJ Ltd	Hong Kong								S3
BNPP SJ Ltd (Japan branch)	Japan								S3
BPP Holdings Pte Ltd	Singapore	Full	100%	100%		Full	100%	100%	
Other Business Units									
BNPP Suisse SA	Switzerland	Full	100%	100%		Full	100%	100%	
BNPP Suisse SA (Guernsey branch)	Guernsey	Full	100%	100%		Full	100%	100%	
Property companies (property used in operations) and others									
Antin Participation 5	France	Full	100%	100%		Full	100%	100%	
BNPP Home Loan SFH	France	Full (1)	100%	100%		Full (1)	100%	100%	
BNPP Partners for Innovation	France	Equity	50%	50%		Equity	50%	50%	
BNPP Procurement Tech	France	Full	100%	100%	E1				
BNPP Public Sector SCF	France	Full (1)	100%	100%		Full (1)	100%	100%	
BNPP SB Re	Luxembourg	Full (2)	100%	100%		Full (2)	100%	100%	
Cobema	Belgium				S4	Full	100%	100%	
Compagnie Financière Ottomane SA	Luxembourg	Full	97.3%	97.2%		Full	97.3%	97.2%	V1
Ejesur SA	Spain	Full	100%	100%	E1				
GIE Groupement Auxiliaire de Moyens	France	Full	100%	100%		Full	100%	100%	
GIE Groupement d'Etudes et de Prestations	France	Full	100%	100%	E1				
Le Sphinx Assurances Luxembourg SA	Luxembourg	Full (2)	100%	100%		Full (2)	100%	100%	
Lion International Investments SA	Luxembourg	Full	100%	100%		Full	100%	100%	
Plagefin SA	Luxembourg	Full	100%	65.9%		Full	100%	65.9%	
Sagip	Belgium	Full	100%	100%		Full	100%	100%	
Société Immobilière du Marché Saint-Honoré	France				S2	Full	100%	100%	V1
Société Orbaisienne de Participations	France	Full	100%	100%		Full	100%	100%	
Structured Entities									
BNPP B Institutional II	Belgium	Full	-	-		Full	-	-	
Euro Secured Notes Issuer (Ex- BNPP SME-1)	France	Full	-	-		Full	-	-	
FCT Laffitte 2016	France	Full	-	-		Full	-	-	
FCT Opéra 2014	France	Full	-	-		Full	-	-	

(a) At 31 December 2018, the securitisation fund Ecarat UK includes 4 funds (Ecarat PLC 6 to 9), versus 5 funds (Ecarat PLC 4 to 8) at 31 December 2017.
(b) At 31 December 2018, the securitisation funds UCI and RMBS Prado include 14 funds (FCC UCI 9 to 12, 14 to 17 and RMBS Prado I to VI), versus 14 fonds at 31 December 2017 (FCC UCI 9 to 12, 14 to 18 and RMBS Prado I to V).
(c) At 31 December 2018 and at 31 December 2017, the securitisation fund Autonoria includes 1 silo (Autonoria 2014).
(d) At 31 December 2018, the securitisation funds Domos comprise these funds : Domos 2011 (including 1 silo Domos 2011-B) and Domos 2017, versus Domos 2008, Domos 2011 (including 2 silos Domos 2011-A and B) and Domos 2017 at 31 December 2017.
(e) At 31 December 2018, 95 sales construction companies (77 fully- consolidated and 18 equity accounted) versus 96 at 31 December 2017 (81 fully-consolidated and 15 equity accounted).

As requested by the ANC 2016 regulation, the list of entities that are controlled by the Group, jointly controlled or under significant influence, but excluded from the scope of consolidation since their contribution to the consolidated financial statements would be immaterial to the Group, and the list of equity investments, are available on the "Regulated Information" page of the https://invest.bnpparibas.com website.

Changes in the scope of consolidation
New entries (E) in the scope of consolidation
E1 Passing qualifying thresholds
E2 Incorporation
E3 Purchase, gain of control or significant influence
Removals (S) from the scope of consolidation
S1 Cessation of activity (dissolution, liquidation...)
S2 Disposal, loss of control or loss of significant influence
S3 Passing qualifying thresholds
S4 Merger, Universal transfer of assets and liabilities
Variance (V) in voting or ownership interest
V1 Additional purchase
V2 Partial disposal
V3 Dilution
V4 Increase in %
Equity Controlled but non material entities consolidated under the equity method as associates*
FV Joint control or investment in associates measured at Fair Value through P&L
Miscellaneous
D1 Consolidation method change not related to fluctuation in voting or ownership interest

Prudential scope of consolidation
(1) French subsidiaries whose supervision of prudential requirements is complied with through the supervision on a consolidated basis of BNP Paribas SA, in accordance with article 7.1 of Regulation n°575/2013 of the European Parliament and of the Council.
(2) Insurance entities consolidated under the equity method in the prudential scope.
(3) Jointly controlled entities under proportional consolidation in the prudential scope.
(4) Collective investment undertaking excluded from the prudential scope.

8.k FEES PAID TO THE STATUTORY AUDITORS

Year to 31 Dec. 2018 *Excluding tax, in thousands of euros*	Deloitte		PricewaterhouseCoopers		Mazars		TOTAL	
	Total	%	Total	%	Total	%	Total	%
Statutory audits and contractual audits, including	15,289	75%	15,712	61%	12,104	90%	43,105	73%
Issuer	3,899		4,462		2,515		10,876	
Consolidated subsidiaries	11,390		11,250		9,589		32,229	
Services other than those required for their statutory audit engagement, including	5,108	25%	9,898	39%	1,326	10%	16,332	27%
Issuer	1,526		3,175		712		5,413	
Consolidated subsidiaries	3,582		6,723		614		10,919	
TOTAL	**20,397**	**100%**	**25,610**	**100%**	**13,430**	**100%**	**59,437**	**100%**
of which fees paid to Statutory Auditors in France for the statutory audit and contractual audit	*4,318*		*4,477*		*4,936*		*13,731*	
of which fees paid to Statutory Auditors in France for services other than those required for their statutory audit engagements	*398*		*2,091*		*609*		*3,098*	

Year to 31 Dec. 2017 *Excluding tax, in thousands of euros*	Deloitte		PricewaterhouseCoopers		Mazars		TOTAL	
	Total	%	Total	%	Total	%	Total	%
Statutory audits and contractual audits, including	16,683	68%	16,667	64%	11,261	92%	44,611	71%
Issuer	3,840		4,730		2,448		11,018	
Consolidated subsidiaries	12,843		11,937		8,813		33,593	
Services other than those required for their statutory audit engagement, including	7,906	32%	9,513	36%	935	8%	18,354	29%
Issuer	3,534		2,622		535		6,691	
Consolidated subsidiaries	4,372		6,891		400		11,663	
TOTAL	**24,589**	**100%**	**26,180**	**100%**	**12,196**	**100%**	**62,965**	**100%**
of which fees paid to Statutory Auditors in France for the statutory audit and contractual audit	*5,883*		*4,623*		*4,730*		*15,236*	
of which fees paid to Statutory Auditors in France for services other than those required for their statutory audit engagements	*987*		*1,388*		*549*		*2,924*	

The audit fees paid to auditors which are not members of the network of one of the auditors certifying the consolidated financial statements and the non-consolidated financial statements of BNP Paribas SA, mentioned in the table above, amount to EUR 507 thousand for the year 2018 (EUR 909 thousand in 2017).

Services other than those required for the statutory audit engagement are mainly composed this year of reviews of the entity's compliance with regulatory requirements, and reviews of Internal Control quality by comparison with international standards (such as ISAE 3402) as part of services provided to customers, particularly in the Securities and Asset Management businesses, and expertise on the Bank's transformation projects.

4.7 Statutory Auditors' report on the consolidated financial statements

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide 92908 Paris La Défense Cedex	63, rue de Villiers 92208 Neuilly-sur-Seine Cedex	61, rue Henri Regnault 92400 Courbevoie

For the year ended 31 December 2018

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,
BNP Paribas SA
16 boulevard des Italiens
75009 PARIS

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of BNP Paribas SA for the year ended 31 December 2018.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group at 31 December 2018 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us for the period from 1 January 2018 to the date of our report, and, in particular, we did not provide any non audit services prohibited by article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (*Code de déontologie*) for Statutory Auditors.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Notes 1.a.1 and 2 to the consolidated financial statements, which describe the impact on the consolidated financial statements for the year ended 31 December 2018 of the changes in presentation and the application of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from contracts with customers".

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Assessment of the impacts of the first-time application of IFRS 9 – Financial instruments
(See Notes 1.a.1, 1.e.5, 1.e.6, 2b, 3.a, 3.c, 3.d, 3.h and 5.a to 5.h to the consolidated financial statements)

Description of risk	How our audit addressed this risk
The Group applied IFRS 9 (phases I and II), which replaces IAS 39 "Financial Instruments: Recognition and Measurement", from 1 January 2018 to its financial assets and liabilities, with the exception of those of the Insurance business line. This standard significantly changes the rules concerning the classification, measurement and impairment of financial assets. In particular, the calculation of impairment losses according to the expected credit losses model requires management to exercise judgement, as described below. The first-time application of IFRS 9 led BNP Paribas to recognise a negative impact of EUR 2.5 billion, net of tax, in equity, to publish an opening balance sheet at 1 January 2018 and to provide detailed disclosures on the transition from the balance sheet at 31 December 2017 prepared under IAS 39 to the opening balance sheet at 1 January 2018 prepared under IFRS 9 (excluding insurance assets and liabilities). Determining this impact and detailed information required reliance on many assumptions and judgements as well as new operating processes. Given the complexity of the application of IFRS 9 and the significance of the information published, we deemed the determination of the impact of the first-time application of IFRS 9 and the related disclosures to be a key audit matter.	We assessed the procedures deployed by BNP Paribas to implement the new standard. We asked our experts to assess the analyses performed and the models used by BNP Paribas to apply the new IFRS 9 accounting principles. With respect to the classification and measurement of assets and liabilities, our work consisted in: ■ examining the analyses performed and the accounting principles defined by the Group and their implementation by the main business lines; ■ based on a sample of contracts, verifying the analysis prepared by BNP Paribas as regards the classification of financial assets; ■ assessing the models used for managing financial assets. With respect to expected credit losses, our audit work consisted in: ■ assessing the compliance of BNP Paribas' accounting principles with IFRS 9 and the methods implemented by the business lines by examining the independent verifications performed internally where appropriate; ■ based on a sample of models, assessing the implementation of said models in IT systems and the financial reporting; ■ performing an independent calculation of the expected losses based on a sample of contracts. We also assessed the appropriateness of the disclosures provided in the notes to the consolidated financial statements in relation to the impact of the first-time application of IFRS 9.

Assessment of credit risk and measurement of impairment losses (stages 1, 2 and 3)

(See Notes 1.e.5, 1.e.6, 1.o, 3.h, 5.e, 5.f, 5.g, 5.h and 5.p to the consolidated financial statements)

Description of risk	How our audit addressed this risk

BNP Paribas recognises impairment losses to hedge the credit risks inherent to its banking intermediation activities.
 	
As from 1 January 2018, these impairment losses are determined in accordance with IFRS 9 and the expected credit losses model.
 	
The measurement of expected credit losses on customer loan portfolios requires management to exercise judgement, in particular in order to:
■ assess the significant deterioration of credit risk to classify outstandings in stage 1, stage 2, or stage 3;
■ estimate the amount of expected losses according to the different stages;
■ prepare macro-economic projections which are integrated into both the criteria for recognising deterioration and in the measurement of expected losses.
 	
At 31 December 2018, total outstanding customer loans exposed to credit risk amounted to EUR 790 billion; total impairment losses stood at EUR 24.1 billion.
 	
We deemed the assessment of credit risk and the measurement of impairment losses to be a key audit matter insofar as management is required to exercise judgement and make estimates to assess credit risk, in particular as regards credit granted to companies given the potentially substantial amounts of the outstanding loans concerned.
	We concentrated our work on the most significant outstandings and/or portfolios at the reporting date as well as on the credit granted to companies operating in more sensitive economic sectors or geographic regions.
	We assessed the relevance of BNP Paribas' internal control system and tested the manual and computerised controls for assessing credit risk and measuring expected losses.
	
	During our work, we focused on:
	■ Classification of outstandings by stage: we assessed the relevance and the correct application of the indicators used by the various business lines to measure significant increases in credit risk, in particular as regards the rating of corporate counterparties;
	■ Measurement of expected losses (stages 1, 2 and 3);
	  ■ assisted by our credit risk experts and relying on the internal system for independent validation of the Group's models, we assessed the methodologies as well as the assumptions underlying the macro-economic projections used by BNP Paribas across the various scopes, the proper integration of said projections into the information system and the effectiveness of the data quality controls;
	  ■ with regard to impairment losses specific to outstanding loans to companies classified n stage 3, we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and based on a sample, assessed the assumptions and data used by management to estimate impairment.
	
	In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to credit risk and particularly the new disclosures required as a result of the application of IFRS 9.

Valuation of financial instruments

(See Notes 1.e.2, 1.e.7, 1.e.10, 1.o, 3.a, 3.c, 3.d, 5.a, 5.b and 5.d to the consolidated financial statements)

Description of risk	How our audit addressed this risk
As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value. Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices (instruments classified in level 1 of the fair value hierarchy); (ii) using valuation models whose main inputs are observable (instruments classified in level 2); and (iii) using valuation models whose main inputs are unobservable (instruments classified in level 3). The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks. The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used. At 31 December 2018, financial instruments represented EUR 604 billion (of which EUR 11.9 billion for level 3 instruments) under assets and EUR 572 billion (of which EUR 24.9 billion for level 3 instruments) under liabilities. In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of level 3 instruments given the use of unobservable inputs.	Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to: ■ the approval and regular review by management of the risks of the valuation models; ■ the independent verification of the valuation inputs; ■ the determination of value adjustments. Based on a sample, our valuation experts: ■ analysed the relevance of the assumptions and inputs used; ■ analysed the results of the independent verification of the inputs by BNP Paribas; ■ performed independent counter valuations using our own models. We also analysed on a sample basis any differences between the valuations obtained and collateral calls with counterparties. In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to the valuation of financial instruments.

Goodwill impairment

(See Notes 1.b.4 and 5.o to the consolidated financial statements)

Description of risk	How our audit addressed this risk
When recognising acquisitions, BNP Paribas records goodwill under assets, corresponding to the excess of the acquisition price of the shares over the value of the Group's interest. At 31 December 2018, goodwill amounted to EUR 8.5 billion. Goodwill is tested for impairment at least once a year or more frequently if there is an indication of impairment. Comparing the carrying amount of the cash-generating units to which goodwill is allocated with their recoverable amount is a key step in the process of determining if an impairment charge should be recorded. We deemed goodwill impairment to be a key audit matter because management is required to exercise judgement to measure the recoverable amount of the cash-generating units, which involves making assumptions as regards the future earnings of acquirees and the discount rates applied to projected cash flows.	Our audit approach consisted in assessing the procedures implemented within BNP Paribas to test goodwill for impairment as well as the controls designed to identify indications of goodwill impairment. Assisted by our valuation experts, our work on the goodwill balances at 31 December 2018 consisted primarily in: ■ analysing the methods adopted by BNP Paribas; ■ critically assessing the provisional business plans approved by Executive Management to ensure the reasonableness of the future cash flow estimates set out therein (in particular when projections do not match past performance); ■ critically analysing the main assumptions and inputs used (growth rate, cost of capital and discount rate) with respect to available external information; ■ assessing the analyses of the sensitivity of estimates to key inputs (in particular when the recoverable amount approximates the carrying amount). Lastly, we verified the appropriateness of the disclosures in the notes to the consolidated financial statements with respect to the results of impairment and sensitivity tests.

Analysis of legal risk with respect to regulatory and administrative investigations and to class actions

(See Notes 1.o, 3.h, 5.p and 8.b to the consolidated financial statements)

Description of risk	How our audit addressed this risk
In each of the countries where it is present, BNP Paribas is subject to the regulations applicable to the sectors in which it operates. If the Group does not comply with the applicable laws and regulations, it may be exposed to significant fines and other administrative and criminal sanctions. It may also incur losses as a result of private legal disputes in connection with or unrelated to these sanctions. Any provision recognised to cover the consequences of investigations into non-compliance with certain regulations requires judgement due to the difficulty in estimating the outcome of regulatory procedures. Any provisions with respect to class actions or other private legal disputes also requires management to exercise judgement. In light of the increase in regulatory and administrative investigations and class actions brought against financial establishments in recent years and of the significant judgement exercised by management to determine the amount of provisions recognised, we deemed this risk to be a key audit matter.	We were informed of the procedure for identifying and assessing legal risk with respect to regulatory and administrative investigations and to class actions, in particular through quarterly interviews with BNP Paribas' legal functions. Our work consisted primarily in: ■ obtaining an understanding of the analyses prepared by the financial and legal departments at the end of each quarterly accounting period; ■ interviewing the specialised law firms with which BNP Paribas works when subject to legal disputes.

General IT controls

Description of risk	How our audit addressed this risk
The reliability and security of IT systems plays a key role in the preparation of BNP Paribas' consolidated financial statements. We thus deemed the assessment of the general IT controls and the application controls specific to the information processing chains that contribute to the preparation of accounting and financial information to be a key audit matter. In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to applications' settings or underlying data.	For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in: ■ obtaining an understanding of the systems, processes and controls which underpin accounting and financial data; ■ assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on key systems (in particular accounting, consolidation and automatic reconciliation applications); ■ examining the controls for the authorisation of manual accounting entries; ■ performing additional audit procedures, where appropriate.

Technical reserves of insurance companies
(See Notes 1.f.3 and 5.j to the consolidated financial statements)

Description of risk	How our audit addressed this risk
At the year-end, a liability adequacy test is performed for BNP Paribas' insurance activities. This test consists in comparing insurance liabilities (or technical reserves) recognised in the balance sheet with projected net future cash flows. In the hypothetical event that the carrying amount of the insurance liabilities were not sufficient, an additional liability would have to be recognised. At 31 December 2018, total technical insurance reserves amounted to EUR 213.7 billion. The end-2018 test confirmed that the carrying amount of the reserves was sufficient. We deemed the implementation of the liability adequacy test for the Savings business to be a key audit matter because it involves using actuarial models as well as modelling options and guarantees which are specific to BNP Paribas and requires management to exercise judgement to determine certain key assumptions (e.g., return on assets, surrender rate and fees).	Based on a sample, we assessed the amount of net future cash flows used in the calculation, in particular by: ■ assessing the validity of the data on asset portfolios and contracts used as a starting point for the modelling exercise; ■ identifying the main changes made to the actuarial models, assessing the relevance of said changes and obtaining an understanding of their impact on the result of the test; ■ analysing differences in the model results between 2017 and 2018 using analyses prepared by BNP Paribas. We verified that the most material differences were justified by changes in the portfolio, the assumptions or the models. We also examined the disclosures in the notes to the consolidated financial statements with respect to insurance liabilities.

Specific verifications

As required by legal and regulatory provisions and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the Group management report includes the consolidated non-financial information statement required under article L.225-102-1 of the French Commercial Code. However, in accordance with article L.823-10 of the French Commercial Code, we have not verified the fair presentation and consistency with the consolidated financial statements of the information given in that statement, which will be the subject of a report by an independent third party.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2018, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the thirteenth, the twenty-fifth and the nineteenth consecutive year of their uninterrupted engagement, respectively.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements giving a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these consolidated financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit.

They also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant for the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 5 March 2019	**Deloitte et Associés**	**Mazars**
	Laurence Dubois	Virginie Chauvin
	PricewaterhouseCoopers Audit	
The Statutory Auditors	Patrice Morot	

5 RISKS AND CAPITAL ADEQUACY – PILLAR 3

The purpose of Pillar 3 – market discipline, is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2) with a set of disclosures completing the usual financial disclosures.

This chapter presents the information relative to the BNP Paribas Group's risks and in this respect meets:

- the requirements of part 8 of Regulation (EU) No. 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms applicable to BNP Paribas on a consolidated basis (see article 13);
- the accounting standards requirements relating to the nature and the extent of the risks. Some information required by accounting standards IFRS 7, IFRS 4 and IAS 1 is included in this chapter and covered by the opinion of the Statutory Auditors on the consolidated financial statements. This information is identified by the mention "[Audited]" and must be read as being part of the notes to the consolidated financial statements;
- the "Guidelines on disclosure requirements under Part Eight of Regulation (EU) No. 575/2013" in addition to the "Guidelines on LCR disclosure" proposed by the European Banking Authority in order improve the comparability of the financial information published by financial institutions in respect of Pillar 3.

The Basel current measures (known as Basel 3), approved in November 2010, strengthen the ability of banks to withstand economic and financial shocks of all kinds by introducing a series of regulatory provisions. The content of this reform was transposed into European law in Directive 2013/36/EU (CRD 4) and Regulation (EU) No. 575/2013 of 26 June 2013 (CRR), which together constitute the corpus of texts known as "CRD IV".

All of these new requirements are phased-in over a five-year period from 1 January 2014 to 1 January 2019, transitioning from "phased-in" ratios to "fully loaded" ratios.

The regulatory framework of Basel 3 had the following main impacts:

- **strengthened solvency:**

  The Basel 3 rules harmonise the definition of capital and strengthen the ability of financial institutions to absorb losses.

  A detailed description of the composition of regulatory capital is given under *Regulatory capital* in section 5.2. The table in Appendix 2 is presented in accordance with Council Implementing Regulation (EU) No. 1423/2013 of 20 December 2013.

  Rules on calculating risk-weighted assets were also revised to strengthen related capital requirements.

  Strengthened solvency is implemented through the Single Supervisory Mechanism (SSM) overseen by the ECB as of 1 November 2014 and application of the European Banking Authority (EBA) Supervisory Review and Evaluation Process (SREP) guidelines.

  The BNP Paribas Group, identified as a "financial conglomerate", is subject to additional supervision. As a financial conglomerate, the Group's own funds cover the capital requirements for banking activities as well as insurance activities (see *Capital adequacy and capital planning* in section 5.2).
- **introduction of a leverage ratio:**

  It is planned to introduce a leverage ratio primarily to act as a supplementary measure to the risk-based capital requirements (backstop principle). Banks have been required to publish their leverage ratios since 1 January 2015.

  The Group's leverage ratio as at 31 December 2018 is presented in section 5.2 *Capital adequacy and capital planning*.
- **liquidity management:**

  The implementation of CRD IV on liquidity with the introduction of a short-term liquidity ratio (Liquidity Coverage Ratio – LCR) and a long term liquidity ratio (Net Stable Funding Ratio – NSFR) is presented in section 5.8 *Liquidity risk*.

  The minimum liquidity coverage ratio has been set at 100% of total net cash outflows during the 30-day stress period.
- **introduction of the new bank resolution scheme:**

  The new bank resolution scheme applies as of 1 January 2016, together with the definition of the TLAC (Total Loss Absorbing Capacity) ratio applicable to global systemically important banks (G-SIBs), in accordance with the recommendations of the Financial Stability Board approved during the G20 Antalya summit in November 2015. These requirements have been in force since 1 January 2019, and shall be stricter from 1 January 2022 (see *Capital adequacy and capital planning* in section 5.2).

Furthermore, two recent proposals can be noted:

- on 23 November 2016, the European Commission proposed a text as an amendment to Regulation (EU) No. 575/2013 of 26 June 2013 (CRR), Directive 2013/36/EU (CRD 4), Regulation (EU) No. 806/2014 (Single Resolution Mechanism Regulation), and Directive 2014/59/EU (Bank Recovery and Resolution Directive). These proposals concern in particular the level of the leverage ratio, the methods for calculating the net stable funding ratio (NSFR) and the TLAC requirements for G-SIBs. At the end of 2018 an agreement was reached between the European Commission, the European Council and the European Parliament (Trilogue procedure), as a prerequisite to voting and publication in the OJEU (Official Journal of the European Union), expected in the first half of 2019;
- on 7 December 2017, the Group of Governors and Heads of Supervision (GHOS) approved the reforms finalising the Basel 3 regulatory framework. They consist of a revision of the framework for credit risk, credit valuation adjustment (CVA) risk, and operational risk, the procedures for calculating the leverage ratio and its requirement level for G-SIBs, and the introduction of a floor for the calculation of risk-weighted assets when an internal method is used.

  The Basel Committee plans an application as of 1 January 2022. To be applicable, these reforms must be transposed into European law.

In chapter 5 the figures presented may not seem to add up in certain columns or lines due to their rounding off.

5.1 Annual risk survey

Chapter 5 presents information related to the Group's risks in 2018 and 2017. Given the entry into force of IFRS 9 and the supervisory authority's new directive to deduct irrevocable payment commitments from regulatory capital at 1 January 2018, comparative data for 2017 were restated to account for the impacts of these two regulatory changes and are shown as at 1 January 2018.

KEY FIGURES

REGULATORY RATIOS

Since 1 January 2018, the Group no longer applies transitional arrangements for calculating risk-weighted assets. However, in accordance with Regulation (EU) No. 2016/445 of 14 March 2016, regulatory capital is still subject to transitional arrangements (see *Regulatory capital* in section 5.2 *Capital management and capital adequacy*).

TABLE 1: CAPITAL RATIOS

Phased-in ratios

In millions of euros			Phased-in
	31 December 2018	1 January 2018	31 December 2017
COMMON EQUITY TIER 1 (CET1) CAPITAL	**76,230**	**74,467**	**76,135**
TIER 1 CAPITAL	**84,916**	**82,748**	**84,417**
TOTAL CAPITAL	**97,194**	**93,305**	**94,658**
RISK-WEIGHTED ASSETS	**647,001**	**634,699**	**640,644**
RATIOS			
Common Equity Tier 1 (CET1) capital	11.8%	11.7%	11.9%
Tier 1 capital	13.1%	13.0%	13.2%
Total capital	15.0%	14.7%	14.8%

Fully loaded ratios(*)

In millions of euros			Fully loaded(*)
	31 December 2018	1 January 2018	31 December 2017
COMMON EQUITY TIER 1 (CET1) CAPITAL	**76,131**	**73,857**	**75,741**
TIER 1 CAPITAL	**84,773**	**81,882**	**83,766**
TOTAL CAPITAL	**97,096**	**92,470**	**94,039**
RISK-WEIGHTED ASSETS	**647,001**	**634,699**	**642,070**
RATIOS			
Common Equity Tier 1 (CET1) capital	11.8%	11.6%	11.8%
Tier 1 capital	13.1%	12.9%	13.0%
Total capital	15.0%	14.6%	14.6%

(*) *In accordance with grandfathered Additional Tier 1 and Tier 2 eligibility rules applicable as of 2019.*

The Group's balance sheet is very solid. The impacts of the first time application of the new IFRS 9 accounting standard were fully taken into account as of 1 January 2018 with a decrease of -10 bp on the fully loaded CET1 ratio. This ratio also recorded as at 1 January 2018 the impact of -10 bp related to the supervisor's new general requirement to deduct irrevocable payment commitments from the prudential capital and thus stood at 11.6% *pro forma* as at 1 January 2018.

The fully loaded CET1 ratio rose back to 11.8% as at 31 December 2018, or an increase of 20 bp compared to 1 January 2018 which breaks down between:

- the net income for the year (excluding capital gain on the sale of 43.6% of First Hawaiian Bank) after taking into account dividend payment (+50 bp);
- the increase in risk-weighted assets, in particular in Domestic Markets and Personal Finance, excluding foreign exchange effect and operational risk (-20 bp);
- the risk-weighted assets related to operational risk brought to the standard method level (-10 bp);
- the other effects which have a negligible impact on the ratio overall (including the effects of the acquisitions and sales of the year).

The Group forecasts a CET1 ratio of at least 12% and a total capital ratio of at least 15% in 2020, at constant regulatory framework.

TABLE 2: LEVERAGE RATIO

	31 December 2018	1 January 2018	31 December 2017
LEVERAGE RATIO(*)	**4.5%**	**4.5%**	**4.6%**

(*) *See detail in Capital adequacy and capital planning in section 5.2.*

TABLE 3: LIQUIDITY COVERAGE RATIO (LCR)

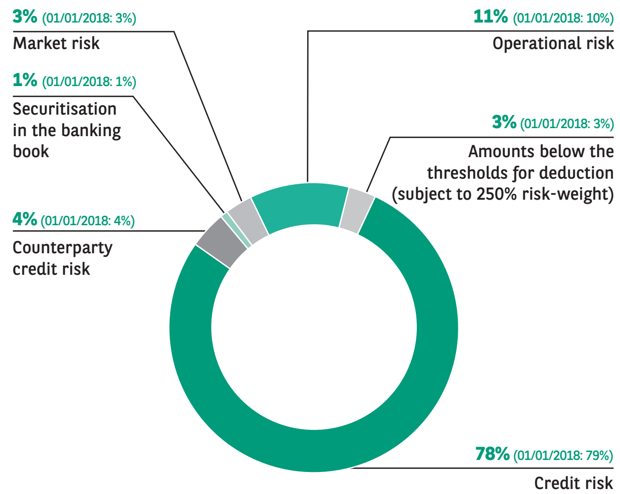
	31 December 2018	1 January 2018	31 December 2017
LIQUIDITY COVERAGE RATIO (LCR AT YEAR-END)(*)	**132%**	**121%**	**121%**

(*) *See detail in Liquidity risk management and supervision in section 5.8.*

The evolution of these ratios illustrates the Group's ability to generate capital regularly and manage its balance sheet in a disciplined manner within the regulatory framework.

RISK-WEIGHTED ASSETS BY RISK TYPE AND BY BUSINESS LINE

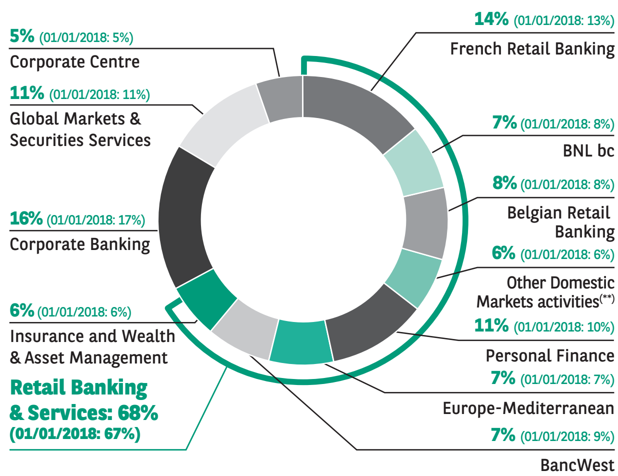
FIGURE 1: RISK-WEIGHTED ASSETS BY RISK TYPE(*)



(*) *Breakdown at 31 December 2018.*

Most of the Group's exposures are subject to credit risk. Market risk is limited to 3% of the Group's risk-weighted assets as of 31 December 2018.

FIGURE 2: RISK-WEIGHTED ASSETS BY BUSINESS LINE(*)



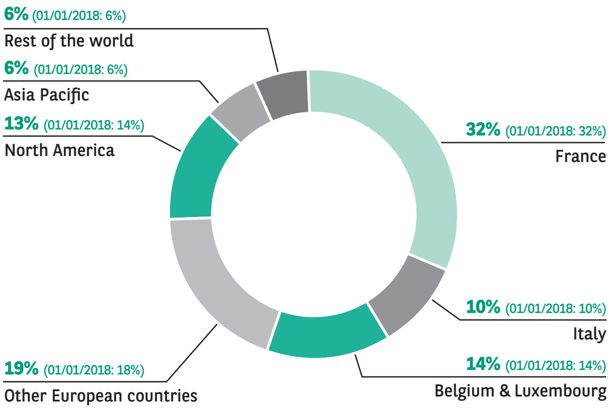
(*) *Breakdown at 31 December 2018.*

(**) *Including Luxembourg.*

As at 31 December 2018, the Group's risks are well spread and no single business makes up more than 16% of its risk-weighted assets. Retail Banking & Services account for 68% of risk-weighted assets.

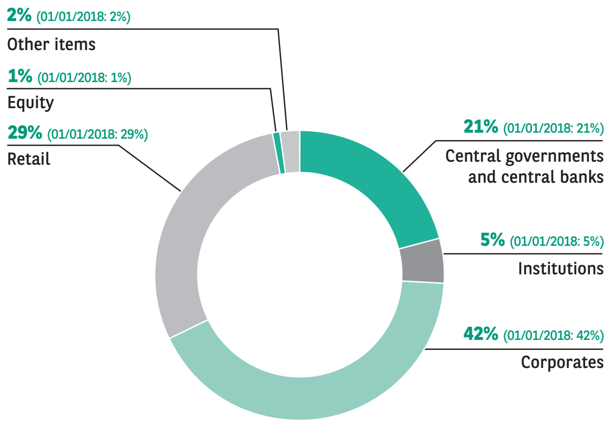
OTHER KEY FIGURES

FIGURE 3: CREDIT RISK EXPOSURE BY GEOGRAPHIC REGION(*)



(*) *Breakdown at 31 December 2018.*

FIGURE 4: CREDIT RISK EXPOSURE BY ASSET CLASS(*)



(*) *Breakdown at 31 December 2018.*

As at 31 December 2018, more than 88% of the Group's credit risk exposure was concentrated in developed countries (See the section *Credit risk diversification* in section 5.4 *Credit risk* for more details about the diversification of the Group's exposures).

Credit exposure to sovereigns, financial institutions, corporates and specialised financing of Investment Grade counterparties represented 79% of IRBA credit risk exposure as of 31 December 2018, stable compared to 1 January 2018.

TABLE 4: DOUBTFUL LOANS ON GROSS OUTSTANDINGS RATIO

	31 December 2018 *IFRS 9*	1 January 2018 *IFRS 9*
DOUBTFUL LOANS(*)/LOANS(**)	**2.6%**	**3.0%**

(*) *Impaired loans (stage 3) to customers and credit institutions, not netted of guarantees, including on-balance sheet and off-balance sheet and debt securities measured at amortised costs or at fair value through shareholders' equity (excluding insurance).*

(**) *Gross outstanding loans to customers and credit institutions, on-balance sheet and off-balance sheet and including debt securities measured at amortised costs or at fair value through shareholders' equity (excluding insurance).*

TABLE 5: STAGE 3 COVERAGE RATIO

In billions of euros	31 December 2018 *IFRS 9*	1 January 2018 *IFRS 9*
Stage 3 provisions	19.9	22.9
Doubtful loans(*)	26.2	28.6
STAGE 3 COVERAGE RATIO	**76.2%**	**80.2%**

(*) *Impaired loans (stage 3) to customers and credit institutions, on-balance sheet and off-balance sheet, netted of guarantees received, including debt securities measured at amortised costs and at fair value through shareholders' equity (excluding insurance).*

TABLE 6: COST OF RISK ON OUTSTANDINGS

in annualised basis points	31 December 2018	31 December 2017
COST OF RISK/CUSTOMER LOANS	**35**	**39**

➤ TABLE 7: IMMEDIATELY AVAILABLE LIQUIDITY RESERVE

In billions of euros	31 December 2018	31 December 2017
IMMEDIATELY AVAILABLE LIQUIDITY RESERVE (COUNTERBALANCING CAPACITY)(*)	308	285

(*) *Liquid market assets or eligible to central banks taking into account prudential standards, notably US standards, minus intra-day payment systems needs.*

TOP AND EMERGING RISKS

The identification and monitoring of top and emerging risks are central to BNP Paribas' approach to risk management.

These risks are identified, analysed and managed through different work and analyses carried out by the RISK Function, the divisions and the businesses, and through several committees which give rise to actions and decisions:

- a close follow-up of macroeconomic and financial conditions with the objective of organising them into a hierarchy with regard to the consequences for BNP Paribas portfolio, and designing adverse scenarios. This close monitoring is delivered quarterly to the General Management as well as to the Internal Control, Risk Management and Compliance Committee (CCIRC) through a dashboard presented by RISK;
- a close monitoring of the risk profile in accordance with the directives and thresholds approved by the Board of directors;
- cross-functional policies on concentration or corporate social responsibility among others;
- market and liquidity risk decisions made by Group ALM Committee (or ALCo, see section *Governance* of section 5.3 *Risk management*) and the Capital Markets Risk Committee (CMRC);
- key decisions made by committees with respect to specific transactions at the highest level;
- proposals for new activities or new products;
- portfolio/business reviews by Risk Policy Committees, on topics selected by the Group's Executive Management through the Risk Forum for the upcoming year;
- proactive and forward-looking discussions on emerging risks and their impacts on the Bank's risk profile in the Risk Anticipation Committee;
- an analysis and a monitoring of changes to the regulatory framework and their consequences on the Bank's capital and liquidity management as well as on its activities.

TOP RISKS

A top risk is defined as having:

- the potential to have a material impact, across a business area or geographical area, on the financial results, reputation or sustainability of the Group;
- the potential of occurring in the near future.

The top risks to which the Group is exposed are described below.

Macroeconomic environment

Macroeconomic and market conditions affect the Bank's results. The nature of the Bank's business makes it particularly sensitive to macroeconomic and market conditions in Europe.

In 2018, global growth remained healthy at around 3.7% (according to the IMF), reflecting a stabilised growth rate in advanced economies (+2.4% after +2.3% in 2017) and in emerging economies (+4.6% after +4.7% in 2017). Since the economy was at the peak of its cycle in large developed countries, central banks continued to tighten accommodating monetary policy or planned to taper it. With inflation levels still moderate, however, central banks were able to manage this transition gradually, thereby limiting the risks of a marked downturn in economic activity. Thus, the IMF expects the global growth rate experienced over the last two years to continue in 2019 (+3.5%) despite the slight slowdown expected in advanced economies.

In this context, the following risk categories can be identified:

Risks of financial instability due to the conduct of monetary policies

Two risks should be emphasised: a sharp increase in interest rates and the current very accommodating monetary policy being maintained for too long.

On the one hand, the continued tightening of monetary policy in the United States (started in 2015) and the less-accommodating monetary policy in the euro zone (reduction in assets purchases started in January 2018, with an end in December 2018) involve risks of financial turbulence and economic slowdown more pronounced than expected. The risk of a not adequately controlled rise in long-term interest rates may in particular be emphasised, under the scenario of an unexpected increase in inflation or an unanticipated tightening of monetary policies. If this risk materialises, it could have negative consequences on the asset markets, particularly those for which risk premiums are extremely low compared to their historic average, following a decade of accommodating monetary policies (credit to non-investment grade corporates or countries, certain sectors of the equity and bond markets, etc.) as well as on certain interest rate-sensitive sectors.

On the other hand, despite the upturn since mid-2016, interest rates remain low, which may encourage excessive risk-taking among some financial market participants: lengthening maturities of financings and assets held, less stringent credit policy, and an increase in leveraged financings. Some of these participants (insurance companies, pension funds, asset managers, etc.) have an increasingly systemic dimension and in the event of market turbulence (linked for example to a sharp rise in interest rates and/or a sharp price correction) they could be brought to unwind large positions in a relatively weak market liquidity.

Systemic risks related to increased debt

Macro-economically, the impact of an interest rate increase could be significant for countries with high public and/or private debt-to-GDP. This is particularly the case for certain European countries (in particular Greece, Italy, and Portugal), which are posting public debt-to-GDP ratios often above 100% but also for emerging countries.

Between 2008 and 2018, these latter recorded a marked increase in their debt, including foreign currency debt owed to foreign creditors. The private sector was the main source of the increase in this debt, but also the public sector to a lesser extent, particularly in Africa. These countries are particularly vulnerable to the prospect of a tightening in monetary policies in the advanced economies. Capital outflows could weigh on exchange rates, increase the costs of servicing that debt, import inflation, and cause the emerging countries' central banks to tighten their credit conditions. This would bring about a reduction in forecast economic growth, possible downgrades of sovereign ratings, and an increase in risks for the banks. While the exposure of the BNP Paribas Group to emerging countries is limited, the vulnerability of these economies may generate disruptions in the global financial system that could affect the Group and potentially alter its results.

It should be noted that debt-related risk could materialise, not only in the event of a sharp rise in interest rates, but also with any negative growth shocks.

Laws and regulations applicable to financial institutions

Recent and future changes in the laws and regulations applicable to financial institutions may have a significant impact on the Bank. Measures that were recently adopted or which are (or whose application measures are) still in draft format, that have or are likely to have an impact on the Bank notably include:

- regulations governing capital: CRD 4/CRR, the international standard for Total Loss Absorbing Capacity (TLAC) and the Bank's designation as a financial institution that is of systemic importance by the Financial Stability Board;
- the structural reforms comprising the French banking law of 26 July 2013 requiring that banks create subsidiaries for or segregate "speculative" proprietary operations from their traditional retail banking activities, the "Volcker rule" in the US, which restricts proprietary transactions, sponsorship and investment in private equity funds and hedge funds by US and foreign banks;
- the European Single Supervisory Mechanism and the ordinance of 6 November 2014;
- the Directive of 16 April 2014 related to deposit guarantee systems and its delegation and implementing Decrees, the Directive of 15 May 2014 establishing a Bank Recovery and Resolution framework, the Single Resolution Mechanism establishing the Single Resolution Council and the Single Resolution Fund;
- the Final Rule by the US Federal Reserve imposing tighter prudential rules on the US transactions of large foreign banks, notably the obligation to create a separate intermediary holding company in the US (capitalised and subject to regulation) to house their US subsidiaries;
- the new rules for the regulation of over-the-counter derivative activities pursuant to Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, notably margin requirements for non-cleared derivative products and the security derivatives traded by swap dealers, major swap participants, security-based swap dealers and major security-based swap participants, and the rules of the US Securities and Exchange Commission which require the registration of banks and major swap participants active on derivatives markets as well as transparency and reporting on derivative transactions;
- the new MiFID and MiFIR, and European regulations governing the clearing of certain over-the-counter derivative products by centralised counterparties and the disclosure of securities financing transactions to centralised bodies;
- The General Data Protection Regulation (GDPR) came into force on 25 May 2018. This regulation aims to move the European data confidentiality environment forward and improve personal data protection within the European Union). Businesses run the risk of severe penalties if they do not comply with the standards set by the GDPR. This regulation applies to all banks providing services to European citizens;

- the finalisation of Basel 3 published by the Basel committee in December 2017, introducing a revision to the measurement of credit risk, operational risk and CVA risk for the calculation of risk-weighted assets. These measures are expected to come into effect in January 2022, after transposition into EU law, and will be subject to an output floor (based on standardised approaches), which will be gradually applied as of 2022 and reach its final level in 2027.

For a more detailed description, see the risk factor "*Laws and regulations adopted in recent years, particularly in response to the global financial crisis, as well as new legislative proposals, may materially impact the Bank and the financial and economic environment in which it operates*".

Moreover, in this tougher regulatory context, the risk of non-compliance with existing laws and regulations, in particular those relating to the protection of the interests of customers and personal data, is a significant risk for the banking industry, potentially resulting in significant losses and fines[1]. In addition to its compliance system, which specifically covers this type of risk, the Group places the interest of its customers, and more broadly that of its stakeholders, at the heart of its values. Thus, the code of conduct adopted by the Group in 2016 sets out detailed values and rules of conduct in this area.

Cyber security and technology risk

BNP Paribas' ability to do business is intrinsically tied to the fluidity of electronic transactions as well as the protection and security of information and technology assets.

The technological change is accelerating with the digital transformation and the resulting increase in the number of communications circuits, proliferation in data sources, growing process automation, and greater use of electronic banking transactions.

The progress and acceleration of technological change are giving cybercriminals new options for altering, stealing, and disclosing data. The number of attacks is increasing, with a greater reach and sophistication in all sectors, including financial services.

The outsourcing of a growing number of processes also exposes the Group to structural cyber security and technology risks leading to the appearance of potential attack vectors that cybercriminals can exploit.

Accordingly, the Group has a second line of defence within the RISK Function dedicated to managing technological and cyber security risks (see the paragraph *Cyber security and technology* in section 5.9 *Operational Risk*). Thus, operational standards are regularly adapted to support the Bank's digital evolution and innovation while managing existing and emerging threats (such as cyber-crime, espionage, etc.).

EMERGING RISKS

An emerging risk is defined as a new or evolving risk which potential impact could be material in the future but is currently not fully known or is difficult to quantify.

In 2018, the Group identified emerging risks related to technological innovations, the evolving regulatory environments, the reduction of international trade, as well as certain environmental and demographic risks.

Technological innovations

Technological developments related to the growing use of data in all production, marketing, and distribution processes, and to data sharing among economic players (producers, suppliers, and customers) will impact the economic models of our clients and counterparties in a lasting way. These impacts, which are sometimes hard to assess in a context where new standards, economic balances, and regulatory entities are in the process of evolving and adapting, are being analysed internally by industry experts focused on the economic sectors most exposed to this evolution.

Furthermore, the Group's competitive environment is undergoing profound change, with the emergence of new Fintech players, even though still relatively modest in size, and the emergence of technological innovations like blockchains, which disrupt the traditional value chains of Group's businesses, and place the quality of the customer experience, and the use of new technologies to reduce the cost of low added-value operations, as their key competitive success factors. Maintenance of the Group's information systems must be done in this context of evolving value chains. The Group is deploying a proactive strategy in this area to adapt its activities to these major technological developments and promote some industrial cooperation with Fintech players.

Evolving regulatory environments

Beyond the regulatory measures recently adopted or pending adoption, and already cited as Top Risks, the trend toward growing complexity and regional differences in the bank regulatory environment and related supervision is creating relative uncertainty over future developments, compliance costs, and proper performance risk concerning the various measures. The Group has established an active monitoring system for its regulatory environment, enabling it to minimise these risks.

Risks of reduction of international trade from protectionist measures

Various protectionist measures were taken in 2018. These measures are threatening to raise prices and slow down global economic activity, the positive effects sought in some sectors being more than offset by the negative effects suffered by the rest of the economy. If, at this point, the measures adopted do not seem likely to cause a major economic crisis, harsher measures and their potential consequences on financial markets (equities, currencies) and on economic players, could significantly worsen the outlook in the coming months. In the longer term, the increase in protectionist measures could disrupt international value chains and direct investment.

(1) Risk factors: "The Bank may incur substantial fines and administrative and other criminal penalties for non-compliance with applicable laws and regulations and may also incur losses in related (or unrelated) litigation with private parties".

Climate-related issues

Climate change is a financial risk for the Group. Climate change-related risks may affect the Group, either directly on its own operations, or indirectly via its financing and investment activities. These risks mainly concern the physical risks related to the consequences of climate change and the "carbon" risks resulting from the transition to a low-carbon economy.

Demographic risk

The ageing population is a major underlying trend in many countries. In the years and decades to come, it will significantly impact economic growth (this is already visible), as well as health care and retirement budgets, or savings and consumption behaviours.

AREAS OF SPECIAL INTEREST IN 2018

United Kingdom

On 23 June 2016, the United Kingdom held a referendum which resulted in a majority vote to leave the European Union ("Brexit") with uncertain economic consequences.

The BNP Paribas Group operates in the United Kingdom through several branches and subsidiaries (see section 8.6 *Locations by country* in chapter 8 *General Information*). Its business, which it carries out mainly with corporations through its BNP Paribas SA branch in the United Kingdom, is of limited size for the scale of the Group and does not include a retail banking network in that country. At 31 December 2018, BNP Paribas generated 6.1% of its pre-tax operating income in the United Kingdom (see section 8.6 *Profit and loss account items and headcount by country* in chapter 8 *General Information*).

With respect to exposure to counterparties whose main business is in the United Kingdom, commercial commitments at 31 December 2018 represent 4.7% of the Group's total gross commitments, on- and off-balance sheet (see Table 26 *Credit risk exposure by geographical region*). Similarly, exposure to British sovereign risk is contained at 5.5% of the banking book's sovereign exposure (see Appendix 1 *Sovereign exposures*). The Bank's structural foreign exchange and interest rates position in pounds sterling is very moderate: outstanding loan amounts are low and funding in pounds sterling is largely matched.

The Group has prepared for Brexit with a view to ensuring the continuity of its activities. Its diversified business model in Europe in terms of both business lines and countries provides it with a high degree of flexibility to adapt to this new environment.

In practice, the Group is working with the British and European regulators in order to ensure the continuity of its operational systems and has prepared various adaptation measures to enable clients, whether based in the United Kingdom or in Europe, to continue to benefit from the Group's broad range of banking products and services.

Turkey

In Turkey, the steady growth of GDP in the first half of 2018 suffered a significant slowdown in the second half, with the drop in the Turkish lira one of its most visible manifestations. Highly volatile foreign exchange and interest rates reflected hesitation among investors.

From the third quarter, however, the institutions – the Ministry of Finance and the Central Bank – were able to reassure the financial markets with the announcement of necessary measures, resulting in an upturn in the Turkish lira and a drop in risk premiums.

Over the next few months, however, economic growth is likely to remain weaker in comparison with past performances. Despite a narrowing of the deficit and stabilisation of inflation, certain risks could continue to weigh on the Turkish economy. BNP Paribas's presence in Turkey is primarily through its TEB subsidiary (ranking No. 10 in Retail Banking in Turkey with a market share of approximately 3%). At 31 December 2018, the Group generated 3.1% of its pre-tax operating income in this country (see section 8.6 *Locations, Profit and loss account items and headcount by country* in chapter 8 *General information*). TEB had a solvency ratio of 16.7% as at 31 December 2018, in excess of the regulatory requirements.

In 2018, TEB Group significantly strengthened its balance sheet liquidity with a Liquidity Coverage Ratio (LCR) of 294% at 31 December 2018, up from 171% on 1 January 2018. With outstanding loans of TRY 65.7 billion and deposits of TRY 64.2 billion, TEB Group's financing structure is balanced.

With respect to exposure to counterparties whose main business is in Turkey, commercial commitments as at 31 December 2018 represent 1.6% of the Group's total gross commitments, on- and off-balance sheet (see Table 26 *Credit risk exposure by geographical region*). Exposure to Turkish sovereign risk is contained at 1.3% of the banking book's sovereign exposure and is essentially borne by TEB Group.

As a reminder, the slowdown in growth for TEB in Turkey resulted in a write-down of the full amount of goodwill on TEB in the amount of EUR 172 million in 2017 (see note to the financial statements 5.o).

Others

Geopolitical tensions abated in Asia (Korean peninsula) but remain high in certain areas, particularly in the Middle East, with the potential involvement of Western powers to varying degrees, and in Latin America. Even if the possible consequences of such risks are hard to assess, the regional economies in question, and the global economy, could be impacted through different channels (confidence, trade ties, and commodity prices).

The risks associated with changes in the macroeconomic and market environment are described in section 5.1 *Risk factors*[1].

The analyses relating to the sectors (particularly shipping finance and leveraged finance) are set out in the *Industry diversification* paragraph in section 5.4.

The risk principles are presented in the Risk Appetite Statement approved by the Board of directors (see *Risk appetite* in section 5.3).

(1) *In particular the risk factor "Given the global scope of its activities, the Bank may be vulnerable to certain political, macroeconomic or financial risks in the countries and regions where it operates".*

RISK FACTORS

The principal risks to which the Group is exposed are presented below. They may be measured through risk-weighted assets or other indicia to the extent risk-weighted assets are not relevant.

Credit risk: Credit risk is defined as the probability of a borrower or counterparty defaulting on its obligations to the Bank. Probability of default along with the recovery rate of the loan or debt in the event of default are essential elements in assessing credit quality. The Bank's risk-weighted assets subject to this type of risk amounted to EUR 504 billion at 31 December 2018. In accordance with the EBA recommendations, this category of risk also includes risks on equity investments, as well as those related to insurance activities. See section 5.4.

Operational risk: Operational risk is the risk of loss resulting from failed or inadequate internal processes (particularly those involving personnel and information systems) or external events, whether deliberate, accidental or natural (floods, fires, earthquakes, terrorist attacks, etc.). Operational risks include fraud, human resources risks, legal and reputational risks, non-compliance risks, tax risks, information systems risks, risk of providing inadequate financial services (conduct risk), risk of failure of operational processes including credit processes, or from the use of a model (model risk), as well as potential financial consequences related to reputation risk management. The Bank's risk-weighted assets subject to this type of risk amounted to EUR 73 billion at 31 December 2018. See section 5.9.

Counterparty risk: Counterparty risk arises from the Bank's credit risk in the specific context of market transactions, investments, and/or settlements. The amount of this risk varies over time depending on fluctuations in market parameters affecting the potential future value of the transactions concerned. The Bank's risk-weighted assets subject to this type of risk amounted to EUR 27 billion at 31 December 2018. See section 5.6.

Market risk: Market risk is the risk of loss of value caused by an unfavorable trend in prices or market parameters. Market parameters include, but are not limited to, exchange rates, prices of securities and commodities (whether the price is directly quoted or obtained by reference to a comparable asset), the price of derivatives on an established market and all benchmarks that can be derived from market quotations such as interest rates, credit spreads, volatility or implicit correlations or other similar parameters. The Bank's risk-weighted assets subject to this type of risk amounted to EUR 20 billion at 31 December 2018. See section 5.7.

Securitization risk: Securitization is a transaction or arrangement by which the credit risk associated with a liability or set of liabilities is subdivided into tranches. Any commitment made under a securitization structure (including derivatives and liquidity lines) is considered to be a securitization. The bulk of these commitments are in the prudential banking portfolio. The Bank's risk-weighted assets subject to this type of risk amounted to EUR 7 billion at 31 December 2018. See section 5.5.

Risks related to deferred taxes and certain holdings in credit or financial institutions: amounts below the prudential capital deduction thresholds generate risk-weighted assets amounting to EUR 17 billion at 31 December 2018.

Liquidity risk: Liquidity risk is the risk that the Bank will not be able to honor its commitments or unwind or offset a position due to market conditions or specific factors within a specified period of time and at a reasonable cost. It reflects the risk of not being able to cope with net cash outflows, including collateral requirements, over short-term to long-term horizons. The Group's specific risk can be assessed through its short-term liquidity ratio (Liquidity Coverage Ratio – LCR), which analyzes the hedging of net cash outflows during a thirty-day stress period. See section 5.8.

More generally, the risks to which the Group is exposed may arise from a number of factors related, among others, to changes in its macroeconomic, competitive, market and regulatory environment or the implementation of its strategy, its business or its operations.

These risk factors are described in detail below.

RISKS RELATED TO THE MACROECONOMIC ENVIRONMENT

Adverse economic and financial conditions have in the past had and may in the future have an impact on the Bank and the markets in which it operates.

The Bank's business is sensitive to changes in the financial markets and more generally to economic conditions in France, Europe and the rest of the world. A deterioration in economic conditions in the markets where the Bank operates could have some or all of the following impacts:

- adverse economic conditions could affect the business and operations of the Bank's customers, reducing credit demand and trading volume and resulting in an increased rate of default on loans and receivables;
- a decline in market prices of bonds, shares and commodities could impact many of the businesses of the Bank, including in particular trading, Investment Banking and asset management revenues;
- macroeconomic policies adopted in response to actual or anticipated economic conditions could have unintended effects, and are likely to impact market parameters such as interest rates and foreign exchange rates, which in turn could affect the Bank's businesses that are most exposed to market risk;
- perceived favorable economic conditions generally or in specific business sectors could result in asset price bubbles, which could in turn exacerbate the impact of corrections when conditions become less favorable;

- a significant economic disruption (such as the global financial crisis of 2008 or the European sovereign debt crisis of 2011) could have a severe impact on all of the Bank's activities, particularly if the disruption is characterized by an absence of market liquidity that makes it difficult to sell certain categories of assets at their estimated market value or at all;
- a significant deterioration of market and economic conditions resulting from, among other things, from adverse political and geopolitical events such as natural disasters, societal unrest, geopolitical tensions (in particular protectionist measures), acts of terrorism, cyber-attacks, military conflicts or threats thereof and related risks could affect the operating environment for financial institutions episodically or for extended periods.

European markets may be affected by a number of factors in 2019, including continuing uncertainty resulting from the decision of the United Kingdom to leave the European Union and uncertain political and economic conditions in certain large European countries. Markets in the United States may be affected by factors, such as trade policy or a tendency towards political stalemate, which has affected credit and currency markets globally. Asian markets could be impacted by factors such as slower than expected economic growth rates in certain countries in the region.

Share prices have recently experienced significant volatility, which may occur again. Credit markets and the value of fixed income assets could be adversely affected if interest rates were to rise as central banks continue to scale back the extraordinary support measures put in place in response to recent adverse economic conditions. The price of oil has been particularly volatile in recent months, and could be impacted by unpredictable geopolitical factors in regions such as the Middle East and Russia.

More generally, increased volatility of financial markets could adversely affect the Bank's trading and investment positions in the debt, currency, commodity and equity markets, as well as its positions in other investments. Severe market disruptions and extreme market volatility have occurred in recent years and may occur again in the future, which could result in significant losses for the Bank. Such losses may extend to a broad range of trading and hedging products, including swaps, forward and future contracts, options and structured products. The volatility of financial markets makes it difficult to predict trends and implement effective trading strategies.

It is difficult to predict when economic or market downturns will occur, and which markets will be most significantly impacted. If economic or market conditions in France or elsewhere in Europe, or global markets more generally, were to deteriorate or become more volatile, the Bank's operations could be disrupted, and its business, results of operations and financial condition could be adversely affected.

Given the global scope of its activities, the Bank may be vulnerable to certain political, macroeconomic or financial risks in the countries and regions where it operates.

The Bank is subject to country risk, meaning the risk that economic, financial, political or social conditions in a given foreign country in which it operates could affect its business and results. The Bank monitors country risk and takes it into account in the fair value adjustments and cost of risk recorded in its financial statements. However, a significant change in political or macroeconomic environments may require it to record additional charges or to incur losses beyond the amounts previously written down in its financial statements. In addition, factors specific to a country or region in which the Bank operates could make it difficult for it to carry out its business and lead to losses or impairment of assets.

As of 31 December 2018, 32% of the Bank's commercial lending portfolio was comprised of loans to borrowers in France, 14% by loans to borrowers in Belgium and Luxembourg, 10% by loans to borrowers in Italy, 19% by loans to borrowers in other European countries, 13% by loans to borrowers in North America and 6% by loans to borrowers in Asia. Adverse conditions that particularly affect these countries and regions would have a particularly significant impact on the Bank. In addition, the Group has significant exposures in countries outside the OECD, which are subject to risks that include political instability, unpredictable regulation and taxation, expropriation and other risks that are less present in more developed economies.

The Bank's access to and cost of funding could be adversely affected by a resurgence of financial crises, worsening economic conditions, rating downgrades, increases in credit spreads or other factors.

The financial crisis, the euro zone sovereign debt crisis as well as the general macroeconomic environment have at times adversely affected the availability and cost of funding for European banks in recent years. This was due to several factors, including a sharp increase in the perception of bank credit risk due to exposure to sovereign debt in particular, credit rating downgrades of sovereigns and of banks, and debt market speculation. Many European banks, including the Bank, at various points experienced restricted access to wholesale debt markets and to the interbank market, as well as a general increase in their cost of funding. Accordingly, reliance on direct borrowing from the "ECB" at times increased substantially. If such adverse credit market conditions were to reappear in the event of prolonged stagnation of growth, deflation, resurgence of the financial crisis, the sovereign debt crisis or new forms of financial crises, factors relating to the financial industry in general or to the Bank in particular, the effect on the liquidity of the European financial sector in general and the Bank in particular could be materially adverse and have a negative impact on the Bank's results of operations and financial condition.

The prolonged low interest rate environment carries inherent systemic risks, and an exit from such environment also carries risks.

Since the 2008-2009 financial crisis, global markets have been characterized by an extended period of low interest rates. If the low interest rate environment continues, the Bank's profitability may be affected. During such periods, interest rate spreads tend to tighten, and the Bank may be unable to lower interest rates on deposits sufficiently to offset reduced income from lending at lower interest rates. In addition, the Bank has been facing and may continue to face an increase in early repayment and refinancing of mortgages and other fixed-rate consumer and corporate loans as clients take advantage of lower borrowing costs. This, along with the issuance of new loans at the low prevailing market interest rates, has resulted and may continue to result in a decrease in the average interest rate of the Bank's portfolio of loans thereby causing a decline in the Bank's net interest income from its lending activities. Moreover, an environment of persistently low interest rates can also have the effect of flattening the yield curve in the market more generally, which could reduce the premium generated by the Bank from its funding activities. A flattening yield curve can also influence financial institutions to engage in riskier activities in an effort to earn the desired level of returns, which can increase overall market risk and volatility. Low interest rates may also negatively affect the profitability of the Bank's insurance activities, which may not be able to generate sufficient returns to be competitive with other investment products. Low interest rates may also adversely affect commissions charged by the Bank's asset management subsidiaries on money market and other fixed income products. A reduction in credit spreads and decline in Retail Banking income resulting from lower portfolio interest rates may adversely affect the profitability of the Bank's Retail Banking operations.

On the other hand, the end of a period of prolonged low interest rates, in particular due to tightening monetary policy, also carries risks. In this respect, the US Federal Reserve is currently tightening its monetary policy and the ECB announced the end of its quantitative easing policy in December 2018, which could result in an increase in interest rates in the future. If market interest rates were to rise, a portfolio featuring significant amounts of lower interest loans and fixed income assets would be expected to decline in value. If the Bank's hedging strategies are ineffective or provide only a partial hedge against such a change in value, the Bank could incur losses. Any sharper or more rapid than expected tightening could have a negative impact on the economic recovery. On the lending side, it could in particular cause stress in loan and bond portfolios, possibly leading to an increase in non-performing exposures and defaults. More generally, the ending of accommodative monetary policies (including liquidity infusions from central bank asset purchases) may lead to severe corrections in certain markets or asset classes (e.g., non-investment grade corporate and sovereign borrowers, certain sectors of equities and real estate) that particularly benefitted (including from very low risk premia as compared to historical averages) from the prolonged low interest rate and high liquidity environment, and such corrections could potentially be contagious to financial markets generally, including through substantially increased volatility.

RISKS RELATED TO THE MARKET ENVIRONMENT

Significant interest rate changes could adversely affect the Bank's revenues or profitability.

The amount of net interest income earned by the Bank during any given period significantly affects its overall revenues and profitability for that period. Interest rates are highly sensitive to many factors beyond the Bank's control, such as the rate of inflation, country-specific monetary policies and certain decisions concerning regulatory capital. Changes in market interest rates could affect the interest rates charged on interest-earning assets differently than the interest rates paid on interest-bearing liabilities. Any adverse change in the yield curve could cause a decline in net interest income from the Bank's lending activities. In addition, increases in the interest rates at which the Bank's short-term funding is available and maturity mismatches may adversely affect its profitability.

The soundness and conduct of other financial institutions and market participants could adversely affect the Bank.

The Bank's ability to engage in financing, investment and derivative transactions could be adversely affected by the soundness of other financial institutions or market participants. Financial institutions are interrelated as a result of trading, clearing, counterparty, funding or other relationships. As a result, defaults, or even rumors or questions about, one or more financial services institutions, or the financial services industry generally, may lead to market-wide liquidity problems and could lead to further losses or defaults. The Bank has exposure to many counterparties in the financial industry, directly and indirectly, including clearing houses, brokers and dealers, commercial banks, investment banks, mutual and alternative investment funds, and other institutional clients with which it regularly executes transactions. The Bank may also be exposed to risks related to the increasing involvement in the financial sector of players and the introduction of new types of transactions subject to little or no regulation (e.g., unregulated funds, trading venues or crowdfunding platforms). Credit and counterparty risks could be exacerbated if the collateral held by the Bank cannot be realized upon or is liquidated at prices not sufficient to recover the full amount of the loan or derivative exposure due to the Bank or in case of a failure of a significant financial market participant such as a central counterparty. It is worth noting in this respect that regulatory changes requiring mandatory clearing of standardized over-the-counter (OTC) derivatives through central counterparties have resulted in an increase of the exposure of financial market participants to such central counterparties.

In addition, fraud or misconduct by financial market participants can have a material adverse effect on financial institutions due in particular to the interrelated nature of the financial markets. An example is the fraud perpetrated by Bernard Madoff that came to light in 2008, as a result of which numerous financial institutions globally, including the Bank, announced losses or exposure to losses in substantial amounts. The Bank remains the subject of various claims in connection with the Madoff matter; see note 8.b *Contingent liabilities: legal proceedings and arbitration* to its consolidated financial statements as of and for the period ended 31 December 2018.

There can be no assurance that any losses resulting from the risks summarized above will not materially and adversely affect the Bank's results of operations.

The Bank may incur significant losses on its trading and investment activities due to market fluctuations and volatility.

The Bank maintains trading and investment positions in the debt, currency, commodity and equity markets, and in unlisted securities, real estate and other asset classes, including through derivative contracts. These positions could be adversely affected by extreme volatility in these markets, i.e., the degree to which prices fluctuate over a particular period in a particular market, regardless of market levels. Moreover, volatility trends that prove substantially different from the Bank's expectations may lead to losses relating to a broad range of other products that the Bank uses, including swaps, forward and future contracts, options and structured products.

To the extent that the Bank owns assets, or has net long positions, in any of those markets, a market downturn could result in losses from a decline in the value of its positions. Conversely, to the extent that the Bank has sold assets that it does not own, or has net short positions in any of those markets, a market upturn could, in spite of the existing limitation of risks and control systems, expose it to potentially substantial losses as it attempts to cover its net short positions by acquiring assets in a rising market. The Bank may from time to time hold a long position in one asset and a short position in another, in order to hedge transactions with clients and/or from which it expects to gain based on changes in the relative value of the two assets. If, however, the relative value of the two assets changes in a direction or manner that the Bank did not anticipate or against which it is not hedged, the Bank might realize a loss on those paired positions. Such losses, if significant, could adversely affect the Bank's results and financial condition.

The Group uses a "value at risk" (VaR) model to quantify its exposure to potential losses from market risks, and also performs stress tests with a view to quantifying its potential exposure in extreme scenarios. However, these techniques rely on statistical methodologies based on historical observations, which may turn out to be unreliable predictors of future market conditions. Accordingly, the Group's exposure to market risk in extreme scenarios could be greater than the exposures predicted by its quantification techniques.

The Bank may generate lower revenues from commission and fee-based businesses during market downturns.

Financial and economic conditions affect the number and size of transactions for which the Bank provides securities underwriting, financial advisory and other Investment Banking services. These revenues, which include fees from these services, are directly related to the number and size of the transactions in which it participates and can thus be significantly affected by economic or financial changes that are unfavorable to its Investment Banking business and clients. In addition, because the fees that the Bank charges for managing its clients' portfolios are in many cases based on the value or performance of those portfolios, a market downturn that reduces the value of its clients' portfolios or increases the amount of withdrawals would reduce the revenues the Bank receives from its asset management, equity derivatives and Private Banking businesses. Independently of market changes, below-market performance by the Bank's mutual funds may result in increased withdrawals and reduced inflows, which would reduce the revenues the Bank receives from its asset management business.

The Bank experienced some or all of these effects during the various significant market downturns of recent years and could experience them again in future market downturns, which may occur periodically and unexpectedly.

Protracted market declines can reduce liquidity in the markets, making it harder to sell assets and possibly leading to material losses.

In some of the Bank's businesses, particularly Global Markets and Asset/Liability Management, protracted market movements, particularly asset price declines, can reduce the level of activity in the market or reduce market liquidity. These developments can lead to material losses if the Bank cannot close out deteriorating positions in a timely way. This is particularly true for assets that are intrinsically illiquid. Assets that are not traded on stock exchanges or other public trading markets, such as certain derivative contracts between financial institutions, may have values that the Bank calculates using models rather than publicly-quoted prices. Monitoring the deterioration of prices of assets like these is difficult and could lead to significant losses that the Bank did not anticipate.

The Bank must ensure that its assets and liabilities properly match in order to avoid exposure to losses.

The Bank is exposed to the risk that the maturity, interest rate or currencies of its assets might not match those of its liabilities. The timing of payments on many of the Bank's assets is uncertain, and if the Bank receives lower revenues than expected at a given time, it might require additional funding from the market in order to meet its obligations on its liabilities. While the Bank imposes strict limits on the gaps between its assets and its liabilities as part of its risk management procedures, it cannot be certain that these limits will be fully effective to eliminate potential losses arising from asset and liability mismatches.

REGULATORY RISKS

Laws and regulations adopted in recent years, particularly in response to the global financial crisis, as well as new legislative proposals, may materially impact the Bank and the financial and economic environment in which it operates.

Laws and regulations have been enacted in the past few years or could be adopted, in particular in France, Europe and the United States, with a view to introducing a number of changes, some permanent, in the financial environment. The impact of the measures has changed substantially the environment in which the Bank and other financial institutions operate. The measures that have been or may be proposed and adopted include:

- more stringent capital and liquidity requirements (particularly for global systemically important banks such as the Bank), as well as changes to the risk-weighting methodologies and the methods of using internal models that could lead to increased capital requirements;
- restrictions on certain types of activities considered as speculative undertaken by commercial banks that are prohibited or need to be ring-fenced in subsidiaries (particularly proprietary trading) and are subject to prudential requirements and autonomous financing;

- restrictions or prohibitions on certain types of financial products or activities, enhanced recovery and resolution regimes, in particular the Bank Recovery and Resolution Directive of 15 May 2014 (the "BRRD"), which strengthens powers to prevent and resolve banking crises in order to ensure that losses are borne largely by the creditors and shareholders of the banks and in order to keep the costs incurred by taxpayers to a minimum;
- the establishment of the national resolution funds by the BRRD and the creation of the Single Resolution Board (the "SRB") by the European Parliament and Council of the European Union in a resolution dated 15 July 2014, which can initiate resolution proceedings for banking institutions such as the Bank, and the Single Resolution Fund (the "SRF"), whose financing is provided for by the Bank (up to its annual contribution) and can be significant;
- the establishment of national deposit guarantee schemes and a proposed European deposit guarantee scheme or deposit insurance which will gradually cover all or part of the guarantee schemes of participating countries;
- increased internal control and reporting requirements with respect to certain activities;
- more stringent governance and conduct of business rules and restrictions and increased taxes on employee compensation over specified levels;
- measures to improve the transparency, efficiency and integrity of financial markets and in particular the regulation of high frequency trading, more extensive market abuse regulations, increased regulation of certain types of financial products including mandatory reporting of derivative and securities financing transactions, requirements either to mandatorily clear, or otherwise mitigate risks in relation to, over-the-counter derivative transactions (including through posting of collateral in respect of non-centrally cleared derivatives);
- the taxation of financial transactions;
- enhanced privacy and cybersecurity requirements; and
- strengthening the powers of supervisory bodies, such as the French Prudential Supervision and Resolution Authority (the "ACPR") and the creation of new authorities, including the adoption of the Single Resolution Mechanism in October 2013, which placed the Bank under the direct supervision of the ECB as of November 2014.

It is impossible to predict what additional measures will be adopted and, given the complexity and continuing uncertainty of a certain number of these measures, to determine their impact on the Bank. The cumulative effect of these measures, whether already adopted or in the process of being adopted, has been and could continue to be a decrease in the Bank's ability to allocate its capital and capital resources to financing, limit its ability to diversify risks, reduce the availability of certain financing and liquidity resources, increase the cost of financing, increase the cost or reduce the demand for the products and services offered by the Bank, require the Bank to proceed with internal reorganizations, structural changes or reallocations, affect the ability of the Bank to carry on certain activities or to attract and/or retain and, more generally, affect its competitiveness and profitability, which could have an impact on its profitability, financial condition and operating results.

The Bank could become subject to a resolution proceeding.

The BRRD and the Ordinance of 20 August 2015 confer upon the ACPR or the SRB the power to commence resolution proceedings for a banking institution, such as the Bank, with a view to ensure the continuity of critical functions, to avoid the risks of contagion and to recapitalize or restore the viability of the institution.

These powers are to be implemented so that, subject to certain exceptions, losses are borne first by shareholders, then by holders of additional capital instruments qualifying as tier 1 and tier 2 (such as subordinated bonds), then by the holders of non preferred senior debt and finally by the holders of senior preferred debt, all in accordance with the order of their claims in normal insolvency proceedings.

Resolution authorities have broad powers to implement resolution measures with respect to institutions and groups subject to resolution proceedings, which may include (without limitation): the total or partial sale of the institution's business to a third party or a bridge institution, the separation of assets, the replacement or substitution of the institution as obligor in respect of debt instruments, the full or partial write-down of capital instruments, the dilution of capital instruments through the issuance of new equity, the full or partial write-down or conversion into equity of debt instruments, modifications to the terms of debt instruments (including altering the maturity and/or the amount of interest payable and/or imposing a temporary suspension on payments), discontinuing the listing and admission to trading of financial instruments, the dismissal of managers or the appointment of a special manager (*administrateur spécial*).

Certain powers, including the full or partial write-down of capital instruments, the dilution of capital instruments through the issuance of new equity, the full or partial write-down or conversion into equity of additional capital instruments qualifying as tier 1 and tier 2 (such as subordinated bonds), can also be exercised as a precautionary measure, outside of resolution proceedings and/or pursuant to the European Commission's State Aid framework if the institution requires exceptional public financial support.

The implementation of these tools and powers with respect to the Bank may result in significant structural changes to the Group (including as a result of asset or business sales or the creation of bridge institutions) and in a partial or total write-down, modification or variation of claims of shareholders and creditors. Such powers may also result, after any transfer of all or part of the Bank's business or separation of any of its assets, in the holders of securities (even in the absence of any such write-down or conversion) being left as the creditors of the Bank whose remaining business or assets are insufficient to support the claims of all or any of the creditors of the Bank.

The Bank is subject to extensive and evolving regulatory regimes in the jurisdictions in which it operates.

The Bank faces the risk of changes in legislation or regulation in all of the countries in which it operates, including, but not limited to, the following:

- monetary, liquidity, interest rate and other policies of central banks and regulatory authorities;
- changes in government or regulatory policy that may significantly influence investor decisions, in particular in the markets in which the Group operates;
- changes in regulatory requirements applicable to the financial industry, such as rules relating to applicable governance, remunerations, capital adequacy and liquidity frameworks, restrictions on activities considered as speculative and recovery and resolution frameworks;
- changes in securities regulations as well as in financial reporting, disclosure and market abuse regulations;
- changes in the regulation of certain types of transactions and investments, such as derivatives and securities financing transactions and money market funds;
- changes in the regulation of market infrastructures, such as trading venues, central counterparties, central securities depositories, and payment and settlement systems;
- changes in the regulation of payment services, crowdfunding and fintech;
- changes in the regulation of data privacy and cybersecurity;
- changes in tax legislation or the application thereof;
- changes in accounting norms;
- changes in rules and procedures relating to internal controls, risk management and compliance; and
- expropriation, nationalization, price controls, exchange controls, confiscation of assets and changes in legislation relating to foreign ownership.

These changes, the scope and implications of which are highly unpredictable, could substantially affect the Bank and have an adverse effect on its business, financial condition and results of operations. Some reforms not aimed specifically at financial institutions, such as measures relating to the funds industry or promoting technological innovation (such as open data projects), could facilitate the entry of new players in the financial services sector or otherwise affect the Bank's business model, competitiveness and profitability, which could in turn affect its financial condition and results of operations.

The Bank may incur substantial fines and other administrative and criminal penalties for non-compliance with applicable laws and regulations, and may also incur losses in related (or unrelated) litigation with private parties.

The Bank is exposed to regulatory compliance risk, i.e. the failure to comply fully with the laws, regulations, codes of conduct, professional norms or recommendations applicable to the financial services industry. This risk is exacerbated by the adoption by different countries of multiple and occasionally diverging and even conflicting legal or regulatory requirements. Besides damage to the Bank's reputation and private rights of action (including class actions), non-compliance could lead to material legal proceedings, fines and expenses (including fines and expenses in excess of recorded provisions), public reprimand, enforced suspension of operations or, in extreme cases, withdrawal by the authorities of operating licenses. This risk is further exacerbated by continuously increasing regulatory scrutiny of financial institutions as well as substantial increases in the quantum of applicable fines and penalties. Moreover, litigation by private parties against financial institutions has substantially increased in recent years. Accordingly, the Bank faces significant legal risk in its business, and the volume and amount of damages claimed in litigation, regulatory proceedings and other adversarial proceedings against financial services firms have substantially increased in recent years and may increase further.

In this respect, on 30 June 2014 the Bank entered into a series of agreements with, and was the subject of several orders issued by, US federal and New York state government agencies and regulatory authorities in settlement of investigations into violations of US laws and regulations regarding economic sanctions. The fines and penalties imposed on the Bank as part of this settlement included, among other things, the payment of monetary penalties amounting in the aggregate to $8.97 billion (€6.6 billion) and guilty pleas by BNP Paribas SA, the parent company of the BNP Paribas Group, to charges of having violated US federal criminal law and New York State criminal law.

Following this settlement, the Bank remains subject to increased scrutiny by regulatory authorities (including via the presence within the Bank of an independent consultant) who are monitoring its compliance with a remediation plan agreed with them.

The Bank is currently involved in various litigations and investigations as summarized in note 8.b *Contingent liabilities: legal proceedings and arbitration* to its consolidated financial statements as of and for the period ended 31 December 2018. It may become involved in further such matters at any point. No assurance can be given that an adverse outcome in one or more of such matters would not have a material adverse effect on the Bank's operating results for any particular period.

RISKS RELATED TO THE IMPLEMENTATION OF THE BANK'S STRATEGY

Risks related to the implementation of the Bank's strategic plans.

The Bank announced a strategic plan for the 2017-2020 period on 7 February 2017. This plan contemplates a number of initiatives, including the implementation of new customer pathways, the digital transformation of the Bank, continuing to improve operating efficiency and various business development initiatives. The Bank closely monitors these initiatives and provided an update on its 2020 targets on 6 February 2019.

The plan also includes a number of financial targets and objectives relating to net banking income, operating costs, net income, capital adequacy ratios and return on equity, among other things. These financial targets and objectives were established primarily for purposes of internal planning and allocation of resources, and are based on a number of assumptions with regard to business and economic conditions.

The Bank's actual results could vary significantly from these targets and objectives for a number of reasons, including the occurrence of one or more of the risk factors described elsewhere in this section.

Additionally, as part of the Bank's commitment to environmental responsibility within its CSR policy, it has announced a number of initiatives to support the energy transition towards a low-carbon economy, including a reduction in financing for energies with the most negative environmental impact. These measures (and any future ones along similar lines) may in certain cases adversely affect the Bank's results in the relevant sectors.

The Bank may experience difficulties integrating acquired companies and may be unable to realize the benefits expected from its acquisitions.

The Bank makes acquisitions on a regular basis. Integrating acquired businesses is a long and complex process. Successful integration and the realization of synergies require, among other things, proper coordination of business development and marketing efforts, retention of key members of management, policies for effective recruitment and training as well as the ability to adapt information and computer systems. Any difficulties encountered in combining operations could result in higher integration costs and lower savings or revenues than expected. There will accordingly be uncertainty as to the extent to which anticipated synergies will be achieved and the timing of their realization. Moreover, the integration of the Bank's existing operations with those of the acquired operations could interfere with the respective businesses and divert management's attention from other aspects of the Bank's business, which could have a negative impact on the business and results of the Bank. In some cases, moreover, disputes relating to acquisitions may have an adverse impact on the integration process or have other adverse consequences, including financial ones.

Although the Bank undertakes an in-depth analysis of the companies it plans to acquire, such analyses often cannot be complete or exhaustive. As a result, the Bank may increase its exposure to doubtful or troubled assets and incur greater risks as a result of its acquisitions, particularly in cases in which it was unable to conduct comprehensive due diligence prior to the acquisition.

RISKS RELATED TO THE MANAGEMENT OF THE BANK'S BUSINESS

The Bank is exposed to credit risk and counterparty risk.

As a credit institution, the Bank is exposed to the creditworthiness of its customers and counterparties. These risks impact the Group's consolidated financial statements when a customer or counterparty is unable to honour its obligations and when the book value of these obligations in the Bank's records is positive. The customer or counterparty may be a bank, a financial institution, an industrial or commercial enterprise, a government and its various entities, an investment fund, or a natural person. If the level of customer or counterparty defaults increases compared to recent historically low levels, the Bank may have to record significant charges for possible bad and doubtful debts, affecting its profitability.

While the Bank seeks to reduce its exposure to credit risk and counterparty risk by using risk mitigation techniques such as collateralization, obtaining guarantees, entering into credit derivatives and entering into netting agreements, it cannot be certain that these techniques will be effective to offset losses resulting from counterparty defaults that are covered by these techniques. Moreover, the Bank is exposed to the risk of default by the party providing the credit risk coverage (such as a counterparty on derivatives) or to the risk of loss of value of any collateral. In addition, only a portion of the Bank's overall credit risk and counterparty risk is covered by these techniques. Accordingly, the Bank has significant exposure to these risks.

A substantial increase in new provisions or a shortfall in the level of previously recorded provisions could adversely affect the Bank's results of operations and financial condition.

In connection with its lending activities, the Bank regularly establishes provisions for loan losses, which are recorded in its profit and loss account under "cost of risk". The Bank's overall level of provisions is based on its assessment of prior loss experience, the volume and type of lending being conducted, industry standards, past due loans, economic conditions and other factors related to the recoverability of various loans or statistical analysis based on scenarios applicable to different asset classes. Although the Bank seeks to establish an appropriate level of provisions, its lending businesses may have to increase their provisions for loan losses substantially in the future as a result of deteriorating economic conditions or other causes. Any significant increase in provisions for loan losses or a significant change in the Bank's estimate of the risk of loss inherent in its portfolio of non-impaired loans, as well as the occurrence of loan losses in excess of the related provisions, could have a material adverse effect on the Bank's results of operations and financial condition.

The Bank's hedging strategies may not prevent losses.

If any of the variety of instruments and strategies that the Bank uses to hedge its exposure to various types of risk in its businesses is not effective, the Bank may incur losses. Many of its strategies are based on historical trading patterns and correlations. For example, if the Bank holds a long position in an asset, it may hedge that position by taking a short position in another asset where the short position has historically moved in a direction that would offset a change in the value of the long position. However, the hedge may only be partial, or the strategies used may not protect against all future risks or may not be fully effective in mitigating the Bank's risk exposure in all market environments or against all types of risk in the future. Unexpected market developments may also reduce the effectiveness of the Bank's hedging strategies. In addition, the manner in which gains and losses resulting from certain ineffective hedges are recorded may result in additional volatility in the Bank's reported earnings.

Adjustments to the carrying value of the Bank's securities and derivatives portfolios and the Bank's own debt could have an impact on its net income and shareholders' equity.

The carrying value of the Bank's securities and derivatives portfolios and certain other assets, as well as its own debt, in its balance sheet is adjusted as of each financial statement date. Most of the adjustments are made on the basis of changes in fair value of its assets or its debt during an accounting period, with the changes recorded either in the income statement or directly in shareholders' equity. Changes that are recorded in the income statement, to the extent not offset by opposite changes in the value of other assets, affect its consolidated revenues and, as a result, its net income. All fair value adjustments affect shareholders' equity and, as a result, its capital adequacy ratios. The fact that fair value adjustments are recorded in one accounting period does not mean that further adjustments will not be needed in subsequent periods.

The credit ratings of the Bank may be downgraded, which would weigh on its profitability.

Credit ratings have a significant impact on the Bank's liquidity. A downgrade in the Bank's credit rating could affect its liquidity and competitive position. It could also increase the Bank's borrowing costs, limit access to the capital markets or trigger additional obligations under its covered bonds or under certain bilateral provisions in some trading, derivative or collateralized financing contacts.

In addition, the Bank's cost of obtaining long-term unsecured funding from market investors is also directly related to its credit spreads, which in turn depend to a certain extent on its credit ratings. Increases in credit spreads can significantly increase the Bank's cost of funding. Changes in credit spreads are continuous, market-driven, and subject at times to unpredictable and highly volatile movements. Credit spreads are also influenced by market perceptions of the Bank's creditworthiness. Furthermore, credit spreads may be influenced by movements in the cost to purchasers of credit default swaps referenced to the Bank's debt obligations, which are influenced both by the credit quality of those obligations, and by a number of market factors that are beyond the control of the Group.

Intense competition by banking and non-banking operators could adversely affect the Bank's revenues and profitability.

Competition is intense in all of the Bank's primary business areas in France and the other countries in which it conducts a substantial portion of its business, including other European countries and the United States. Competition in the banking industry could intensify as a result of consolidation in the financial services area or as a result of the presence of new players in the payment and the financing services area or the development of crowdfunding platforms. In particular, competitors subject to less extensive regulatory requirements or to less strict capital requirements (e.g., debt funds, shadow banks), or benefiting from economies of scale, data synergies or technological innovation (e.g., internet and mobile operators, digital platforms, fintechs), could be more competitive by offering lower prices or more innovative services. In addition, new payment systems and crypto-currencies, such as Bitcoin, and new technology that facilitate transaction processes, such as blockchain, have developed in recent years. While it is difficult to predict the effects of these emerging technologies as well as any applicable regulations, their use could nevertheless reduce the Bank's market share or secure investments that otherwise would have used technology used by more established financial institutions, such as the Bank. If the Bank is unable to respond to the competitive environment in France or in its other major markets by offering attractive, innovative and profitable product and service solutions, it may lose market share in key areas of its business or incur losses on some or all of its activities. In addition, downturns in the economies of its principal markets could add to the competitive pressure, through, for example, increased price pressure and lower business volumes for the Bank and its competitors. It is also possible that the imposition of more stringent requirements (particularly capital requirements and business restrictions) on large or systemically significant financial institutions, could lead to distortions in competition in a manner adverse to large private-sector institutions such as the Bank.

RISKS RELATED TO THE BANK'S OPERATIONS

The Bank's risk management policies, procedures and methods may leave it exposed to unidentified or unanticipated risks, which could lead to material losses.

The Bank has devoted significant resources to developing its risk management policies, procedures and assessment methods and intends to continue to do so in the future. Nonetheless, the Bank's risk management techniques and strategies may not be fully effective in mitigating its risk exposure in all economic and market environments or against all types of risk, particularly risks that the Bank may have failed to identify or anticipate. The Bank's ability to assess the creditworthiness of its customers or to estimate the values of its assets may be impaired if, as a result of market turmoil such as that experienced in recent years, the models and approaches it uses become less predictive of future behavior, valuations, assumptions or estimates. Some of the Bank's qualitative tools and metrics for managing risk are based on its use of observed historical market behavior. The Bank applies statistical and other tools to these observations to arrive at quantifications of its risk exposures. The process the Bank uses to estimate losses inherent in its credit exposure or estimate the value of certain assets requires difficult, subjective, and complex judgments, including forecasts of economic conditions and how these economic predictions might impair the ability of its borrowers to repay their loans or impact the value of assets, which may, during periods of market disruption, be incapable of accurate estimation and, in turn, impact the reliability of the process. These tools and metrics may fail to predict future risk exposures, e.g., if the Bank does not anticipate or correctly evaluate certain factors in its statistical models, or upon the occurrence of an event deemed extremely unlikely by the tools and metrics. This would limit the Bank's ability to manage its risks. The Bank's losses could therefore be significantly greater than the historical measures indicate. In addition, the Bank's quantified modelling does not take all risks into account. Its more qualitative approach to managing certain risks could prove insufficient, exposing it to material unanticipated losses.

An interruption in or a breach of the Bank's information systems may cause substantial losses of client or customer information, damage to the Bank's reputation and financial losses.

As with most other banks, the Bank relies heavily on communications and information systems to conduct its business. This dependency has increased with the spread of mobile and online banking services, and the development of cloud computing and blockchain technologies. Any failure or interruption or breach in security of these systems could result in failures or interruptions in the Bank's customer relationship management, general ledger, deposit, servicing and/or loan organization systems or could cause the Bank to incur significant costs in recovering and verifying lost data. The Bank cannot provide assurances that such failures or interruptions will not occur or, if they do occur, that they will be adequately addressed.

In addition, the Bank is subject to cybersecurity risk, or risk caused by a malicious and/or fraudulent act, committed virtually, with the intention of manipulating information (confidential data, bank/insurance, technical or strategic), processes and users, in order to cause material losses to the Group's subsidiaries, employees, partners and clients. An increasing number of companies (including financial institutions) have in recent years experienced intrusion attempts or even breaches of their information technology security, some of which have involved sophisticated and highly targeted attacks on their computer networks. Because the techniques used to obtain unauthorized access, disable or degrade service, steal confidential data or sabotage information systems have become more sophisticated, change frequently and often are not recognized until launched against a target, the Bank and its third-party service providers may be unable to anticipate these techniques or to implement in a timely manner effective and efficient countermeasures. Any failures of or interruptions in the Bank's information systems or those of its providers and any subsequent disclosure of confidential information related to any client, counterpart or employee of the Bank (or any other person) or any intrusion or attack against the Bank's communication system could cause significant losses and have an adverse effect on the Bank's reputation, financial condition and results of operations.

Moreover, the Bank is exposed to the risk of operational failure or interruption of a clearing agent, foreign markets, clearing houses, custodian banks or any other financial intermediary or external service provider used by the Bank to execute or facilitate financial transactions. Due to its increased interaction with clients, the Bank is also exposed to the risk of operational malfunction of the latter's information systems. The Group's communications and data systems and those of its clients, service providers and counterparties may also be subject to malfunctions or interruptions by as a result of cyber-crime or cyber-terrorism. The Bank cannot guarantee that these malfunctions or interruptions in its own systems or those of other parties will not occur or that in the event of a cyberattack, these malfunctions or interruptions will be adequately resolved.

The Bank's competitive position could be harmed if its reputation is damaged.

Considering the highly competitive environment in the financial services industry, a reputation for financial strength and integrity is critical to the Bank's ability to attract and retain customers. The Bank's reputation could be harmed if it fails to adequately promote and market its products and services. The Bank's reputation could also be damaged if, as it increases its client base and the scale of its businesses, the Bank's comprehensive procedures and controls dealing with conflicts of interest fail, or appear to fail, to address conflicts of interest properly. At the same time, the Bank's reputation could be damaged by employee misconduct, fraud or misconduct by market participants to which the Bank is exposed, a decline in, a restatement of, or corrections to its financial results, as well as any adverse legal or regulatory action such as the settlement the Bank entered into in with the US authorities for violations of US laws and regulations regarding economic sanctions. Such risks to reputation have recently increased as a result of the growing use of social networks within the economic sphere. The loss of business that could result from damage to the Bank's reputation could have an adverse effect on its results of operations and financial position.

5.2 Capital management and capital adequacy

SCOPE OF APPLICATION

The prudential scope of application defined in Regulation (EU) No. 575/2013 on capital requirements is not the same as the accounting scope of consolidation whose composition concerns the application of IFRS as adopted by the European Union. The notes to the consolidated financial statements cover the accounting consolidation scope.

The consolidation principles and the scope of consolidation in accordance with the accounting consolidation method used are described respectively in notes 1.b and 8.j to the consolidated financial statements.

PRUDENTIAL SCOPE

In accordance with banking regulation, BNP Paribas Group has defined a prudential scope to monitor capital ratios calculated on consolidated data. Its specificities are as follows:

- insurance companies (primarily BNP Paribas Cardif and its subsidiaries) that are fully consolidated within the accounting scope are consolidated under the equity method in the prudential scope;
- jointly controlled entities are consolidated under the equity method in the accounting scope and under the proportional consolidation method in the prudential scope.

The differences between the accounting and prudential scopes of consolidation are summarised in the table below.

TABLE 8: DIFFERENCES BETWEEN THE ACCOUNTING AND PRUDENTIAL SCOPES (EU LI3)

	31 December 2018					
		Method of regulatory consolidation				
Name of the entity	Method of accounting consolidation	Full consolidation	Proportional consolidation	Equity method	Neither consolidated nor deducted	Description of the entity
BNP Paribas Cardif and its subsidiaries(*)	Full consolidation			x		Insurance
BNPP SB Re	Full consolidation			x		Insurance
BNPP Vartry Reinsurance DAC	Full consolidation			x		Insurance
Decart Re Ltd	Full consolidation			x		Insurance
Darnell DAC	Full consolidation			x		Insurance
Greenval Insurance DAC	Full consolidation			x		Insurance
Le Sphinx Assurances Luxembourg SA	Full consolidation			x		Insurance
Collective investment funds(**)	Full consolidation				x	Asset management
Arval Relsa SPA	Equity method		x			Long-term car leasing
Bantas Nakit AS	Equity method		x			Retail banking
Banque Solféa	Equity method		x			Specialised loans
Bpost banque	Equity method		x			Retail banking
Copartis	Equity method		x			Retail banking
Euro Securities Partners	Equity method		x			Retail banking
Genius Auto Finance Co Ltd	Equity method		x			Specialised loans
FScholen	Equity method		x			Corporate and institutional banking
Fund Channel	Equity method		x			Asset management
Lyf SA	Equity method		x			Internet financial services
Lyf SAS	Equity method		x			Internet financial services
Partecis	Equity method		x			Retail banking
Services Logiciels d'Intégration Boursière	Equity method		x			Securities custody
Sundaram BNPP Home Finance Ltd	Equity method		x			Specialised loans
Union de Creditos Inmobiliarios SA	Equity method		x			Specialised loans
United Partnership	Equity method		x			Specialised loans
Fonds Commun de Créances UCI et RMBS Prado	Equity method		x			Specialised loans

(*) BNP Paribas Cardif subsidiaries are identified in the note 8.j to the consolidated financial statements (Insurance).
(**) Collective investment funds are identified in the note 8.j to the consolidated financial statement (footnote (4)).

The table below shows the differences between the accounting and prudential scopes of consolidation for each balance sheet item.

➤ TABLE 9: CONSOLIDATED BALANCE SHEET TO PRUDENTIAL BALANCE SHEET RECONCILIATION (EU LI1-A)

					31 December 2018
In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference to capital table (see Appendix 2)
ASSETS					
Cash and amounts due from central banks	185,119	-	232	185,351	
Financial instruments at fair value through profit or loss					
Securities	121,954	64	(32)	121,986	
of which own funds instruments in credit or financial institutions more than 10%-owned	*139*	*63*	*-*	*202*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*590*	*-*	*-*	*590*	*2*
Loans and repurchase agreements	183,716	2,378	(227)	185,867	
Derivative financial instruments	232,895	310	(57)	233,148	
Derivatives used for hedging purposes	9,810	(47)	-	9,763	
Financial assets at fair value through equity					
Debt securities	53,838	2,491	917	57,246	
of which own funds instruments in credit or financial institutions more than 10%-owned	*0*	*2,490*	*-*	*2,490*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*11*	*-*	*-*	*11*	*2*
Equity securities	2,151	-	-	2,151	
of which own funds instruments in credit or financial institutions more than 10%-owned	*439*	*0*	*-*	*439*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*986*	*-*	*-*	*986*	*2*
Financial assets at amortised cost					
Loans and advances to credit institutions	19,556	-	220	19,776	
of which own funds instruments in credit or financial institutions more than 10%-owned	*343*	*-*	*(40)*	*303*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*1*	*-*	*-*	*1*	*2*
Loans and advances to customers	765,871	4,209	5,531	775,611	
of which own funds instruments in credit or financial institutions more than 10%-owned	*33*	*339*	*(33)*	*339*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*26*	*-*	*-*	*26*	*2*
Debt securities	75,073	15	1,079	76,167	
of which own funds instruments in credit or financial institutions more than 10%-owned	*100*	*14*	*-*	*114*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*62*	*-*	*-*	*62*	*2*
Remeasurement adjustment on interest-rate risk hedged portfolios	2,787	-	11	2,798	
Financial investments of insurance activities	232,308	(232,308)	-	-	
Current and deferred tax assets	7,220	(46)	105	7,279	
Accrued income and other assets	103,346	(3,382)	336	100,300	
Equity-method investments	5,772	4,482	(115)	10,139	
of which investments in credit or financial institutions	*3,358*	*-*	*(582)*	*2,776*	*1*
of which goodwill	*367*	*290*	*(29)*	*628*	*3*
Property, plant and equipment and investment property	26,652	(551)	73	26,174	
Intangible assets	3,783	(238)	18	3,563	
of which intangible assets excluding mortgage servicing rights	*3,751*	*(238)*	*18*	*3,531*	*3*
Goodwill	8,487	(280)	29	8,236	
Non-current assets held for sale(**)	498	-	(498)	-	
TOTAL ASSETS	**2,040,836**	**(222,903)**	**7,622**	**1,825,555**	

In millions of euros	31 December 2018				
	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference to capital table (see Appendix 2)
LIABILITIES					
Deposits from central banks	1,354	-	-	1,354	
Financial instruments at fair value through profit or loss					
Securities	75,189	-	-	75,189	
Deposits and repurchase agreements	204,039	-	-	204,039	
Issued debt securities	54,908	(3,787)	-	51,121	
of which liabilities qualifing for Tier 1 capital	*205*	-	-	*205*	*4*
of which liabilities qualifying for Tier 2 capital	*116*	-	-	*116*	*5*
Derivative financial instruments	225,804	295	(59)	226,040	
Derivatives used for hedging purposes	11,677	(5)	66	11,738	
Financial liabilities at amortised cost					
Deposit from credit institutions	78,915	(5,938)	547	73,524	
Deposit from customers	796,548	1,033	5,456	803,037	
Debt securities	151,451	3,391	1,311	156,153	
Subordinated debt	17,627	(1,689)	28	15,966	
of which liabilities qualifing for Tier 1 capital	-	-	-	-	*4*
of which liabilities qualifying for Tier 2 capital	*15,454*	-	-	*15,454*	*5*
Remeasurement adjustment on interest-rate risk hedged portfolios	2,470	-	-	2,470	
Current and deferred tax liabilities	2,255	(125)	75	2,205	
Accrued expenses and other liabilities	89,562	(2,016)	194	87,740	
Technical reserves and other insurance liabilities	213,691	(213,691)	-	-	
Provisions for contingencies and charges	9,620	(264)	4	9,360	
Liabilities associated to non-current assets held for sales(**)	-	-	-	-	
TOTAL LIABILITIES	**1,935,110**	**(222,796)**	**7,622**	**1,719,936**	
Share capital, additional paid-in capital and retained earnings	93,431	16	4	93,451	6
Net income for the period attributable to shareholders	7,526	-	(4)	7,522	9
Total capital, retained earnings and net income for the period attributable to shareholders	100,957	16	-	100,973	
Changes in assets and liabilities recognised directly in equity	510	(7)	-	503	
Shareholders' equity	101,467	9	-	101,476	
Minority interests	4,259	(116)	-	4,143	
TOTAL CONSOLIDATED EQUITY	**105,726**	**(107)**	**-**	**105,619**	
TOTAL LIABILITIES AND EQUITY	**2,040,836**	**(222,903)**	**7,622**	**1,825,555**	

(*) *Adjustment of jointly controlled entities under proportional consolidation for prudential purposes, consolidated using the equity method in the accounting scope.*

(**) *The accounts "Non-current assets held for sales" and "Liabilities associated to non-current assets held for sales" are allocated to their original account in the prudential balance-sheet.*

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference – capital table (see Appendix 2)
					1 January 2018
ASSETS					
Cash and amounts due from central banks	178,433	-	129	178,562	
Financial instruments at fair value through profit or loss					
Securities	130,326	36	(65)	130,297	
of which own funds instruments in credit or financial institutions more than 10%-owned	*305*	*34*	*-*	*339*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*492*	*-*	*-*	*492*	*2*
Loans and repurchase agreements	144,948	4,569	-	149,517	
Derivative financial instruments	229,896	2	(9)	229,889	
Derivatives used for hedging purposes	13,721	(7)	3	13,717	
Financial assets at fair value through equity					
Debt securities	53,942	2,492	1,371	57,805	
of which own funds instruments in credit or financial institutions more than 10%-owned	*0*	*2,490*	*-*	*2,490*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*16*	*-*	*-*	*16*	*2*
Equity securities	2,330	-	-	2,330	
of which own funds instruments in credit or financial institutions more than 10%-owned	*518*	*-*	*-*	*518*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*1,088*	*-*	*-*	*1,088*	*2*
Financial assets at amortised cost					
Loans and advances to credit institutions	20,356	-	156	20,512	
of which own funds instruments in credit or financial institutions more than 10%-owned	*401*	*-*	*(40)*	*361*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*1*	*-*	*-*	*1*	*2*
Loans and advances to customers	731,176	2,783	4,174	738,133	
of which own funds instruments in credit or financial institutions more than 10%-owned	*32*	*339*	*(32)*	*339*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*26*	*-*	*-*	*26*	*2*
Debt securities	69,426	14	1,131	70,571	
of which own funds instruments in credit or financial institutions more than 10%-owned	*100*	*14*	*-*	*114*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*33*	*-*	*-*	*33*	*2*
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064	-	-	3,064	
Financial investments of insurance activities	227,712	(227,712)	-	-	
Current and deferred tax assets	7,368	(187)	99	7,280	
Accrued income and other assets	92,961	(2,757)	282	90,486	
Equity-method investments	6,221	4,910	(532)	10,599	
of which investments in credit or financial institutions	*3,256*	*-*	*(658)*	*2,598*	*1*
of which goodwill	*375*	*279*	*(15)*	*639*	*3*
Property, plant and equipment and investment property	25,000	(395)	6	24,611	
Intangible assets	3,327	(276)	10	3,061	
of which intangible assets excluding mortgage servicing rights	*3,288*	*(276)*	*10*	*3,022*	*3*
Goodwill	9,571	(279)	15	9,307	
Non-current assets held for sale(**)	-	-	-	-	
TOTAL ASSETS	**1,949,778**	**(216,807)**	**6,770**	**1,739,741**	

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference – capital table (see Appendix 2)
					1 January 2018
LIABILITIES					
Deposits from central banks	1,471	-	-	1,471	
Financial instruments at fair value through profit or loss					
Securities	67,087	-	-	67,087	
Deposits and repurchase agreements	174,645	-	-	174,645	
Issued debt securities	50,490	(954)	(4)	49,532	
of which liabilities qualifing for Tier 1 capital	*205*	-	-	*205*	*4*
of which liabilities qualifying for Tier 2 capital	*164*	-	-	*164*	*5*
Derivative financial instruments	227,644	8	(9)	227,643	
Derivatives used for hedging purposes	15,682	(29)	10	15,663	
Financial liabilities at amortised cost					
Deposit from credit institutions	76,503	(4,100)	121	72,524	
Deposit from customers	760,941	635	5,123	766,699	
Debt securities	148,156	2,611	1,295	152,062	
Subordinated debt	15,951	(1,706)	5	14,250	
of which liabilities qualifing for Tier 1 capital	-	-	-	-	*4*
of which liabilities qualifying for Tier 2 capital	*13,808*	-	-	*13,808*	*5*
Remeasurement adjustment on interest-rate risk hedged portfolios	2,372	-	1	2,373	
Current and deferred tax liabilities	2,234	(98)	66	2,202	
Accrued expenses and other liabilities	80,472	(2,177)	159	78,454	
Technical reserves and other insurance liabilities	210,494	(210,494)	-	-	
Provisions for contingencies and charges	11,084	(354)	3	10,733	
Liabilities associated to non-current assets held for sales	-	-	-	-	
TOTAL LIABILITIES	**1,845,226**	**(216,658)**	**6,770**	**1,635,338**	
Share capital, additional paid-in capital and retained earnings	89,878	14	-	89,892	6
Net income for the period attributable to shareholders	7,760	-	-	7,760	9
Total capital, retained earnings and net income for the period attributable to shareholders	97,638	14	-	97,652	
Changes in assets and liabilities recognised directly in equity	1,788	-	-	1,788	
Shareholders' equity	99,426	14	-	99,440	
Minority interests	5,126	(163)	-	4,963	
TOTAL CONSOLIDATED EQUITY	**104,552**	**(149)**	**-**	**104,403**	
TOTAL LIABILITIES AND EQUITY	**1,949,778**	**(216,807)**	**6,770**	**1,739,741**	

(*) *Adjustment of jointly controlled entities under proportional consolidation for prudential purposes, consolidated using the equity method in the accounting scope.*

The following table shows the breakdown of the different categories of assets and liabilities recognised on the Bank's balance sheet by regulatory risk type. The sum of the amounts thus broken down is not necessarily equal to the net book values of the prudential scope, because some items may be subject to capital requirements for several types of risk.

➤ TABLE 10: PRUDENTIAL BALANCE SHEET BY RISK TYPE (EU LI1-B)

In millions of euros	31 December 2018					
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
ASSETS						
Cash and amounts due from central banks	185,351	185,351	-	-	-	-
Financial instruments at fair value through profit or loss						
Securities	121,986	6,751	6,838	531	114,543	161
Loans and repurchase agreements	185,867	1,184	181,971	-	184,363	-
Derivative financial instruments	233,148	-	233,148	-	232,227	0
Derivatives used for hedging purposes	9,763	-	9,762	-	-	-
Financial assets at fair value through equity	59,397	55,709	31	1,196	-	2,493
Financial assets at amortised cost						
Loans and advances to credit institutions	19,776	18,231	1,534	-	-	34
Loans and advances to customers	775,611	736,879	16,516	20,245	-	1,948
Debt securities	76,167	62,024	1,018	11,796	-	2,347
Remeasurement adjustment on interest-rate risk hedged portfolios	2,798	-	-	-	-	2,798
Current and deferred tax assets	7,279	6,820	-	-	-	460
Accrued income and other assets	100,300	20,655	70,355	-	10,499	3,614
Equity-method investments	10,139	9,522	-	-	-	618
Property, plant and equipment and investment property	26,174	26,066	-	-	-	108
Intangible assets	3,563	32	-	-	-	3,530
Goodwill	8,236	-	-	-	-	8,236
TOTAL ASSETS	**1,825,555**	**1,129,224**	**521,173**	**33,767**	**541,633**	**26,347**

In millions of euros	31 December 2018					
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
LIABILITIES						
Deposits from central banks	1,354	-	-	-	-	1,354
Financial instruments at fair value through profit or loss						
Securities	75,189	-	-	-	75,162	27
Deposits and repurchase agreements	204,039	-	196,366	-	196,365	7,671
Issued debt securities	51,121	-	-	-	-	51,124
Derivative financial instruments	226,040	-	226,040	-	224,839	-
Derivatives used for hedging purposes	11,738	-	11,738	-	-	-
Financial liabilities at amortised cost						
Deposit from credit institutions	73,524	-	681	-	-	72,843
Deposit from customers	803,037	-	553	-	-	802,485
Debt securities	156,153	-	-	-	-	156,153
Subordinated debt	15,966	-	-	-	-	15,966
Remeasurement adjustment on interest-rate risk hedged portfolios	2,470	-	-	-	-	2,470
Current and deferred tax liabilities	2,205	-	-	-	-	2,205
Accrued expenses and other liabilities	87,740	-	55,261	-	4,341	28,215
Provisions for contingencies and charges	9,360	998	-	-	-	8,363
TOTAL LIABILITIES	**1,719,936**	**998**	**490,639**	**-**	**500,707**	**1,148,873**
TOTAL CONSOLIDATED EQUITY	**105,619**	**-**	**-**	**-**	**-**	**105,619**
TOTAL LIABILITIES AND EQUITY	**1,825,555**	**998**	**490,639**	**-**	**500,707**	**1,254,493**

In millions of euros	1 January 2018					
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
ASSETS						
Cash and amounts due from central banks	178,562	178,562	-	-	-	-
Financial instruments at fair value through profit or loss						
Securities	130,298	7,218	4,737	637	122,430	77
Loans and repurchase agreements	149,516	1,187	147,364	-	147,143	-
Derivative financial instruments	229,890	-	229,890	-	228,970	-
Derivatives used for hedging purposes	13,717	-	13,717	-	-	-
Financial assets at fair value through equity	60,134	56,156	-	1,369	-	2,610
Financial assets at amortised cost						
Loans and advances to credit institutions	20,512	17,093	2,925	-	-	520
Loans and advances to customers	738,133	711,477	14,333	10,632	-	1,664
Debt securities	70,571	59,590	1,108	8,631	-	2,350
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064	-	-	-	-	3,064
Current and deferred tax assets	7,280	6,861	-	-	-	419
Accrued income and other assets	90,486	24,063	64,548	-	7,717	535
Equity-method investments	10,599	9,960	-	-	-	639
Property, plant and equipment and investment property	24,610	24,502	-	-	-	108
Intangible assets	3,061	39	-	-	-	3,022
Goodwill	9,308	-	-	-	-	9,308
TOTAL ASSETS	**1,739,741**	**1,096,709**	**478,621**	**21,268**	**506,261**	**24,315**

In millions of euros	1 January 2018					
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
LIABILITIES						
Deposits from central banks	1,471	-	-	-	-	1,471
Financial instruments at fair value through profit or loss						
Securities	67,087	-	-	-	67,057	29
Deposits and repurchase agreements	174,645	-	167,664	-	167,656	6,982
Issued debt securities	49,532	-	-	-	-	49,532
Derivative financial instruments	227,643	-	227,643	-	227,511	-
Derivatives used for hedging purposes	15,663	-	15,663	-	-	-
Financial liabilities at amortised cost						
Deposit from credit institutions	72,524	-	481	-	-	72,043
Deposit from customers	766,699	-	1,621	-	-	765,078
Debt securities	152,061	-	-	-	-	152,061
Subordinated debt	14,251	-	-	-	-	14,251
Remeasurement adjustment on interest-rate risk hedged portfolios	2,373	-	-	-	-	2,373
Current and deferred tax liabilities	2,202	-	-	-	-	2,202
Accrued expenses and other liabilities	78,453	-	42,573	-	7,961	28,139
Provisions for contingencies and charges	10,733	1,078	-	-	-	9,655
TOTAL LIABILITIES	**1,635,338**	**1,078**	**455,644**	**-**	**470,185**	**1,103,817**
TOTAL CONSOLIDATED EQUITY	**104,403**	**-**	**-**	**-**	**-**	**104,403**
TOTAL LIABILITIES AND EQUITY	**1,739,741**	**1,078**	**455,644**	**-**	**470,185**	**1,208,220**

The following table shows the main differences between the amounts of accounting exposure on the balance sheet (see previous table) and the amounts of exposure used for regulatory purposes, based on the different types of risk, except market risk. Indeed, for the latter, the main regulatory measure used by the Group is Value at Risk (VaR), which reflects the sensitivity of the Bank's trading book to the different market parameters (see section 5.7, *Market risk exposure*). Therefore the VaR amount does not relate directly to the net book value of the assets and liabilities subject to market risk.

➤ TABLE 11: RECONCILIATION BETWEEN NET CARRYING VALUES UNDER THE PRUDENTIAL SCOPE AND THE EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES (EU LI2)

	31 December 2018			
In millions of euros	Credit risk framework	Counterparty credit risk framework	Securitisation framework	Market risk framework
ASSETS NET CARRYING VALUE	**1,129,224**	**521,173**	**33,767**	**541,633**
Liabilities net carrying value		(490,639)		
Off-balance-sheet amounts net of depreciation	390,713		9,762	
Credit risk depreciation amounts	25,490		78	
Amounts below the thresholds for deduction (subject to 250% risk-weight)(*)	(6,627)			
Differences in valuations due to the use of internal models(**)		114,825		
Other adjustments	4,720			
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES	**1,543,521**	**145,360**	**43,608**	

(*) *Includes deferred tax assets depending on future profits and significant participations in financial sector entities, subject to 250% risk-weight.*
(**) *The main regulatory measure used by the Group for counterparty risk is the EEPE (Effective Expected Positive Exposure). The features of the valuation model are described in section 5.6 in the paragraph Counterparty risk measurement.*

	1 January 2018			
In millions of euros	Credit risk framework	Counterparty credit risk framework	Securitisation framework	Market risk framework
ASSETS NET CARRYING VALUE	**1,096,709**	**478,621**	**21,268**	**506,261**
Liabilities net carrying value		(455,644)		
Off-balance-sheet amounts net of depreciation	383,416		4,615	
Credit risk depreciation amounts	28,733		51	
Amounts below the thresholds for deduction (subject to 250% risk-weight)(*)	(6,842)			
Differences in valuations due to the use of internal models(**)		133,835		
Other adjustments	2,886			
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES	**1,504,902**	**156,812**	**25,934**	

(*) *Includes deferred tax assets depending on future profits and significant participations in financial sector entities, subject to 250% risk-weight.*
(**) *The main regulatory measure used by the Group for counterparty risk is the EEPE (Effective Expected Positive Exposure). The features of the valuation model are described in section 5.6 in the paragraph Counterparty risk measurement.*

The exposure amounts used for regulatory purposes are presented:

- in section 5.4 for credit risk;
- in section 5.5 for securitisation positions in the banking book;
- in section 5.6 for counterparty credit risk;
- in section 5.7 for market risk.

SIGNIFICANT SUBSIDIARIES

The risk-weighted assets of BNP Paribas' significant subgroups and subsidiaries are given in Appendix 4 to this chapter.

The following subgroups are considered significant, based on the criterion that their risk-weighted assets amount to more than 3% of the Group's total risk-weighted assets (excluding equity values) at 31 December 2018:

- BNP Paribas Fortis;
- Banca Nazionale del Lavoro (BNL);
- BNP Paribas USA, Inc[(1)];
- BancWest;
- BNP Paribas Personal Finance;
- BGL BNP Paribas.

The risk-weighted assets reported correspond to the sub-consolidation scope of each group. Thus, BGL BNP Paribas and BancWest subgroups are also included in BNP Paribas Fortis and BNP Paribas USA Inc. subgroups respectively.

REGULATORY CAPITAL [Audited][(2)]

The BNP Paribas Group is required to comply with the French regulation that transposes European Directives on "Access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" and "Financial Conglomerates" into French law.

In the various countries in which the Group operates, BNP Paribas also complies with specific regulatory ratios in line with procedures controlled by the relevant supervisory authorities. These ratios mainly address the issues of capital adequacy, risk concentration, liquidity and asset/liability mismatches.

As of 1 January 2014, Regulation (EU) No. 575/2013, establishing the methods for calculating the solvency ratio, defines it as the ratio between total regulatory capital and the sum of:

- the amount of risk-weighted assets for credit and counterparty risks, calculated using the standardised approach or the Internal Ratings Based Approach (IRBA) depending on the particular entity or the activity of the Group concerned;
- capital requirements for market risk, for credit valuation adjustment risk and for operational risk, multiplied by a factor of 12.5.

BREAKDOWN OF REGULATORY CAPITAL

Regulatory capital is divided into three categories (Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital), which consist of equity and debt instruments, to which regulatory adjustments have been made. These items are subject to transitional arrangements.

Common Equity Tier 1 capital

Common Equity Tier 1 capital instruments mainly comprise:

- the consolidated equity attributable to shareholders restated for the anticipated distribution of a dividend and Undated Super Subordinated Notes, which are ineligible for this category;
- minority interest reserves of regulated entities, adjusted for their capitalisation surplus. Minority interests of unregulated entities are excluded.

Main regulatory adjustments are as follows:

- gains and losses generated by cash flow hedges;
- adjustments to the value of instruments measured at fair value required by prudent valuation;
- goodwill and other intangible assets, net of deferred tax liabilities;
- net deferred tax assets that rely on future profitability and arising from tax loss carry-forwards;
- expected losses on equity exposures;
- share of expected losses on outstanding loans measured using the Internal Ratings Based Approach (IRBA) which is not covered by provisions and other value adjustments;
- securitisation tranches for which the Group has opted for the own funds deduction instead of a 1,250% weighting.

Treasury shares held or granted a buyback authorisation are deducted from this category.

(1) Since 1 July 2016, BNP Paribas USA, Inc. has been the Group's intermediate holding company for its US subsidiaries.

(2) In the Registration document, information identified by the ranking [Audited] is information which is integral part of the notes to the consolidated financial statements under the information required by IFRS 7, IFRS 4 and IAS 1, and is covered by the opinion of the Statutory Auditors on the consolidated financial statements.

TABLE 12: TRANSITION FROM CONSOLIDATED EQUITY TO COMMON EQUITY TIER 1 (CET1) CAPITAL [Audited]

	31 December 2018		1 January 2018	
In millions of euros	Phased-in	Transitional arrangements(*)	Phased- in	Transitional arrangements(*)
Consolidated equity	**105,619**	**-**	**104,403**	**-**
Undated Super Subordinated Notes ineligible in CET1	(8,240)	-	(8,182)	-
Proposed distribution of dividends	(3,768)	-	(3,769)	-
Ineligible minority interests	(2,362)	-	(2,180)	482
Changes in the fair value of hedging instruments recognised directly in equity	(825)	-	(1,140)	-
Changes in the value of financial assets and reclassified loans and receivables recognised directly in equity	-	-	(223)	(223)
Additional value adjustments linked to prudent valuation requirements	(892)	-	(715)	
Goodwill and other intangible assets	(12,162)	-	(12,817)	
Net deferred tax assets arising from tax loss carry-forwards	(527)	98	(529)	309
Negative amounts resulting from the calculation of expected losses	(242)	-	(247)	9
Other prudential adjustments	(372)	-	(133)	33
COMMON EQUITY TIER 1 (CET1) CAPITAL	**76,230**	**98**	**74,467**	**610**

(*) *Amounts subject to pre-regulation treatment or prescribed residual amount of Regulation (EU) No. 575/2013.*

Additional Tier 1 capital

Additional Tier 1 capital is mainly composed of subordinated debt instruments with the following characteristics:

- they are perpetual and include no redemption incentive;
- they are not held by the bank, its subsidiaries or any company in which the Group holds 20% or more of the capital;
- they have a capacity to absorb losses;
- they may include a buy back option, five years after the issue date at the earliest, exercisable at the issuer's discretion[1];
- remuneration arises from distributable elements that may be cancelled, with no requirements for the bank.

This category is also composed of non-eligible minority reserves in common equity within their limit of eligibility.

Authorisations to redeem additional Tier 1 own capital instruments are deducted from this category.

Tier 2 capital

Tier 2 capital is comprised of subordinated debt with no buy back incentive, as well as non-eligible minority reserves in Tier 1 capital within their limit of eligibility. A prudential discount is applied to the subordinated debt with less than five years of residual maturity.

Prudential deductions from Tier 2 capital primarily concern:

- Tier 2 capital components in significant financial entities;
- Tier 2 own capital instruments buy back authorisations.

Transitional arrangements

Under CRR, the calculation methods introduced by fully loaded Basel 3 can be implemented gradually until 2022. European Central Bank Regulation 2016/445 of 14 March 2016 and the ACPR's instructions for the calculation of the prudential ratios, updated annually, lay down the percentages to be applied to filters and prudential deductions. The main items subject to these transitional arrangements are subordinated debt, restatements of minority interest reserves, deferred tax, unrealised gains on securities classified at fair value through equity and investment holdings in Tier 2 instruments of other financial sector entities.

Subordinated debt issued prior to 31 December 2012, which is non-eligible under full Basel 3 but eligible under prior regulations, can be recognised degressively as Tier 1 or Tier 2 capital, depending on its previous eligibility (grandfathered debt).

(1) Subject to authorisation by the supervisor.

TABLE 13: REGULATORY CAPITAL [Audited]

In millions of euros	31 December 2018		1 January 2018	
	Phased-in	Transitional arrangements(*)	Phased- in	Transitional arrangements(*)
Common Equity Tier 1 (CET1) capital: instruments and reserves				
Capital instruments and the related share premium accounts	27,133	-	27,084	
of which ordinary shares	*27,133*	-	*27,084*	
Retained earnings	58,968	-	55,271	-
Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	503	-	1,842	
Minority interests (amount allowed in consolidated CET1)	1,781	-	2,782	482
Independently reviewed interim profits net of any foreseeable charge or dividend	3,387	-	3,705	-
COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	**91,772**	**-**	**90,684**	**482**
Common Equity Tier 1 (CET1) capital: regulatory adjustments(**)	(15,542)	98	(16,217)	128
COMMON EQUITY TIER 1 (CET1) CAPITAL	**76,230**	**98**	**74,467**	**610**
Additional Tier 1 (AT1) capital: instruments(**)	8,731	45	8,666	596
Additional Tier 1 (AT1) capital: regulatory adjustments(**)	(44)	-	(385)	(340)
ADDITIONAL TIER 1 (AT1) CAPITAL	**8,687**	**45**	**8,282**	**256**
TIER 1 CAPITAL (T1 = CET1 + AT1)	**84,916**	**143**	**82,748**	**866**
Tier 2 (T2) capital: instruments and provisions(**)	15,511	(45)	13,420	(402)
Tier 2 (T2) capital: regulatory adjustments(**)	(3,233)	-	(2,863)	370
TIER 2 (T2) CAPITAL	**12,278**	**(45)**	**10,556**	**(31)**
TOTAL CAPITAL (TC = T1 + T2)	**97,194**	**98**	**93,305**	**835**

(*) *Amounts subject to pre-regulation treatment or prescribed residual amount of Regulation (EU) No. 575/2013, in accordance with grandfathered Additional Tier 1 and Tier 2 eligibility rules applicable as of 2019.*
(**) *See Appendix 2.*

Total phased-in capital amounted to EUR 97.2 billion at 31 December 2018, a transitional adjustment of EUR 0.1 billion compared with the fully loaded Basel 3 amount. Details are given in Appendix 2.

The table presenting the details of the debt instruments recognised as capital, as well as their characteristics, as required by implementing Regulation No. 1423/2013, is available in the BNP Paribas Debt section of the Investor Relations website: www.invest.bnpparibas.com.

TABLE 14: CHANGE IN REGULATORY CAPITAL [Audited]

In millions of euros	Phased-in
COMMON EQUITY TIER 1 (CET1) CAPITAL	
1 January 2018	74,467
Common Equity Tier 1 capital: instruments and reserves	**1,088**
Capital instruments and the related share premium accounts	49
of which ordinary shares	*49*
Retained earnings	(9)
Accumulated other comprehensive income	(1,339)
Minority interests (amount allowed in consolidated CET1)	(1,001)
Independently reviewed interim profits net of any foreseeable charge or dividend	3,387
Common Equity Tier 1 (CET1) capital: regulatory adjustments	**675**
of which additionnal value adjustments	*(176)*
of which intangible assets and goodwill	*655*
of which net deferred tax assets depending on future profits excluding those arising from temporary differences	*2*
of which fair value reserves related to gains or losses on cash flow hedges	*315*
of which negative amounts resulting from the calculation of expected loss amounts	*5*
of which gains or losses on liabilities valued at fair value resulting from changes in own credit standing	*(190)*
of which securitisation positions for which the Group has opted for the own funds deduction instead of a 1,250% risk-weight	*(2)*
of which regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	*(109)*
of which regulatory adjustments relating to unrealised gains and losses	*223*
of which other regulatory adjustments	*(48)*
31 December 2018	76,230
ADDITIONAL TIER 1 CAPITAL	
1 January 2018	8,282
Additional Tier 1 (AT1) capital: instruments	**64**
Additional Tier 1 (AT1) capital: regulatory adjustments	**341**
Loans to credit or financial institutions more than 10%-owned	334
Others	7
31 December 2018	8,687
TIER 2 CAPITAL	
1 January 2018	10,556
Tier 2 (T2) capital: instruments and provisions	**2,091**
Tier 2 (T2) capital: regulatory adjustments	**(370)**
Loans to credit or financial institutions more than 10%-owned	(312)
Others	(57)
31 December 2018	12,278

TABLE 15: CHANGE IN ELIGIBLE DEBT [Audited]

In millions of euros	Phased-in	
	Tier 1	Tier 2
1 January 2018	**8,450**	**13,233**
New issues	660	1,970
Redemptions	(600)	(92)
Prudential discount	0	(147)
Others	(1)	291
31 December 2018	**8,509**	**15,255**

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

The table below shows risk-weighted assets and capital requirement by risk type. Capital requirements make up 8% of risk-weighted assets.

TABLE 16: RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENT (EU OV1)

In millions of euros	RWAs		Capital requirements	
	31 December 2018	1 January 2018	31 December 2018	
1 Credit risk	**503,851**	**504,298**	**40,308**	See section 5.4
2 of which standardised approach	220,383	216,903	17,631	
4 of which advanced IRB approach	242,323	243,398	19,386	
5 of which equity positions under the simple weighting method	41,146	43,997	3,292	
6 Counterparty credit risk	**26,634**	**26,736**	**2,131**	See section 5.6
7 of which mark-to-market method	2,552	2,755	204	
10 of which internal model method (IMM)	19,702	20,802	1,576	
11 of which CCP – default fund contributions	1,289	1,268	103	
12 of which CVA	3,090	1,910	247	
13 Settlement risk	**12**	**1**	**1**	
14 Securitisation exposures in the banking book	**7,040**	**3,378**	**563**	See section 5.5
15 of which IRB approach	1,675	712	134	
16 of which IRB supervisory formula approach (SFA)	4,301	1,823	344	
17 of which internal assessment approach (IAA)	-	66	-	
18 of which standardised approach	1,064	776	85	
19 Market risk	**19,948**	**16,666**	**1,596**	See section 5.7
20 of which standardised approach	2,222	1,814	178	
21 of which internal model approach (IMA)	17,726	14,852	1,418	
23 Operational risk	**72,947**	**66,515**	**5,836**	See section 5.9
24 of which basic indicator approach	5,619	5,340	450	
25 of which standardised approach	10,393	11,214	831	
26 of which advanced measurement approach (AMA)	56,935	49,961	4,555	
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	**16,569**	**17,106**	**1,326**	
29 TOTAL	**647,001**	**634,699**	**51,760**	

The Group's total risk-weighted assets amounted to EUR 647.0 billion at 31 December 2018 compared with EUR 634.7 billion at 1 January 2018. At 31 December 2018, risk-weighted assets calculated using the internal model represented 54% of the Group's risk-weighted assets.

The breakdown of risk-weighted assets by risk type is presented in the various appropriate sections.

Amounts below the thresholds for prudential capital deduction are assets weighted at 250% pursuant to article 48 of Regulation (EU) No. 575/2013. These include:

- credit or financial institutions consolidated under the equity method, except for insurance entities consolidated under the equity method in the prudential scope, which are weighted using the simple weighting method;
- significant financial interests in credit or financial institutions in which the Group holds a stake of more than 10%;
- deferred tax assets that rely on future profitability and arise from temporary differences.

Settlement risk is defined in article 378 of Regulation (EU) No. 575/2013 as the risk of loss of value related to a delay in the settlement of securities transactions. As at 31 December 2018, the risk-weighted assets with respect to this risk are insignificant for the Group at EUR 12 million.

RISK-WEIGHTED ASSETS MOVEMENTS IN 2018

The change in risk-weighted assets can be broken down into the following effects:

- asset size effect: impact stemming from the variation in exposures (EAD);
- asset quality effect: impact stemming from the change in risk parameters (Probability of Default, Loss Given Default for the internal ratings based approach, and risk weighting for the standardised approach, etc.);
- model update effect: impact stemming from changes in the use of internal models (introduction of a new model, deployment on a new exposure scope, annual recalibration or review of risk parameters, application of add-ons, etc.);
- methodology and policy effect: impact stemming from changes in methodology and the establishment of new regulatory requirements having an impact on the calculation of risk-weighted assets;
- acquisition and disposal effect: impact stemming from changes in the scope of consolidation;
- currency effect: impact stemming from fluctuations in foreign exchange rates on exposures.

The main explanations for the changes in 2018 can be found hereunder and details are provided in the appropriate sections.

➤ TABLE 17: RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER

		Key driver								
RWAs *In millions of euros*	**1 January 2018**	**Asset size**	**Asset quality**	**Model updates**	**Methodology and policy**	**Acquisitions and disposals**	**Currency**	**Other**	**Total Variation**	**31 December 2018**
Credit risk	504,298	25,489	(30,056)	3,484	2,278	(2,475)	977	(144)	(446)	503,851
Counterparty credit risk	26,736	262	(731)	(66)	375	11	(14)	71	(92)	26,634
Settlement risk	1	-	-	-	-	-	-	11	11	12
Banking book securitisation positions	3,378	565	535	2,560	-	5	63	(64)	3,663	7,040
Market risk	16,666	1,415	1	1,168	-	-	-	698	3,282	19,948
Operational risk	66,515	199	211	6,341	-	(256)	-	(62)	6,432	72,947
Amounts below the thresholds for deduction (subject to 250% risk weight)	17,106	(1,076)	0	-	-	520	0	19	(537)	16,569
TOTAL	**634,699**	**26,855**	**(30,041)**	**13,486**	**2,653**	**(2,196)**	**1,026**	**518**	**12,301**	**647,001**

Below are the main reasons behind the EUR 12 billion increase in risk-weighted assets in 2018:

- an increase related to business activity of EUR 27 billion characterised by the sharp rise in credit risk (+EUR 25 billion);
- an improvement in asset-quality of -EUR 30 billion primarily from credit risk, with improvement in risk parameters and the implementation of three securitisation programmes;
- an increase of EUR 13 billion related to the updating of the models, including EUR 6 billion from the effect of raising the risk-weighted assets related to the operational risk to the standardised approach level;

- an increase of EUR 3 billion linked to methodological changes and regulations, mainly related to the macro-prudential measure of mortgages in Belgium;
- a net fall of EUR 2 billion related to scope changes, in particular following the disposal of First Hawaiian Bank (FHB) and the acquisition of the core banking activities of Raiffeisen Bank in Poland.

Comments on the main changes in 2018 for each type of risk can be found in the various appropriate sections.

BREAKDOWN OF RISK-WEIGHTED ASSETS BY BUSINESS LINE

➤ TABLE 18: RISK-WEIGHTED ASSETS BY RISK TYPE AND BUSINESS

	31 December 2018						
	Retail Banking & Services		Corporate & Institutional Banking				
RWAs *In millions of euros*	Domestic Markets	International Financial Services	Corporate Banking	Global Markets	Securities Services	Corporate Centre	Total
Credit risk	**201,178**	**181,846**	**93,573**	**5,561**	**2,773**	**18,920**	**503,851**
of which standardised approach	63,388	138,353	6,329	1,745	575	9,991	220,383
of which advanced IRB approach	132,570	18,597	86,572	2,692	1,603	288	242,323
of which equity positions under the simple weighting method	5,219	24,896	672	1,124	594	8,641	41,146
Counterparty credit risk	**2,249**	**708**	**515**	**21,561**	**1,440**	**161**	**26,634**
of which mark-to-market	296	527	7	875	827	20	2,552
of which internal model method (IMM)	1,834	8	110	17,195	555	0	19,702
of which CCP – default fund contributions	0	0	276	833	53	127	1,289
of which CVA	119	172	122	2,659	5	14	3,090
Settlement risk	**-**	**-**	**-**	**12**	**0**	**-**	**12**
Securitisation exposures in the banking book	**836**	**205**	**1,178**	**4,479**	**0**	**342**	**7,040**
of which IRB approach	10	138	70	1,115	0	342	1,675
of which IRB supervisory formula approach (SFA)	631	0	1,108	2,562	0	0	4,301
of which internal assessment approach (IAA)	-	-	-	-	-	-	-
of which standardised approach	196	67	0	802	0	0	1,064
Market risk	**39**	**284**	**1,295**	**17,846**	**476**	**7**	**19,948**
of which standardised approach	39	208	1,216	702	50	7	2,222
of which internal model approach (IMA)	0	76	79	17,144	427	0	17,726
Operational risk	**23,606**	**19,172**	**9,970**	**15,962**	**3,459**	**778**	**72,947**
of which basic indicator approach	1,145	3,429	203	241	406	196	5,619
of which standardised approach	1,789	6,338	1,201	723	102	241	10,393
of which advanced measurement approach (AMA)	20,673	9,405	8,567	14,998	2,951	341	56,935
Amounts below the thresholds for deduction (subject to 250% risk weight)	**1,207**	**5,420**	**9**	**484**	**54**	**9,395**	**16,569**
TOTAL	**229,115**	**207,635**	**106,541**	**65,905**	**8,203**	**29,603**	**647,001**

RWAs *In millions of euros*	1 January 2018						
	Retail Banking & Services		Corporate & Institutional Banking				
	Domestic Markets	International Financial Services	Corporate Banking	Global Markets	Securities Services	Corporate Centre	Total
Credit risk	**197,576**	**178,752**	**97,229**	**6,648**	**2,074**	**22,020**	**504,298**
of which standardised approach	63,617	134,189	5,823	1,786	508	10,980	216,903
of which advanced IRB approach	128,506	17,485	90,695	2,979	1,307	2,425	243,398
of which equity positions under the simple weighting method	5,453	27,077	711	1,883	259	8,614	43,997
Counterparty credit risk	**2,368**	**576**	**631**	**21,805**	**1,347**	**9**	**26,736**
of which mark-to-market	283	456	23	1,108	883	2	2,755
of which internal model method (IMM)	2,030	12	467	17,890	403	0	20,802
of which CCP – default fund contributions	0	0	64	1,147	58	0	1,268
of which CVA	54	108	78	1,661	3	7	1,910
Settlement risk	**-**	**-**	**-**	**1**	**-**	**-**	**1**
Securitisation exposures in the banking book	**146**	**216**	**688**	**2,119**	**0**	**208**	**3,378**
of which IRB approach	0	114	72	318	0	208	712
of which IRB supervisory formula approach (SFA)	43	0	616	1,164	0	0	1,823
of which internal assessment approach (IAA)	22	0	0	44	0	0	66
of which standardised approach	81	102	0	593	0	0	776
Market risk	**99**	**352**	**786**	**14,910**	**519**	**0**	**16,666**
of which standardised approach	99	198	674	839	4	0	1,814
of which internal model approach (IMA)	0	154	112	14,071	515	0	14,852
Operational risk	**19,576**	**18,458**	**9,879**	**14,188**	**3,229**	**1,185**	**66,515**
of which basic indicator approach	833	3,363	269	482	294	99	5,340
of which standardised approach	1,723	7,201	1,211	870	77	133	11,214
of which advanced measurement approach (AMA)	17,020	7,894	8,399	12,837	2,858	953	49,961
Amounts below the thresholds for deduction (subject to 250% risk weight)	**1,566**	**6,054**	**48**	**560**	**97**	**8,781**	**17,106**
TOTAL	**221,330**	**204,408**	**109,260**	**60,231**	**7,266**	**32,203**	**634,699**

The split of risk-weighted assets by domain reflects the Group's diversified business mix, with 68% devoted to Retail Banking & Services (including 35% for the Domestic Markets and 32% for International Financial Services), 28% to Corporate and Institutional Banking and 5% to Corporate Centre.

The increase in the Group's risk-weighted assets amounted to EUR 12 billion in 2018, with a EUR 8 billion increase in the Domestic Markets, mainly in French Retail Banking and Belgian Retail Banking, an increase of EUR 3 billion in International Financial Services, mainly in Personal Finance, and an increase of EUR 4 billion on Corporate and Institutional Banking, partly offset by a reduction of -EUR 2 billion in Corporate Centre.

CAPITAL ADEQUACY AND CAPITAL PLANNING

SINGLE SUPERVISORY MECHANISM

The Single Supervisory Mechanism (SSM) is the banking supervisory system for the euro zone. The SSM, together with the Single Resolution Mechanism (SRM) and the Deposit Guarantee Scheme, is one of the three pillars of the Banking Union.

The ECB thus became the direct prudential supervisor of BNP Paribas as of 4 November 2014. The ECB draws on the competent national supervisory authorities in fulfilling this role.

CAPITAL ADEQUACY

The BNP Paribas Group is required to comply with a range of regulations:

- European banking regulations under CRD IV, which also cover banking supervision;
- regulation relating to financial conglomerates in respect of additional supervision of its banking and insurance activities.

BNP Paribas' insurance business is governed by Solvency II insurance regulations since 1 January 2016.

Requirements under banking regulations and supervision

With the application of Basel 3 regulation as of 1 January 2014, the minimum ratios requirement increases gradually until 2019.

With respect to Pillar 1, the Group is required to meet a minimum Common Equity Tier 1 (CET1) capital ratio of 4.5%, a minimum Tier 1 capital ratio of 6%, and a minimum Total capital ratio of 8%.

Additional Pillar 1 requirements known as buffers

In addition to the minimum capital requirements regarding Pillar 1, since 1 January 2016, BNP Paribas will have to maintain additional CET1 capital buffers on a gradual basis:

- the capital conservation buffer is equal to 2.5% of the risk-weighted assets, since 2019. The aim of this buffer is to absorb losses in a situation of intense economic stress;
- the following three buffers were defined to limit systemic risk. Only the highest of these three buffers is applicable:
  - the buffer for global systemically important banks (G-SIBs) consists of a surcharge of CET1 capital defined by the Financial Stability Board based on the methodology developed by the Basel Committee, which evaluates the global systemic importance of banks. Global systemic importance is measured in terms of the impact of a bank's failure can have on the global financial system and the wider economy.

    The measurement approach of the global systemic importance is indicator-based. The selected indicators reflect the size of banks, their interconnectedness, the lack of readily available substitutes or financial institution infrastructure for the services they provide, their global cross-jurisdictional activity and their complexity. The methodology is described in the document published in July 2013 by the Basel Committee, entitled "Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement" (BCBS 255).

    In April 2018, BNP Paribas published the values of the G-SIBs indicators as at 31 December 2017. Details of the values of G-SIBs indicators can be found in the *Conferences and Publications* section of the Investor Relations website www.invest.bnpparibas.com.

    The Financial Stability Board published the list of systemically important banks for 2018 on 16 November 2018. As in 2017, BNP Paribas is classified in group 2 which sets the additional Common Equity Tier 1 capital requirement at 1.5% in 2019.

    The next update of the Group indicators is due for publication at the end of April 2019,
  - the buffer for domestic systemically important institutions (D-SIBs) aims to strengthen the capital requirements for institutions whose failure would have an impact on the national economy. The D-SIBs buffer for BNP Paribas is set at 1.5% in 2019,
  - the systemic risk buffer aims to limit systemic or macroprudential non-cyclical risks in the long term. This buffer is not significant for the Group;
- the countercyclical capital buffer is defined as a surcharge of CET1 capital whose purpose is to adjust over time to increase the capital requirements in periods when credit growth is accelerating and reduce them in slower periods. A countercyclical buffer rate may be activated in each country by a discretionary decision from the appointed national authority. In view of the buffer rates by country applicable for 2018, the BNP Paribas countercyclical capital buffer is 0.07% at 31 December 2018. The Group's countercyclical capital buffer will gradually increase with the implementation of rates in certain countries to reach 0.16% by the end of 2019 and 0.17% at 1 January 2020 (see Appendix 3 *Countercyclical Capital Buffer*).

Pillar 2 requirements

With respect to supervision, the second Pillar of the Basel Agreement provides that the supervisor shall determine whether the policies, strategies, procedures and arrangements implemented by the Group on the one hand, and the capital held on the other hand, are adequate for risk management and risk coverage purposes. This evaluation exercise by the supervisors to determine the adequacy of mechanisms and capital with respect to bank risk levels is designated in the regulations under the term SREP (Supervisory Review and Evaluation Process).

ICAAP (Internal Capital Adequacy Assessment Process) is the process by which institutions assess the adequacy of their capital with their internal measurements of the levels of risk generated by their usual activities. ICAAP is used by the supervisory authorities for the annual SREP.

Within the BNP Paribas Group, the ICAAP is based on two key principles: the verification that the level of available capital is adequate with respect to the capital requirements, and the forward-looking capital planning.

The capital adequacy assesment relies on two perspectives:

- the regulatory perspective, described in the CRD 4/CRR, according to which all Pillar 1 risks must be covered by regulatory capital;
- the internal perspective, built around a comprehensive review of the Pillar 1 risks specified by Basel regulations, as well as the Pillar 2 risks defined in the Group's risk appetite framework and identified as material within the framework of the Group's risk inventory system. From this perspective, Pillar 1 and Pillar 2 risks are assessed using internal quantitative approaches, supplemented, as necessary, by qualitative approaches and dedicated monitoring frameworks.

Capital planning is based on the most recent actual and estimated financial data available at the time. These data are used to project future capital requirements, in particular by factoring in the Group's goal of maintaining a first-class credit rating to protect its origination capability, its business development targets and anticipated regulatory changes.

Capital planning consists of comparing the capital ratio targets defined by the Group with future projected capital requirements, then testing their robustness in a stressed macroeconomic environment.

The definitions of SREP and ICAAP have been updated in the EBA's "Guidelines on the revised common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing" published on 19 July 2018. These guidelines offer supervisors a common and detailed methodology that enables them to successfully complete the SREP according to a European standard.

Notification of SREP results

The results of the SREP process are notified annually to BNP Paribas's Executive Management by the ECB. The results of the regulatory stress test carried out in 2018 were included in the 2018 SREP (see section *Stress testing* in section 5.3 *Risk management*).

Since 2016, SREP decision comprises two factors: a requirement known as the "Pillar 2 requirement", and a non-public guidance called "Pillar 2 guidance". Following the ECB's notification of the outcome of the 2018 annual SREP, the Common Equity Tier 1 (CET1) capital "Pillar 2 requirement" for the Group is unchanged at 1.25%. This requirement also applies to Tier 1 and Total capital.

Overall capital requirements

The Group's CET1 ratio, Tier 1 ratio and Total capital ratio must satisfy at all times the following requirements corresponding to the limits of applicable distribution restrictions (Maximum Distributable Amount – MDA):

- the minimum CET1 ratio, Tier 1 ratio and Total capital ratio, respectively, in accordance with article 92 (1) points a), b) and c) of the CRR;
- the Pillar 2 requirement;
- the total buffer requirement defined in article 128 (6) of CRD 4, as transposed into the respective national laws.

5

TABLE 19: OVERALL CET1 REQUIREMENT

	2018(***)	2019
CET1: Minimum requirements (Pillar 1)	4.5%	4.5%
Pillar 2 requirement(*)	1.25%	1.25%
Capital conservation buffer	1.875%	2.5%
G-SIBs buffer applicable to BNP Paribas	1.5%	1.5%
Countercyclical capital buffer(**)	0.03%	0.08%
TOTAL CET1	**9.155%**	**9.83%**

(*) *Only the Pillar 2 requirement is made public.*
(**) *Countercyclical capital buffer as at 1 January 2018 and 1 January 2019.*
(***) *Transitional arrangements implementation.*

TABLE 20: OVERALL TIER 1 REQUIREMENT

	2018(***)	2019
Tier 1 (CET1 + AT1): Minimum requirement (Pillar 1)	6.0%	6.0%
Pillar 2 requirement(*)	1.25%	1.25%
Capital conservation buffer	1.875%	2.5%
G-SIBs buffer applicable to BNP Paribas	1.5%	1.5%
Countercyclical capital buffer(**)	0.03%	0.08%
TOTAL TIER 1	**10.655%**	**11.33%**

(*) *Only the Pillar 2 requirement is made public.*
(**) *Countercyclical capital buffer as at 1 January 2018 and 1 January 2019.*
(***) *Transitional arrangements implementation.*

➤ TABLE 21: OVERALL TOTAL CAPITAL REQUIREMENT

	2018(***)	2019
Total Capital (T1 + T2): Minimum requirement (Pillar 1)	8.0%	8.0%
Pillar 2 Requirement(*)	1.25%	1.25%
Capital conservation buffer	1.875%	2.5%
G-SIBs buffer applicable to BNP Paribas	1.5%	1.5%
Countercyclical capital buffer(**)	0.03%	0.08%
TOTAL CAPITAL	**12.655%**	**13.33%**

(*) Only the Pillar 2 requirement is made public.
(**) Countercyclical capital buffer as at 1 January 2018 and 1 January 2019.
(***) Transitional arrangements implementation.

The fully loaded CET1 capital requirement is 9.83% at 1 January 2019 and 9.91% at 31 December 2019 (excluding Pillar 2 guidance), in view of the capital conservation buffer at 2.5%, a G-SIBs buffer at 1.5%, the gradual activation of the countercyclical buffer in certain countries and a Pillar 2 requirement at 1.25%.

With a fully loaded CET1 capital ratio of 11.8% as at 31 December 2018, BNP Paribas is well above the minimum requirement applicable for 2018. Compared to 1 January 2018, the fully loaded CET1 ratio was up 20 basis points as at 31 December 2018, due primarily to:

- the net income for the year (excluding capital gain on the sale of 43.6% of First Hawaiian Bank) after taking into account dividend payment (+50 bp);
- the increase in risk-weighted assets, in particular in Domestic Markets and Personal Finance, excluding foreign exchange effect and operational risk (-20 bp);
- the risk-weighted assets related to operational risk brought to the standard method level (-10 bp);
- the other effects which have a negligible impact on the ratio overall (including the effects of the acquisitions and sales of the year).

The Group anticipates a CET1 ratio of at least 12% and a total capital ratio of at least 15% in 2020, at constant regulatory framework.

BNP Paribas ratios are monitored and managed centrally, on a consolidated basis. Where a French or international entity is required to comply with banking regulations at its own level, its ratios are also monitored and managed directly by the entity (see section *Capital management at local level*).

Requirements applicable to the Insurance business

Since 1 January 2016, BNP Paribas' insurance business is governed by Solvency II, the new standard for calculating the solvency coverage ratio (Directive 2009/138/EC as transposed into French law).

The objective of Solvency II is to:

- integrate the concepts of risks and risk appetite to which insurance companies are exposed;
- harmonise the insurance regulatory regimes across Europe;
- give more power to supervisory authorities.

Solvency II is divided into three pillars aiming to:

- Pillar 1: assess solvency using what is known as an economic capital-based approach;
- Pillar 2: implement qualitative requirements, *i.e.* governance and risk management rules that include a forward-looking approach to risk assessment. This assessment is called ORSA (Own Risk & Solvency Assessment);
- Pillar 3: improve the transparency of the insurance business by making solvency the cornerstone of disclosures to the public and the supervisory authority.

The BNP Paribas Cardif group complies with this new regulation both in terms of risk management and governance, as well as calculation and reporting. Solvency II-related data as at 31 December 2017 are available in the Solvency and Financial Condition Report (SFCR) for the BNP Paribas Cardif group, published on the institutional website https://www.bnpparibascardif.com.

Insurance risks are presented in section 5.10 *Insurance risks*.

Solvency II sets out two capital requirements:

- the solvency capital requirement (SCR);
- the minimum capital required (MCR) or, for groups, the SCR Group Minimum.

The SCR (Solvency Capital Requirement) is the level of own funds required to absorb a full series of bicentenary impacts after accounting for the correlation between risks. It is calibrated to cover such an event with a return period of 200 years within a one-year timescale (Value at Risk at 99.5%). The BNP Paribas Cardif SCR is evaluated by means of the standard formula.

The Capital Management Policy of BNP Paribas Cardif aims notably to ensure that the prudential solvency requirement are met, to cover at least 100% of the SCR defined within the scope of the ORSA assessment and to structure own funds so that the best balance can be found between the share capital, subordinated debt and other own funds elements, complying with the limits and levels laid down by regulations.

As at 31 December 2017, eligible own funds to meet the SCR stood at EUR 12,061 million. The amount of SCR was EUR 7,696 million and the SCR coverage ratio was 157%. Eligible own funds to meet the SCR Group Minimum amounted to EUR 9,036 million. The amount of SCR Group Minimum was EUR 3,548 million, and the SCR Group Minimum coverage ratio was 255%.

The Solvency Report as at 31 December 2018 will be published on 3 June 2019.

5

Compliance with the regulation on the additional supervision of financial conglomerates

As a bancassurer, the BNP Paribas Group is also subject to additional supervision as a financial conglomerate, pursuant to European Directive 2002/87/EU, supplemented by Delegated Regulation 342/2014 of the European Commission and implemented into French law by the Order of 3 November 2014.

The financial conglomerates directive has established additional prudential supervision, added to the rules existing in the banking and insurance sectors, because it has introduced additional constraints on capital adequacy, the monitoring of large exposures, and intragroup transactions.

A financial conglomerate is required to meet additional capital adequacy requirements on a consolidated basis. The purpose is to require sufficient capital to cover both banking sector and insurance sector risks, while eliminating multiple gearing.

The capital surplus or shortfall results from the difference between the financial conglomerate's equity capital and the solvency requirements applicable to the banking and insurance industries:

- the financial conglomerate's capital is determined based on the sector's solvency rules (CRR/CRD 4 for the banking sector and Solvency II for the insurance sector);
- the requirements for the financial conglomerate are determined on the basis of banking sector requirements, calculated according to CRR/CRD 4 rules, including all capital buffers resulting from SREP 2017 applicable in 2018, and on the basis of the solvency capital requirement (SCR) for the insurance sector, calculated in accordance with the Solvency II regulation.

In calculating the financial conglomerate's capital adequacy, the requirements and deductions of insurance entities are treated in compliance with Solvency II rules as a replacement of the CRR/CRD 4 solvency rules. The latter consist primarily of a 370% weighting of investments in equities treated according to the simple weighting method (see section 5.4, *Credit risk: equities under the simple weighting method*).

This adequacy is calculated taking transitional measures into account.

Governance for the prudential supervision of financial conglomerates falls to the Capital Committee, which meets quarterly under the Chairmanship of the Chief Operating Officer.

As at 31 December 2018, BNP Paribas Group, as a financial conglomerate, had capital of EUR 104.3 million compared to a total requirement of EUR 88.0 million, which represents a capital surplus of EUR 16.3 million.

RECOVERY AND RESOLUTION

Following the 2008/2009 financial crisis, international banking regulatory bodies adopted a series of regulations and directives based on the recommendations of the Financial Stability Board to facilitate the authorities' management of crises involving financial institutions and limit the impact of a potential collapse on the economy and public finances.

These rules started to be implemented in 2010, although some are still being amended. They provide for:

- powers and instruments for the supervisory authorities to allow for better anticipation and oversight of the recovery of banks in difficulty, particularly by means of recovery plans;
- powers and instruments for the resolution authorities in order to implement orderly resolution of a bank that would not have been able to recover by itself and would be placed in resolution. This is based among other things on the resolution documents required from banks;
- the addition of further regulatory requirements for banks. These requirements – which overlap quite largely – aim to ensure a sufficient quantity of liabilities able to absorb losses or be converted into equity. In particular, they consist of:
  - a TLAC (Total Loss Absorbing Capacity) minimum ratio for global systemically important banks (G-SIBs),
  - an MREL (Minimum Requirement for own funds and Eligible Liabilities) applicable to all European institutions;
- new bail-in rules for banks, with a review of the ranking of creditors including the creation of a new category of TLAC eligible debt (non preferred senior), plus the creation of a resolution fund financed by the banks, with the aim of avoiding any recourse to public assistance.

The recommendations of the Financial Stability Board were transposed into French banking law in July 2013, introducing in particular the obligation to create recovery and resolution plans, and resolution powers for the ACPR (*Autorité de contrôle prudentiel et de résolution*).

On a European level, the BRRD (Bank Recovery and Resolution Directive) was passed in 2014 and has been transposed into the law of all European Union Member States. This directive, as well as the Single Resolution Mechanism (SRM) regulation of 2014 and various additional delegated regulations, form all of the current regulations governing the recovery and resolution of European financial institutions. In November 2016, the European Commission proposed a series of amendments to BRRD, CRD 4 and CRR, which are expected to be voted on in 2019.

Recovery Plan

The recovery plan, prepared at Group level, describes the possible recovery options if the Group were to find itself in a distressed situation. It also contains information needed by the authorities to understand the Group's operations, resilience and capacity to absorb losses.

BNP Paribas submitted its updated Recovery Plan to its supervisor, the ECB in September 2018. The Single Resolution Board (SRB) and other authorities can obtain the Recovery Plan from the ECB.

Prepared in accordance with the Financial Stability Board's recommendations, and pursuant to the provisions of the French Monetary and Financial Code, this Recovery Plan was submitted to the Board of Director's Internal Control, Risk Management and Compliance Committee (CCIRC) for review and then to the Board of directors for approval (see chapter 2 *Corporate governance and Internal control*).

The new version of the Plan includes updated figures and takes account of changes in the Group's organisation and activities. It also takes account of the comments of the ECB and the Recovery College's participating authorities, which met in January 2018, as well as developments in European regulations.

This Recovery College, organised under the auspices of its supervisor, the ECB, brings together the authorities in the member countries of the European Union in which BNP Paribas has a presence, as well as the European Banking Authority.

Resolution documentation

In December 2018, BNP Paribas submitted a set of documents to the *Autorité de contrôle prudentiel et de résolution* (ACPR) to be forwarded to the Single Resolution Board (SRB). These documents contain information that may be needed by the authorities to prepare a plan for the resolution of BNP Paribas, should it become necessary.

The Bank also provided a series of templates, notably including an analytical statement of the Bank's and its subsidiaries' liabilities (*Liability Data Report*), requested by the SRB to assist in its initial analysis of the future Minimum Requirement for own funds and Eligible Liabilities (MREL) available for bail-in.

In 2018, BNP Paribas took part in a series of working meetings of the Internal Resolution Team (IRT), including the SRB, the ACPR and other EU bank resolution authorities, under the auspices of the SRB.

The purpose of these meetings, in which a series of questionnaires completed by BNP Paribas were discussed, was to deepen the SRB's analyses of the Group's capacity to deal with any bank resolution measures.

The Crisis Management Group (CMG) and the Resolution College met in January 2018 to approve the resolution plan drafted by the SRB. The next meeting is due to be held in 2019.

Furthermore, in December 2018, BNP Paribas presented a resolution plan to the American authorities for its activities in the United States, pursuant to Rule 165(d) of the Dodd-Frank Act.

TLAC

The Total Loss Absorbing Capacity (TLAC) ratio requirement is 16% of risk-weighted assets as at 1 January 2019, rising to 18% by 1 January 2022, plus the 2.5% capital conservation buffer, BNP Paribas' 1.5% G-SIBs buffer and BNP Paribas' countercyclical capital buffer (see *Appendix 3: Countercyclical capital buffer*). The overall TLAC ratio requirement (excluding countercyclical capital buffer), is thus 20% and 22% of Group's risk-weighted assets in 2019 and 2022, respectively.

The TLAC requirement also provides for a minimum ratio of 6% of the leverage ratio denominator in 2019 and 6.75% in 2022. For BNP Paribas, the requirement calculated on the basis of the leverage is less constraining than that based on risk-weighted assets; therefore the latter applies.

On 1 January 2019, the Group had a TLAC ratio slightly higher than 21%, well above the overall TLAC requirement of 20%.

The debt issuance targets aimed at satisfying these requirements and their nature are described in the section *Wholesale funding trends based on regulatory changes* in section 5.8 *Liquidity risk*.

MREL

The MREL (Minimum Requirement for own funds and Eligible Liabilities) is intended to apply to all European Union credit institutions and investment firms. The procedures for calculating this requirement, specific to each institution, are set to evolve as part of the forthcoming CRR 2 and BRRD 2 texts.

Changes in regulations

BNP Paribas closely tracks the regulatory developments relating to bank recovery and resolution, in particular:

- the proposed amendments to the European directives and regulations on recovery and resolution (CRR, CRD 4, BRRD, SRMR) announced on 23 November 2016 and which were reviewed by the European Parliament and among Member States throughout 2018;
- the work of the Financial Stability Board, in particular, on clearing house resolution, liquidity strategy and the practical implementation of "bail-in" tools;
- discussions focused on the creation of a European Deposit Insurance Scheme (EDIS).

LEVERAGE RATIO

The Basel 3/CRD 4 Regulation introduced the leverage ratio, whose main objective is to serve as a complementary measure to the risk-based capital requirements (back-stop principle).

The delegated act amending Regulation (EU) No. 575/2013 adopted by the European Commission on 10 October 2014, specifies the changes in the methods for calculating the ratio relative to the initial 2013 text.

The leverage ratio is calculated by dividing Tier 1 capital by exposure calculated using the balance sheet assets and off-balance sheet commitments assessed according to a prudential approach. Derivatives and repurchase agreements are also adjusted.

The ratio is based on data from regulatory reports collected since 1 January 2014. It is available to the public since 1 January 2015. On 23 November 2016, on the basis of the report submitted by EBA, the European Commission made a proposal to the European Parliament and to the Council for a new regulation amending Regulation (EU) No. 575/2013, including, among other items, the leverage ratio. The proposal confirms the minimum level of 3%.

As part of finalising the Basel 3 agreements, on 7 December 2017 the Basel Committee announced the leverage ratio framework would be revised, with:

- the establishment of an additional requirement ("buffer") as a leverage ratio for global systemically important banks (G-SIBs). This leverage ratio buffer is equal to 50% of the G-SIBs buffer applicable to CET1 as described in the *Capital adequacy* paragraph;
- the change in the method of measuring derivative financial instruments and off-balance sheet exposures.

The Basel Committee recommends first application of this buffer in 2022; however, this agreement must be transcribed into European law to be applicable.

The qualitative elements (LRQua) requested by the Implementing Regulation (EU) No. 2016/200 of 15 February 2016 are described below.

Processes used to manage the risk of excessive leverage

Monitoring of the leverage ratio is one of the responsibilities of the Capital Committee (as described in the section *Capital management* hereafter).

Factors that had an impact on the leverage ratio during the period to which the disclosed leverage Ratio refers

The leverage ratio was 4.5% as of 31 December 2018, stable compared with 1 January 2018.

As at 31 December 2018, the exposures used for the leverage ratio take into account the exemption related to centralised exposures with the Caisse des dépôts et consignations as regulated savings.

The table below shows the leverage ratio according to the format required by Implementing Regulation (EU) No. 2016/200 of 15 February 2016.

Only relevant items with a non-zero value are included.

➤ TABLE 22: LEVERAGE RATIO – ITEMISED

➤ *Summary reconciliation of accounting assets and leverage ratio exposures (LRSum)*

In billions of euros		31 December 2018	1 January 2018
1	Total assets as per published financial statements	2,041	1,950
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(215)	(210)
4	Adjustments for derivative financial instruments	(80)	(79)
5	Adjustment for securities financing transactions (SFTs)(*)	(5)	(1)
6	Adjustment for off-balance sheet items (*ie* conversion to credit equivalent amounts of off-balance sheet exposures)	160	160
EU-6b	Adjustment for exposures exempt from the total exposure for the purposes of the ratio in respect of article 429, paragraph 14, of Regulation (EU) No. 575/2013	(17)	-
7	Other adjustments	(18)	(18)
8	**LEVERAGE RATIO TOTAL EXPOSURE MEASURE**	**1,864**	**1,801**

(*) *Securities Financing Transactions: repurchase agreements and securities borrowing/lending.*

Leverage ratio common disclosure (LRCom)

	In billions of euros	31 December 2018	1 January 2018
	On-balance sheet exposures (excluding derivatives and SFTs(*))		
1	On-balance sheet items (excluding derivatives, SFTs(*) and fiduciary assets, but including collateral)	1,397	1,345
2	(Asset amounts deducted in determining Tier 1 capital)	(15)	(16)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs(*) and fiduciary assets) (sum of lines 1 and 2)**	**1,381**	**1,329**
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (*ie* net of eligible cash variation margin)	42	44
5	Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	144	144
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(30)	(32)
8	(Exempted CCP leg of client-cleared trade exposures)	(18)	(15)
9	Adjusted effective notional amount of written credit derivatives	450	417
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(424)	(394)
11	**Total derivatives exposures (sum of lines 4 to 10)**	**162**	**165**
	SFT(*) exposures		
12	Gross SFT(*) assets (with no recognition of netting), after adjusting for sales accounting transactions	284	280
13	(Netted amounts of cash payables and cash receivables of gross SFT(*) assets)	(112)	(137)
14	Counterparty credit risk exposure for SFT(*) assets	7	5
16	**Total securities financing transaction exposures (sum of lines 12 to 14)**	**179**	**147**
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	401	387
18	(Adjustments for conversion to credit equivalent amounts)	(241)	(227)
19	**Other off-balance sheet exposures (sum of lines 17 and 18)**	**160**	**160**
	Exempted exposures in accordance with Article 429 (7) and (14) of Regulation (EU) No. S75/2013 (on- and off-balance sheet)		
EU-19b	(exposures exempted under Article 429 (14) of Regulation (EU) No. 575/2013 (on-balance sheet and off-balance sheet exposures))	(17)	-
	Capital and total exposure measure		
20	**Tier 1 capital(**)**	**85**	**82**
21	**Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU 19b)**	**1,864**	**1,801**
22	**LEVERAGE RATIO**	**4.5%**	**4.5%**
	Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully loaded(**)	Fully loaded(**)

(*) *Securities Financing Transactions: repurchase agreements and securities lending/borrowing.*
(**) *In accordance with the eligibility rules for grandfathered debts in additional Tier 1 capital applicable in 2019.*

Split of on-balance sheet exposures (excluding derivatives, SFTs(*) and exempted exposures) (LRSpl)

	In billions of euros	31 December 2018	1 January 2018
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**1,381**	**1,329**
EU-2	Trading book exposures	117	125
EU-3	Banking book exposures, of which:	1,264	1,205
EU-4	Covered bonds	-	-
EU-5	Exposures treated as sovereigns	310	307
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	30	29
EU-7	Institutions	32	36
EU-8	Secured by mortgages of immovable properties	195	181
EU-9	Retail exposures	212	214
EU-10	Corporate	294	281
EU-11	Exposures in default	15	17
EU-12	Other exposures (*e.g.* equity, securitisations, and other non-credit obligation assets)	175	140

(*) Securities Financing Transactions: repurchase agreements and securities borrowing/lending.
Pursuant to article R.511-16-1 of the French Monetary and Financial Code, BNP Paribas' asset yield (i.e. net accounting income divided by the total balance sheet on a consolidated basis) is 0.39% in 2018 compared to 0.42% in 2017.

CAPITAL MANAGEMENT

To ensure the Group's sustainability, the Bank must maintain an adequate level of capital with respect to the risks to which it is exposed and its strategy. Capital is a rare and strategic resource which requires stringent, clearly defined, rigorous management according to an approach which takes account of the needs and demands of stakeholders, including shareholders, supervisors, creditors and depositors.

OBJECTIVES

BNP Paribas' capital management:

- is governed by policies and procedures which make it possible to understand, document and supervise capital management practices throughout the Bank;
- takes risk measurement into account to determine the use of the capital;
- considers capital requirements and resources under normal operating conditions, as well as under situations of severe, but plausible stress;
- presents a forward-looking vision of the Bank's capital adequacy to the Executive Management;
- allocates the capital constraint to the business lines in keeping with their strategic objectives;
- complies with the Internal Capital Adequacy Assessment Process (ICAAP);
- is monitored by an appropriate governance.

CAPITAL MANAGEMENT AT CENTRAL LEVEL

BNP Paribas' capital management aims to ensure and verify that the Group has adequate capital to comply with the regulatory capital ratios, as well as special requirements, for instance to operate as a global systemically important bank. To ensure its capital adequacy, the Group abides by the following principles:

- maintaining the capital at an appropriate level in view of BNP Paribas' activities, risk appetite, growth and strategic initiatives;
- maintaining BNP Paribas' capital at a level which complies with regulatory requirements;
- keeping a balance between capital adequacy and return on capital;
- meeting its obligations *vis-à-vis* creditors and counterparties, at each due date;
- continuing to operate as a financial intermediary.

Governance

The governance of the development, approval and update of the capital planning process is handled by two committees:

- the Risk-Weighted Assets Committee: it is jointly chaired by the Chief Financial Officer and the Chief Risk Officer, and comprises the operational divisions' Chief Financial Officers and Chief Risk Officers. The committee meets quarterly to examine forecasts of the Group's risk-weighted assets in the context of the budget cycle and updating of its estimates.

The Risk-Weighted Assets Committee is tasked with:

- monitoring and discussing the forecasts of the Group's risk-weighted assets for each business line,
- identifying the main assumptions underlying these forecasts and checking their accuracy,
- identifying any evolution factors and quantifying their impacts,
- proposing adjustments if required;

- The Committee's mission is to validate the Group's targets in terms of solvency ratios and Total Loss-Absorbing Capacity (TLAC) requirements as well as the trajectory to achieve these targets; monitor compliance with this trajectory; and, where necessary, propose corrective measures, consistent with the Group's Risk Appetite Statement (RAS). The Committee ensures, in this respect, internal capital adequacy is taken into account in the ICAAP as well as in the results of the global stress tests processes.

  The Capital Committee is tasked with:

  - monitoring, validating and anticipating changes in the business lines' risk-weighted assets as well as changes in the Group's prudential ratios, and monitoring these indicators relative to the Group's Risk Appetite, which is stated in the Risk Appetite Statement. This includes the solvency ratios, the additional requirement for financial conglomerate, the TLAC ratio and the leverage ratio,
  - identifying any evolution factors and quantifying their impacts,
  - defining trends in short/medium-term capital consumption and proposing the ensuing arbitrages to the Group's Executive Committee,
  - monitoring internal capital adequacy as part of the ICAAP,
  - monitoring the impacts of global stress test results,
  - monitoring the implementation of the supervisor's decisions that have an impact on the Group's solvency ratio or the amount of its risk-weighted assets.

The Capital Committee is also the Group's competent Executive Management authority for all issues related to the internal credit and operational risk model and the methodologies used in the ICAAP.

Monitoring indicators

Capital management at the consolidated level rests on the following indicators:

- the solvency ratios:

  BNP Paribas uses the fully loaded CET1 ratio as its main internal capital management indicator;
- risk-weighted assets:

  The risk-weighted assets are calculated per business line and per type of risk. The change in risk-weighted assets is analysed per type of effect (in particular: volume effect, parameters effect, perimeter effect, currency effect and method effect);
- notional equity:

  The capital allocation transfers the capital constraints to all Group divisions and thus represents a major constraint concerning the Group's development and management. The evaluation of the business lines' performance includes the analysis of their pre-tax Return On Notional Equity – (RONE) indicators. The equity component of this ratio is the notional equity, which corresponds to the business lines' consumption of capital.

This management rests on two major processes which are closely linked:

- a detailed quarterly analysis of actual capital consumption by divisions/business lines and of the Group's solvency ratios, as well as quarterly forecasts of these indicators throughout the year;
- the yearly budget process, which plays a central role in the Bank's strategic planning process.

CAPITAL MANAGEMENT AT LOCAL LEVEL

The Group has to allocate available capital among its different entities. To ensure a free and efficient flow of capital throughout the Group, the capital allocation process within the Group is centralised at head office level. It is mainly based on two principles: compliance with local regulatory requirements and analysis of the local business needs of the entity and growth prospects. In line with these two principles, the aim is to minimise capital dispersion.

With respect to the first principle, the local Chief Financial Officers are responsible for the daily management and reporting of their subsidiaries' capital requirements. When a capital need arises, it is analysed on a case-by-case basis by the Group, taking into consideration the subsidiary's present position and future strategy. Furthermore, each year, the Group manages the subsidiaries' earnings repatriation process. The Group general policy stipulates that the entire distributable profit of every entity, including retained earnings, must be paid out, with exceptions reviewed on a case-by-case basis. This policy ensures that the capital remains centralised at BNP Paribas SA level and also contributes to reducing the foreign exchange risk.

Local Chief Executive Officers are responsible for ensuring the subsidiary's ongoing financial viability and competitiveness in terms of capital, where relevant. However, any capital action requested by a subsidiary is assessed by and subject to authorisation from head office.

With respect to the second principle, the needs of each entity are analysed by dedicated teams in light of the Group's strategy in the relevant country, the entity's growth prospects and the macroeconomic environment.

As regards the branches, the Group reviews their capital allocation annually using the same approach. Here again, the policy is to maintain the level of capital at the adequate level, the principle being that capital ratios of the branches must not exceed that of their parent company, unless required for tax or regulatory reasons, which are analysed by the relevant departments.

5.3 Risk management [Audited]

GOVERNANCE

The specialised Committees of the Board of directors (see chapter 2, *Corporate Governance and internal control*), which examine the risks taken and the risk policies on a Group scale, are:

- the Internal Control, Risk Management and Compliance Committee (CCIRC);
- the Joint Committee that combines the CCIRC and the Financial Statements Committee.

In line with the Group's Risk Appetite Statement, Executive Management gives the broad direction for the major guidelines based on three key dimensions – risk, capital and liquidity – through the following bodies which are subsets of the Group's Executive Committee:

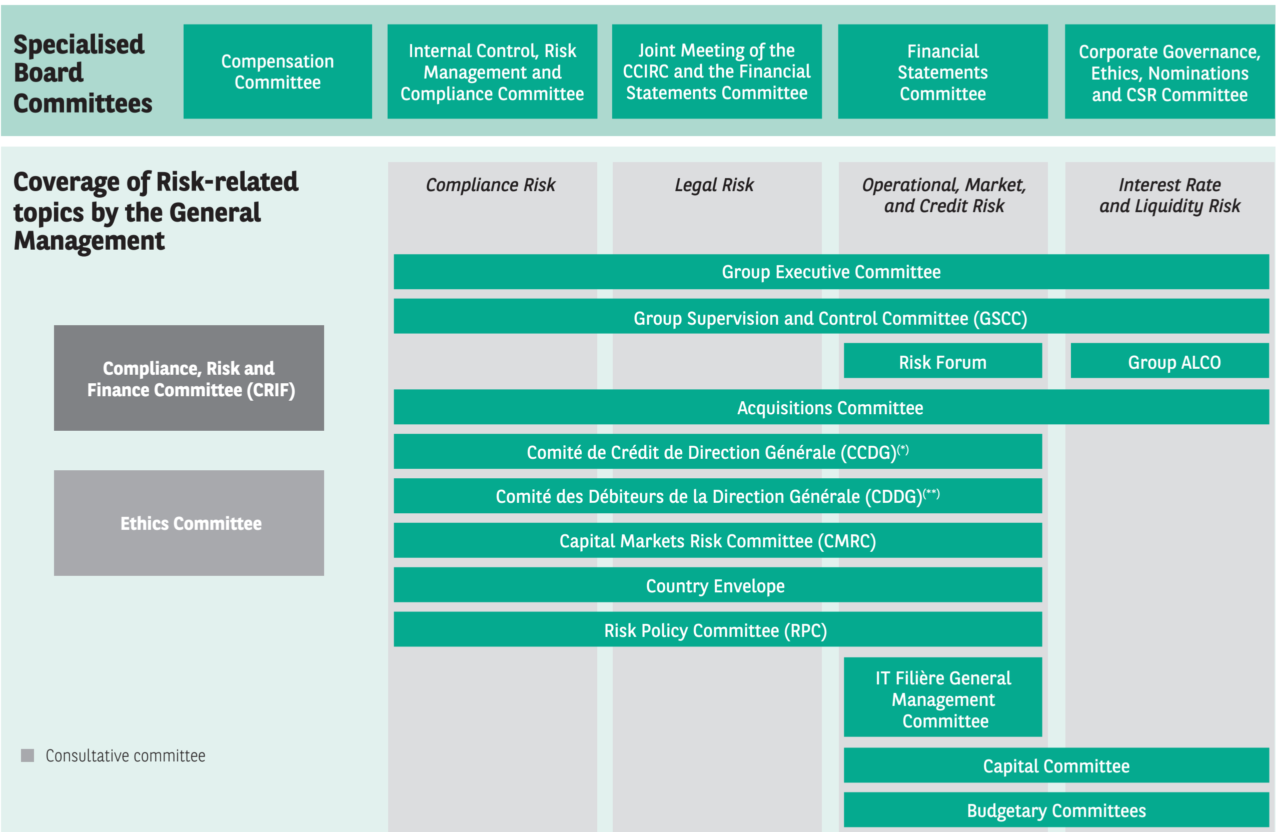
- Risk Forum: examines all risk topics considered as important and identifies those requiring additional analyses or risk decisions by the appropriate committees;
- Capital Committee: described under *Capital management* in section 5.2, validates the Group's objectives in terms of solvency ratios and Total Loss-Absorbing Capacity (TLAC) requirements as well as the trajectory to achieve these targets, monitors the compliance with this trajectory and, when relevant, proposes corrective actions. As the Group's competent Executive Management authority for all issues related to the internal credit and operational model, the Capital Committee is informed of decisions made in the MARCo Committee (Model Approval and Review Committee);
- Group ALM Committee (Group ALCo): responsible for the management of the liquidity risk, interest rate risk and structural foreign exchange risk over the whole Group.

Moreover, the Group Supervision and Control Committee (GSCC) brings together the Group's control functions at Executive Management level and takes a Group-wide approach to tackling all aspects of risk exposure.

The following figure shows the main governance bodies at Group level for risk management.

5

➤ FIGURE 5: OVERVIEW OF GROUP LEVEL GOVERNING BODIES COVERING RISK-RELATED TOPICS [Audited]



(*) General Management Credit Committee.

(**) General Management Doubtful Committee.

The other main bodies at Group level have the following roles:

- the General Management Credit Committee (CCDG) is the Group's highest authority concerning credit and counterparty risks; it decides on risk-taking and conducts annual reviews of authorisations for customers or groups, in both cases beyond certain thresholds;
- the General Management Doubtful Committee (CDDG) decides, beyond certain thresholds, on stage 3 provisions and recognitions of losses relative to Group exposures to defaulting counterparties;
- the Capital Markets Risk Committee (CMRC) is the body which governs the Group's risk profile of the capital markets activities; its tasks include, among others, analysing market and counterparty risks and setting limits for capital market activities;
- the Country Envelope Committees set limits for medium to high risk countries, in light of market conditions, business strategies and risk and compliance aspects;
- a Risk Policy Committee (RPC) defines the appropriate risk policy on a given matter such as a business activity, a product, a geography (region, country), a client segment or an economic sector;
- the General Management IT Committee oversees Group-wide topics in the IT sector and validates the Group's strategy, governance framework, and risk strategy in terms of IT.

RISK MANAGEMENT ORGANISATION

POSITION OF THE CONTROL FUNCTIONS

Risk management is central to the banking business and is one of the cornerstones of operations for the BNP Paribas Group. BNP Paribas has an internal control system covering all types of risks to which the Group may be exposed, organised around three lines of defence (see the *Internal Control* section in chapter 2, *Corporate Governance and Internal Control*):

- as the first line of defence, Internal Control is the business of every employee, and the heads of the operational activities are responsible for establishing and running a system for identifying, assessing and managing risks according to the standards defined by the functions exercising an independent control in respect of a second level of control;
- the main control functions within BNP Paribas ensuring the second line of defence are the Compliance, RISK and LEGAL Functions. Their Heads report directly to Chief Executive Officer and account for the performance of their missions to the Board of directors *via* its specialised committees;
- General Inspection provides a third level of defence. It is responsible for the periodic control.

GENERAL RESPONSIBILITIES OF THE RISK AND COMPLIANCE FUNCTIONS

Responsibility for managing risks primarily lies with the divisions and business lines that propose the underlying transactions. RISK continuously performs a second-line control over the Group's credit, market, banking book interest rate, liquidity, operational and insurance risks. As part of this role, it must ascertain the soundness and sustainability of the business developments and their overall alignment with the risk appetite target set by the Group. Risk's remit includes formulating recommendations on risk policies, analysing the risk portfolio on a forward-looking basis, approving corporate loans and trading limits, guaranteeing the quality and effectiveness of monitoring procedures and defining or validating risk measurement methods. RISK is also responsible for ensuring that all the risk implications of new businesses or products have been adequately assessed.

Compliance has identical responsibilities as regards compliance and reputation risks. It plays an important oversight and reporting role in the process of validating new products, new business activities and exceptional transactions.

ORGANISATION OF THE RISK AND COMPLIANCE FUNCTIONS

Approach

The RISK organisation fully complies with the principles of independence, vertical integration, and decentralisation issued by the Group's Management for the Group's main control functions (Compliance, RISK, LEGAL, and a third line of defence, General Inspection). Hence within RISK:

- all the teams in charge of risks, including those in operational entities have been integrated in the function with reporting lines to the Chief Risk Officers of these entities;
- the Chief Risk Officers of the entities report to RISK.

Moreover, this organisation enabled the governance of risk management activities to be strengthened, especially regarding model risk management, by creating RISK Independent Review and Control (RISK IRC), reporting directly to the Chief Risk Officer (CRO) which groups together the teams in charge of the independent review of the risk methodologies and models, and in the area of operational risk, with the organisation described in section 5.9 *Operational, compliance, and reputation risk*.

In accordance with international standards and French regulations, Compliance manages the system for monitoring compliance and reputation risks for all of the Group's businesses in France and abroad. The system for monitoring compliance and reputation risks is described in section 5.9.

5

Role of the Chief Risk Officer

The Group Chief Risk Officer directly reports to the Chief Executive Officer and sits on the Executive Committee of BNP Paribas. He has line authority over all RISK employees. He can veto the risk-related decisions and has no connection, in terms of authority, with the Heads of core businesses, business lines and territories. This positioning serves the following purposes:

- ensuring the objectivity of risk control, by removing any involvement in commercial relationships;
- making sure senior management is warned of any deterioration in risk and is rapidly provided with objective and comprehensive information on the status of risks;
- enabling the dissemination, throughout the Bank, of high and uniform risk management standards and practices;
- ensuring the quality of risk assessment methods and procedures by calling on professional risk managers in charge of evaluating and enhancing these methods and procedures in light of the best practices implemented by international competitors.

Role of the Chief Compliance Officer

The Chief Compliance Officer directly reports to the Chief Executive Officer and sits on the Executive Committee of BNP Paribas. He has direct access, if necessary, to the Board of directors and its Internal Control, Risk Management and Compliance Committee. He has no operational activity outside of compliance and reputation risk and no commercial activity, which guarantees his independence of action. As the person responsible for the Compliance Function, he exercises a hierarchical supervision over all the compliance teams in the various business units, geographical areas and functions.

The Compliance Function's mission is to issue opinions and decisions, and provide oversight and second-line controls, in order to give reasonable assurance that the Group's compliance oversight procedures for its transactions are effective and consistent, and that its reputation has been protected.

RISK CULTURE

ONE OF THE GROUP'S CORE FOUNDING PRINCIPLES

The BNP Paribas Group has a strong risk and compliance culture.

Executive Management has chosen to include the risk culture in three of its key corporate culture documents:

- Code of conduct:

  The Group adopted a new Code of conduct in 2016. It applies to all employees and defines the rules for our conduct in line with the core values of our corporate culture. For example, employees are reminded in the Code of conduct that the Group's interests are protected by responsible risk-taking in a strict control environment. The Code of conduct also includes rules for protecting customers' interests, financial security, market integrity and professional ethics, which all play an important role in mitigating compliance and reputation risks;
- Responsibility Charter:

  Executive Management drew up a formal Responsibility Charter, inspired by the Group's core values (the "BNP Paribas Way"), management principles and Code of conduct. One of the four commitments is "Being prepared to take risks, while ensuring close risk control".

  The Group sees rigorous risk control as part of its responsibility, both to clients and to the financial system as a whole. The bank's decisions on the commitments it makes are reached after a rigorous and concerted process, based on a strong, shared risk culture which pervades all levels of the Group. This is true both for risks linked to lending activities, where loans are granted only after in-depth analysis of the borrower's situation and the project to be financed, and for market risks arising from transactions with clients – these are assessed on a daily basis, tested against stress scenarios, and subject to limits.

  As a strongly diversified Group, both in terms of geography and businesses, BNP Paribas is able to balance risks and their consequences as they materialise. The Group is organised and managed in such a way that any difficulties arising in one business area will not jeopardise another in the Bank;
- The Group's mission and commitments:

  The mission of BNP Paribas is to finance the economy and advise its clients, by supporting them with their projects, their investments, and the management of their savings, guided by strong ethical principles. Through these activities, BNP Paribas wants to have a positive impact on stakeholders and on society, and be one of the most trustworthy players in the sector. BNP Paribas' twelve commitments as a Responsible Bank (see section 7.2 *Economic Responsibility: financing the economy in an ethical manner*) include in particular the commitment to finance the economy ethically, and the commitments to apply the highest ethical standards and rigorously manage environmental, social, and governance risks.

SPREADING THE RISK CULTURE

Robust risk management is an integral part of the Bank's makeup. A culture of risk management and control has always been one of its top priorities.

BNP Paribas launched the Risk Academy, a Group-wide initiative, giving it the objective of disseminating the best practices in risk management.

The Risk Academy is an open structure sponsored by four functions: Compliance, LEGAL, HR, and RISK, designed for the benefit of all staff and covering all types of risks to which the Group may be exposed, including credit, market, liquidity, operational, compliance and regulatory risks, the Risk Academy is organised around an evolving and participative framework intended to strengthen the Group's risk culture. The main aims of the Risk Academy are:

- to promote training and professional development efforts in the area of risk management;
- The exchange of information and sharing of knowledge among the Bank's different players.

The Risk Academy defined six fundamental risk management practices that are widely disseminated across the Group, through a number of different initiatives. They are key to developing a robust risk culture. They serve as a reminder to staff about the importance of clearly understanding and anticipating risks with a long-term perspective, being disciplined with risks taken and reporting swiftly and transparently on risk issues.

Lastly, the risk culture is also spread throughout the Group by linking compensation to performance and risk (see chapter 7, section entitled *A competitive compensation policy*), under a system that was strengthened in this area since 2015 for those employees whose decisions entail a significant risk component.

RISK APPETITE

DEFINITION AND OBJECTIVES

The Group does not have a specific risk appetite target, but some risks are inherent to its business and therefore to the achievement of its strategic objectives. It has prepared a Risk Appetite Statement and Risk Appetite Framework, which should be seen as the Group's formal statement of its tolerance to the risks to which it is exposed as it implements its strategic plan.

The Risk Appetite Statement is approved on a yearly basis by the Board of directors on the proposal of Executive Management. Consistent with the Group's strategic plan and in light of the environment in which it operates, this document sets out the qualitative risk principles it intends to follow in its business activities, as well as a quantitative mechanism for supervising the Group's risk profile indicators through quantitative metrics and thresholds. This system covers both the quantifiable and non-quantifiable risks to which it is exposed.

The Group's risk appetite is determined by Executive Management, through the various committees it chairs (CCDG, CMRC, Group ALCo, and Capital Committee), which are tasked with managing the Group's different types of risk exposure. The Group's strategic processes, such as budget, capital and liquidity management, are in line with the Risk Appetite Statement. Certain Risk Appetite Statement indicators are included in the budget exercise and their expected values in the budget are cross-checked against the thresholds in the Risk Appetite Statement.

The Group's Risk Appetite Statement reflects the core values of its risk culture. It states that the Group's risk culture and its commitments as a responsible bank are at the heart of its strategy. The Statement reaffirms the Group's mission: to finance the economy, advise its clients, and help to finance their projects, guided by strong ethical principles. The Group's strategy underpinning its risk appetite is founded on the core principles that have guided its development: a balance between business activities to deliver profitability and stability, a customer-focused business model and an integrated banking model to optimise services to customers. This strategy also factors in developments in the banking industry, including the trend towards a digital model, an uncertain macro economic outlook, marked by a low rates environment, and stringent regulatory constraints.

RISK PRINCIPLES

The risk principles aim to define the types of risk the Group is prepared to accept in support of its business strategy.

They include the following in particular:

- diversification and risk-adjusted profitability:

  The Group seeks to generate sustainable, client-driven, risk adjusted profits. Sustainable profitability will be achieved based on selectivity and controlled evolution of assets, and the pursuit of a diversified business model. Whilst the Group accepts some level of earnings volatility, it remains attentive to contain, at all times, the level of maximum potential losses in an adverse scenario;
- solvency and profitability:

  BNP Paribas has sufficient capital to cope with stress scenarios and to meet regulatory capitalisation standards in force. In the course of serving its clients, BNP Paribas accepts exposure to risks when it earns a proper return over an acceptable timeframe, and when its potential impacts seem acceptable;
- funding and liquidity:

  The Group ensures that the diversification of and balance between its resources and uses of funds correspond to a conservative funding strategy, allowing it to withstand adverse liquidity scenarios. The Group makes sure that it complies with the regulatory liquidity ratios in force;
- credit risk:

  The Group only accepts exposure on customers it knows well, based on comprehensive information, and pays close attention to the structure of the financing it grants. The Group builds and maintains a diversified risk portfolio, avoiding large concentrations (especially on single names, industries and countries) and ensures that it complies with the concentration policies in force;
- market risk:

  BNP Paribas' activity in the capital markets is customer-focused. BNP Paribas intends to keep its market risk profile in line with this customer-focused business mode;

- operational risk:

  The Group aims to protect its customers, employees and shareholders from operational risk. To do so it has developed a risk management infrastructure based on identifying potential risks, strategies to mitigate risk, and actions to raise awareness of these risks. Some specific risks have resulted in the definition of dedicated principles, in particular:

  - non-compliance risk:

    the Group is committed to compliance with all applicable laws and regulations. It undertakes to implement a system to manage the risk of non-compliance, including through special programs dedicated to the most important regulations for its business,

  - Information, Communication and Technology risk:

    the Group endeavours to reduce the risks related to the security of its information through various awareness actions, enhanced supervision of outsourced activities, heightened protection of terminals, incident monitoring, and a technology watch over IT vulnerabilities and attacks;

- insurance activities:

  BNP Paribas Cardif is exposed mainly to credit, underwriting and market risks. The entity closely monitors its exposures and profitability, taking into account its risks and the adequacy of its capital with regard to solvency rules. It endeavours to contain potential losses in adverse scenarios at acceptable levels.

Moreover, the Group applies the principles of its Code of conduct and its responsible bank principles including its social and environmental responsibility, (see chapter 7 *A Committed Bank : Information concerning the economic, social, civic and environmental responsibility of BNP Paribas*) to all its activities.

SUPERVISION OF RISK PROFILE INDICATORS

The Risk Appetite Statement sets out the indicators that measure the Group's risk profile for its risk exposure categories.

Risk level thresholds are assigned to each metric. When these thresholds are reached, they trigger an established process to inform Executive Management and the Board of directors, and if need be, to implement action plans.

These indicators are monitored quarterly in the risk dashboards presented to the CCIRC.

For example, the following ratios (described in the Key figures of section 5.1) are included in the Risk Appetite indicators:

- the fully loaded CET1 ratio;
- the balance of the breakdown of risk-weighted assets by business line (IFS, DM and CIB);
- the cost of risk on outstanding loans (in annualised basis points);
- the liquidity coverage ratio (LCR).

STRESS TESTING

To ensure dynamic risk supervision and management, the Group has implemented a comprehensive stress testing framework.

STRESS TESTING FRAMEWORK

The stress testing framework forms an integral part of the risk management and financial monitoring system and is used in three main areas: forward-looking risk management, planning of regulatory resources and liquidity requirements, and optimisation of the deployment of these resources within the Group, mainly through the Group's and its main entities' ICAAP and ILAAP processes.

Different types of stress tests

There are two types of stress tests:

- regulatory stress tests:

  These involve primarily the stress tests requested by the EBA, the ECB, or any other supervisory authority.

  The EBA and the ECB conducted EU-wide stress tests of the forty-eight largest European banks in 2018. All banks were required to apply certain macroeconomic scenarios and methodological assumptions for comparison purposes. A scenario of severe macroeconomic stress over a period of three consecutive years (the "adverse scenario") was used to test the impact on exposure to credit, market, operational and revenue (rates and commission) risk. This was the first European regulatory year completed under the new IFRS 9 accounting standard, enabling its potential impact in the event of a major macroeconomic crisis to be analysed.

  The impact of this major stress scenario on BNP Paribas' capital was to reduce the full CET1 ratio by 288 basis points compared with the level at 31 December 2017, restated for calculation changes in the first half of 2018[1], versus an average reduction of -385 basis points across all of the forty-eight European banks tested.

  In 2017, the ECB conducted a regulatory stress test focused on the scope of interest rate risk for the banking book. The main European banks had taken part in this exercise, which demonstrated the Group's resilience to the various interest rate scenarios defined by the ECB;

(1) *Relating to the entry into force of IFRS 9, to the deduction from CET1 capital of irrevocable payment undertakings (IPU) and to risk-weighted assets associated with operational risk which were treated using a standardised approach.*

- internal stress tests:
  - stress tests dedicated to risk anticipation: they contribute to the forward-looking management of credit, market, counterparty, operating, activity and liquidity risks. The results of the transverse stress tests (carried out by central functions and the STFS team) are used, among other purposes, to formulate the Bank's risk appetite and periodically measure its risk profile, and are periodically submitted to Group Executive Management as well as the Board's Internal Control, Risk Management and Compliance Committee (CCIRC) through the quarterly Group risk dashboard. Moreover, *ad hoc* stress testing is performed, when appropriate, within Risk Policy Committees, portfolio reviews or Country Strategic Committees to identify and assess areas of vulnerability within the Group's portfolios,
  - stress tests for the budget process: they contribute to three-year capital planning. Stress tests are carried out annually as part of the budget process and are included in the ICAAP and the ILAAP. They are reviewed at divisional and business line level before being consolidated at Group level to provide a comprehensive view of the impact on the Bank's capital and earnings.

    The purpose of stress testing in the budget process is to assess the impact of an adverse macroeconomic scenario on the Group and its activities. These stress tests are part of the yearly budget process which is run on the basis of baseline and adverse scenarios.

    The impact of the adverse scenario is measured on P&L (revenues, cost of risk, etc.), balance-sheet, risk-weighted assets, and capital. The main risk appetite metrics are calculated within the framework of the adverse scenario in order to ensure compliance with the limits set.

    The expected final output of stress testing exercises is a Group stressed solvency ratio, as well as possible adjustment measures. The scenarios used, the outcomes of the stress tests and the proposed possible adjustment measures (such as reducing exposures to a sub-segment or changes in funding or liquidity policies, etc.) are included in the budget synthesis report presented to the Group Executive Management at the end of the budget process,
  - reverse stress tests: they were conducted as part of the Bank's recovery and resolution plan and ICAAP. Reverse stress tests consist of identifying scenarios likely to result in a drop in the Bank's solvency ratios to below levels set in advance in line with the methods of use in question. These exercises enable any areas where the Bank is fragile in terms of changes in certain risk factors to be detected and facilitate in-depth analyses of the remedial actions that could be implemented by business lines or Group-wide.

Governance and implementation

This framework is based on a well-defined governance, with clear responsibilities, shared between the Group and operational entities in order to encourage operational integration and relevance. In February 2017, the Group decided to launch a Stress Testing and Extended Planning (STEP) programme serving both the Group and its subsidiaries and business lines. The aim of the STEP programme is continue to respond effectively to the various regulatory stress tests, such as the EBA and ECB stress test carried out in 2018, and to develop internal stress test practices required for proper risk management and Group resource planning.

Group Finance, RISK and ALM & Treasury have decided to create a shared team – Stress Testing and Financial Synthesis ("STFS"), responsible for implementing the STEP programme and its deployment across the Group's entities and activities.

The STFS team is responsible in particular for:

- defining and implementing the Group's target structure in terms of stress testing while covering the associated organisational issues, IT systems and governance;
- performing all of the Group's stress testing exercises, relying in particular on existing teams within RISK and Group Finance;
- supporting the stress test initiatives of the Group's business lines and legal entities in order to ensure overall consistency and streamline procedures;
- managing the Group's financial synthesis and steering its adaptation to the challenges of SREP.

Stress test methodologies are tailored to the main categories of risk and subject to independent review.

Stress tests may be run at Group, business line or portfolio level, dedicated to one or more risk types and on a more or less large number of variables depending on the pursued objective. Where appropriate, the results of quantitative models may be adjusted on the basis of expert judgement.

Since its creation, the Group's stress testing framework has evolved continuously in order to integrate the most recent developments in stress tests, whether in terms of methodologies or improved operational integration in the Group's management processes. The stress test framework by type of risks is detailed in sections 5.4 *Credit risk*, 5.6 *Counterparty credit risk* and 5.7 *Market risk*.

5

INTERNAL STRESS TEST SCENARIO DEFINITION

In stress testing exercises, it is common practice to distinguish baseline scenario and adverse scenarios. A macroeconomic scenario is typically a set of macroeconomic and macrofinancial variables (GDP and its components, inflation, unemployment, interest and exchange rates, stock prices, commodity prices, etc.) values projected over a given future period of time.

Baseline scenario

The baseline scenario is considered as the most likely scenario over the projection horizon. The baseline scenario is constructed by Group Economic Research in collaboration with various functions or business lines possessing a specific expertise, in particular:

- Group ALM Treasury (interest rates);
- Wealth Management (equity indices);
- BNPP Real Estate (commercial real estate);
- local economists (regional expertise);
- RISK (coordination and overall consistency of the scenario).

The global scenario is made up of regional and national scenarios (euro zone, France, Italy, Belgium, Spain, Germany, United Kingdom, Poland, Turkey, United States, Japan, China, India, Russia, etc.) consistent with each other.

Adverse scenario

An adverse scenario describes one or several potential shocks to the economic and financial environment – i.e. the materialisation of one or several risks to the baseline scenario – over the projection horizon. An adverse scenario is thus always designed in relation to a baseline scenario, and the shocks associated with the adverse scenario are translated in the set of macroeconomic and financial variables listed above as deviations from their value in the baseline scenario. The adverse scenario is constructed by RISK with the benefit of the expertise of the same team from Group functions or business lines used for the baseline scenario.

Construction of scenarios

Adverse scenarios are revised quarterly by RISK for a review of the Bank's risk appetite metrics and credit provision calculations within the framework of IFRS 9.

They are also approved (together with the baseline scenario) by Group Executive Management in June and September as part of the Group's budget process. For the other two quarterly exercises in March and December, scenarios are approved jointly by the Group Chief Risk Officer and the Group Chief Financial Officer.

The scenarios are then used to calculate expected losses (or P&L impact in the case of market risks) over the year for all Group portfolios:

- for portfolios exposed to credit or counterparty risk and for the equity portfolio of the banking book: this calculation measures the impact of the scenario on the cost of risk and risk-weighted assets due to the deterioration of the portfolio quality resulting from the adverse scenario, or adverse moves in equity prices. Credit risk stress tests are performed on the Bank's entire portfolio for all regions and all prudential portfolios, namely Retail, Corporates and Financial Institutions;
- for market portfolios: the changes in value and their P&L impact are calculated by simulating a one-time shock, which is consistent with the overall scenario.

The above calculations and related methodologies for stress tests on credit and market risks are coordinated centrally at Group level by STFS team. They also involve various teams of experts at Group and territory's levels in their implementation and design.

5.4 Credit risk

Credit risk is the consequence resulting from the likelihood that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The probability of default and the expected recovery on the loan or receivable in the event of default are key components of the credit quality assessment.

EXPOSURE TO CREDIT RISK [Audited]

The following table shows the gross exposure of all of the BNP Paribas Group's assets exposed to credit risk. The banking book securitisation positions as well as derivatives and repurchase agreements exposed to counterparty risk are excluded from this section and presented in section 5.5 and 5.6, respectively.

In accordance with the EBA's recommendations published in December 2016 on the revised Pillar 3, equity exposures under the standardised approach and using the simple weighting method are included in this section.

The main differences between the carrying amounts of the prudential balance sheet and the risk exposure amounts used for regulatory purposes are presented in Table 11 in the *Scope of Application* section of section 5.2.

These gross exposure amounts do not take into account guarantee and collateral received by the Group in its normal credit risk management operations (see the section *Credit risk mitigation techniques*).

➤ TABLE 23: CREDIT RISK EXPOSURE BY ASSET CLASS AND APPROACH [Audited]

Exposure *In millions of euros*	31 December 2018				1 January 2018				Variation	
	IRB approach	Standardised approach(*)	Simple weighting method	Total	IRB approach	Standardised approach(*)	Simple weighting method	Total	Total	Total – excluding foreign exchange effect
Central governments and central banks	284,811	40,579	-	325,390	272,874	46,000	-	318,874	6,515	3,720
Corporates	504,405	146,722	-	651,127	487,606	144,290	-	631,896	19,231	10,940
Institutions(**)	46,859	23,490	-	70,350	46,730	24,556	-	71,286	(936)	(1,642)
Retail	263,561	186,027	-	449,589	256,551	182,554	-	439,105	10,484	12,667
Equity	-	1,262	12,959	14,220	-	1,699	13,621	15,320	(1,100)	(1,147)
Other items(***)	833	32,013	-	32,846	381	28,040	-	28,420	4,426	4,541
TOTAL	**1,100,469**	**430,094**	**12,959**	**1,543,521**	**1,064,142**	**427,139**	**13,621**	**1,504,902**	**38,620**	**29,079**

(*) *In the following paragraphs, standardised credit risk exposures are reported according to the regulatory standardised classification.*
(**) *Institutions asset class comprises credit institutions and investment firms, including those recognised in other countries. It also includes some exposures to regional and local authorities, public sector agencies and multilateral development banks that are not treated as central government authorities.*
(***) *Other non credit-obligation assets include tangible assets, accrued income and residual values*

Exposure related to loan acquisitions on the secondary market in 2018 only accounts for a marginal amount.

TRENDS IN CREDIT RISK EXPOSURE

The EUR 26 billion increase in credit risk exposure excluding the foreign exchange effect in 2018 (excluding Other items and Equities), is due mainly to the Bank's current business activity. Currency effects had a significant influence on the increased exposure (+ EUR 9.5 billion) under the combined effect of appreciation of the US dollar (+ EUR 15.1 billion) and the depreciation of the Turkish lira (- EUR 5.1 billion). Excluding these currency effects, the main changes by exposure class are the following:

- the increased corporate exposures of EUR 10.9 billion mainly arises from CIB (+ EUR 12.7 billion) in relation to large corporates in the United States and Europe, as well as by the acquisition of the core banking activities of Raiffeisen Bank in Poland partially offset by the sale of First Hawaiian Bank in the United States;
- the increased retail exposures of EUR 12.7 billion is related in part to the organic growth, the development of Personal Finance partnerships and the acquisition of the core banking activities of Raiffeisen Bank in Poland, and also to increased residential mortgage business in France and Belgium. This increase is partially offset by the sale of First Hawaiian Bank in the United States.

APPROACHES USED TO CALCULATE CAPITAL REQUIREMENTS

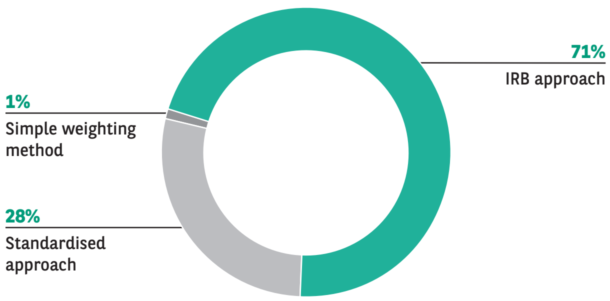
BNP Paribas has opted for the most advanced approaches allowed under Basel 3. In accordance with the European Directive and its transposition into French law, in 2007 the supervisor authorised the Group to use internal models to calculate capital requirements starting on 1 January 2008.

For credit risk, the share of exposures under the IRBA approach is 71% as at 31 December 2018, stable compared to 1 January 2018. This significant scope includes in particular Corporate and Institutional Banking (CIB), French Retail Banking (FRB), BNL SpA, a part of the BNP Paribas Personal Finance business (consumer loan book) and the entities BNP Paribas Fortis and BGL BNP Paribas. The main models used by the Fortis Group, which prior to its acquisition had been authorised by its banking supervisor to use the advanced approach, converged to Group methodologies (with the exception of those concerning retail customers). The IRBA scope nevertheless excludes certain entities such as those of the BancWest sub-group and subsidiaries in emerging countries.

Within the scope of equity exposures, the Group has mainly opted for the simple weighting method.

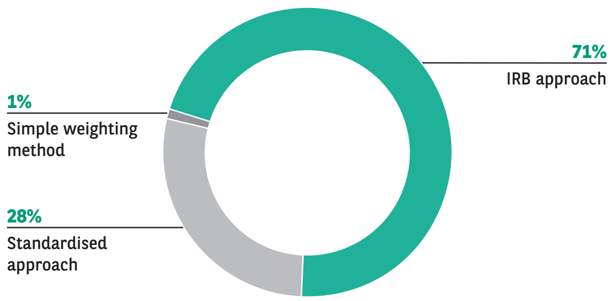
FIGURE 6: CREDIT RISK EXPOSURE BY APPROACH [Audited]

At 31 December 2018



Total: EUR 1,544 billion

At 1 January 2018



Total: EUR 1,505 billion

CREDIT RISK MANAGEMENT POLICY [Audited]

CREDIT POLICIES

The Bank's lending activities are governed by the Global Credit Policy. It applies to all Group activities that generate credit or counterparty risk. The Global Credit Policy provides general principles (including the risk assessment and decision-making process, adherence to the highest standards of compliance and ethics) applicable to all credit risk, as well as specific principles applicable to country risk, economic sector risks, clients selection and the transaction structures. It is supplemented by specific policies tailored to each type of business or counterparty.

The Global Credit Policy is updated in line with developments in the credit environment in which the Group operates. Since its complete update in 2012, it was enhanced in 2014 through the addition of a clause on its clients' Social and Environmental Responsibility (CSR) performance.

Social and Environmental Responsibility (CSR)

Clauses on Corporate Social and Environmental Responsibility (CSR) are included in specific new credit policies or when existing policies are updated.

Furthermore, sectoral policies and financing exclusions for certain sectors presenting significant Environmental, Social and Governance (ESG) challenges (described in the *Commitment 3* section of chapter 7 *A Committed Bank: Information concerning the economic, social, civic and environmental responsibility of BNP Paribas*) have also been implemented.

The Group is also taking a number of steps to improve the incorporation of ESG risks, especially climate change-related risks, in its credit risk system. Within the context of the application of the Duty of Vigilance law, in addition to sectoral policies and financing exclusions, the Group also decided to strengthen the ESG assessment of its clients to make it more systematic and to better understand the ESG risk profile of all its corporate clients.

INDIVIDUAL DECISION-MAKING PROCEDURES

A system of discretionary lending limits has been established, under which all lending decisions must be approved by managers or representatives of the sales teams, with the approval of a formally designated member of RISK. Approvals are systematically evidenced in writing, either by means of a signed approval form or in the minutes of formal Credit Committee meetings. Discretionary lending limits correspond to aggregate commitments by business group and vary according to internal credit ratings and the specific nature of the business concerned. All transactions proposed are subject to a detailed review of the borrower's current and future position. The review, conducted as soon as the transaction is arranged and updated at least on an annual basis, is designed to ensure the Group has comprehensive information about the borrower and can monitor any potential changes in its situation. Certain types of lending commitments, such as loans to financial institutions, sovereign loans and loans to customers operating in certain industries that are exposed to cyclical risks or to a rapid pace of change, are subject to specific authorisation procedures and require the sign-off of an industry expert or designated specialist. In retail banking, simplified procedures are applied, based on statistical decision-making aids.

Loan applications must comply with the Bank's Global Credit Policy and any relevant specific policies. Material exceptions undergo a special approval process. Before making any commitments, BNP Paribas carries out an in-depth review of any known development plans of the borrower, and ensures that it has thorough knowledge of all the structural aspects of the borrower's operations and that adequate monitoring will be possible.

The *Comité de Crédit de Direction Générale* (CCDG) is the highest level Group committee for all decisions related to credit and counterparty risk. It is chaired by a member of Executive Management or, by delegation, a Deputy Chief Operating Officer or the Chief Risk Officer (see *Governance* in section 5.3 *Risk Management*). It has ultimate decision-making authority for all loan applications for amounts in excess of individual discretionary lending limits or applications that would not comply with the Global Credit Policy.

MONITORING AND PORTFOLIO MANAGEMENT PROCEDURES

Monitoring exposures

A comprehensive risk monitoring system is organised around control units, which are responsible for ensuring that lending commitments comply with the loan approval decision, that credit risk reporting data are reliable and that risks accepted by the Bank are effectively monitored. Daily exception reports are produced and various early warning tools are used to identify early the deterioration of credit risks. The various monitoring levels are carried out under the supervision of RISK up to the General Management Doubtful Committee. This Committee regularly reviews all exposures in excess of a given threshold, for which it decides on the amount of impairment to be recognised or reversed, based on a recommendation from the business lines and with RISK's approval. In addition, quarterly Doubtful and Watch List Review Committees review files on the watch list and non-performing exposures. Depending on the amount of the commitments, these Review Committee meetings may be held locally, regionally or at head office, and the most important also include representatives of Executive Management.

The responsibilities of the control teams include the monitoring of exposures against approved limits, covenants, and guarantees. This allows the identification of any signs of deterioration against the risk profile approved by the Credit Committee. Control teams flag up (to the RISK teams and business units) any cases that fail to comply with Credit Committee decisions and oversee their resolution. In some cases, a specific alert is sent to the senior management of RISK and of the relevant business unit. These are mainly where exceptions remain unresolved and/or where there are serious indications of deterioration in the risk profile compared with that approved by the Credit Committee.

Furthermore, in 2018 the General Credit Policy included specific checks to be conducted for loans granted to clients presenting high leverage ratios, in accordance with European Central Bank guidelines.

Overall portfolio management and monitoring

The selection and careful evaluation of individual exposures are supported by a reporting system based on more aggregated portfolio levels in terms of division/business line, country, industry, business/product.

The overall portfolio management policy, including concentration of risk by single name, industry and country, is based on this reporting system and Group Risk Committees review all reports and analyses produced:

- risk concentration by country is managed through country risk limits that are set at the appropriate level of delegated authority for each country. The Group, which is naturally present in most economically active areas endeavours to avoid excessive concentrations of risk in countries with weak economic or unstable political structures or which economic position has been undermined. Country envelope limits are reviewed at least once a year, and quarterly reports are drawn up on their utilisation;
- the Group closely monitors individual concentrations, in particular on business groups or sovereign debts. The largest exposures to groups of corporate clients, financial institutions and sovereign debt are reported in the quarterly risk report to the CCIRC. BNP Paribas has also implemented concentration policies on exposures to corporate clients and financial institutions. These policies are described in the *Credit risk diversification* section (section 5.4);
- Regular reviews are carried out of portfolios in certain industries, either because of the magnitude of the Group's exposure to the sector or because of sector-specific risks, such as the cyclical nature of the industry or rapid technological developments. In conducting these reviews, the Group draws on the expertise of the relevant business lines and independent industry specialists working in RISK (Industry and Sector Studies). These reviews provide Executive Management, and if appropriate the CCIRC, with an overview of the Group's exposure to the sector under consideration, and assist it to decide on strategic guidelines. As an illustration, in 2018, an internal portfolio review was undertaken on the retail, automotive and leveraged finance sectors (see the paragraph on *Industry Diversification* in this section).

Stress tests assess portfolio vulnerabilities by measuring the impact of various adverse scenarios. They are conducted on a quarterly basis on the entire portfolio and on an *ad hoc* basis on sub-portfolios to identify any concentrations. They help to ensure that the Bank's credit risk exposure is in line with its risk appetite.

Lastly, BNP Paribas may use credit risk transfer instruments, such as securitisation programmes, credit derivatives or credit insurance, to mitigate individual risks, reduce portfolio concentration or cap potential losses arising from adverse scenarios.

IMPAIRMENT VALUATION PROCEDURES

The Group applied the impairment procedures described below for all loans subject to impairment (see note 1.e.5):

- Impairment valuation procedure for performing loans:

  A loss allowance for loans in stage 1 or stage 2 is constituted by each operating division based on an estimation of expected credit losses. This is determined on a quarterly basis during a Committee meeting attended by the Chief Financial Officer and Chief Risk Officer of each operating division. Estimations of expected credit losses result from the default risk in the coming 12 months for financial instruments whose credit risk has not significantly increased since initial recognition (stage 1) or upon maturity for unimpaired loans whose credit risk has significantly increased since initial recognition (stage 2). A tool used by most of the Group's business lines enables simulations to be performed based on the parameters of the rating system described below;
- Impairment valuation procedure for defaulted exposures:

  RISK reviews corporate, bank and sovereign loans in default at monthly intervals to determine the amount of any decrease in value to be recognised, either by reducing the carrying amount or by recording a provision for impairment, in accordance with applicable accounting standards (see chapter 4 note 1.e.5 *Impairment of financial assets at amortised cost and debt instruments at fair value through equity*). The Group uses various methodologies (expert opinions, statistical calculations) for defaulted exposures to retail customers. These impairments are referred to as stage 3. The amount of this impairment loss is based on the present value of probable recovered net cash flows, including from the possible realisation of the collateral held.

RATING SYSTEM

Each counterparty is rated internally by the Group using uniform principles, regardless of the approach used to calculate regulatory capital requirements.

The Bank has a comprehensive internal rating system compliant with regulatory requirements regarding capital adequacy. A periodic assessment and control process has been deployed within the Bank to ensure that the system is appropriate and correctly implemented. The system was formally validated by the supervisor in December 2007 and is inspected on a regular basis.

For loans to institutions, corporates, sovereigns and specialised lendings, the system is based on three parameters: the counterparty's probability of default (PD) expressed via a rating, the Global Recovery Rate (GRR) or its complement, Loss Given Default (LGD), which depends on the structure of the transaction, and the Credit Conversion Factor (CCF) which estimates the off-balance sheet exposure at risk.

There are twelve counterparty ratings. Ten cover performing clients with credit assessments ranging from "excellent" to "very concerning", and two relate to clients classified as in default, as per the definition by the banking supervisor.

Confirmation or amendments to the rating parameters and GRR applicable to each transaction are reviewed at least once a year as part of the loan approval process or annual credit review. These are based on the combined expertise of business line staff and, as a second look, the RISK representatives (who have the final say in case of disagreement). It uses appropriate tools including analysis aids and credit scoring systems. The decision to use these tools and the choice of technique depends on the nature of the risk.

For retail counterparties, the system is also based on three parameters: Probability of Default (PD), the Global Recovery Rate (GRR) and the Credit Conversion Factor (CCF). On the other hand, rating methods are applied automatically to determine the loan parameters.

Internal estimates of risk parameters are used in the Bank's day-to-day management in line with regulation recommendations. Thus apart from calculating capital requirements, they are used for example when setting delegated limits, granting new loans or reviewing existing loans to measure profitability, determine stage 1 and stage 2 impairment and for book analyses.

➤ TABLE 24: INDICATIVE MAPPING OF INTERNAL COUNTERPARTY RATING WITH AGENCY RATING SCALE AND AVERAGE EXPECTED PD

	BNP Paribas rating	LT Issuer/ Unsecured issuer's ratings S&P/Fitch	Average expected PD
Investment Grade	1+	AAA	0.01%
	1	AA+	0.01%
	1-	AA	0.01%
	2+	AA-	0.02%
	2	A+/A	0.03%
	2-	A-	0.04%
	3+/3/3-	BBB+	0.06% to 0.10%
	4+/4/4-	BBB	0.13% to 0.21%
	5+/5/5-	BBB-	0.26% to 0.48%
Non Investment Grade	6+	BB+	0.69%
	6/6-	BB	1.00% to 1.46%
	7+/7	BB-	2.11% to 3.07%
	7-	B+	4.01%
	8+/8/8-	B	5.23% to 8.06%
	9+/9/9-	B-	9.53% to 13.32%
	10+	CCC	15.75%
	10	CC	18.62%
	10-	C	21.81%
Default	11	D	100%
	12	D	100%

The Group has developed an indicative equivalence between the Bank's internal ratings and the long-term issuer ratings assigned by the major rating agencies. However, the Bank has a much broader clientele than just those counterparties rated by an external rating agency. An indicative equivalence is not relevant in retail banking. It is used when the internal ratings are assigned or reviewed in order to identify any differences between the Bank's assessment of a borrower's probability of default and that of one or more of the rating agencies. However, the internal ratings do not aim to reproduce or even approximate the external ratings. There are significant variances in both directions within the portfolio. Some counterparties rated 6 or 7 by BNP Paribas could be considered Investment Grade by the rating agencies.

For further details, see the sections *Internal rating system – sovereigns, financial institutions, corporates and specialised financing* and *Internal rating system specific to retail customers*.

CREDIT RISK STRESS TESTING

Quantitative models have been developed and are used to connect credit risk and rating migration parameters with macroeconomic and financial variables projected in stress testing scenarios (see section 5.3 *Stress testing*), for historical data as well as the relevant forecast period.

The quality of the methods used is guaranteed by:

- strict governance in terms of the separation of duties and responsibilities,
- a review of existing systems (models, methodologies, tools) by an independent entity;
- periodic evaluation of the effectiveness and pertinence of the system as a whole.

This governance is based on internal policies and procedures, the supervision of the Credit Risk Stress Testing Committees by business line and the integration of the stress tests within the risk management system.

There is a Group-level credit-risk stress testing policy, approved by the Capital Committee in July 2013. It is used for different types of stress testing (regulatory, periodic and *ad hoc*).

The central stress testing framework is consistent with the structure defined in the EBA guidelines for European stress tests:

- it is based on the parameters used to calculate capital requirements (regulatory EAD, PD and LGD);
- the expected loss conditional to the macroeconomy is used as a measure of the cost of risk resulting from new defaults;
- the stressed cost of risk is supplemented with impacts on stage 1 and 2 provisions and provisions on the outstanding non-performing loans;
- the regulatory capital stress testing is performed on the basis of rating migrations, default events, and the stressed regulatory PD used in calculating regulatory capital requirements.

In the case of the stress of risk-weighted assets, the Loss Given Default is not stressed as it is considered as downturn LGD. In that of stress on the cost of risk, the rate of loss (also known as Point-in-time LGD) can be stressed through a link with macroeconomic and financial variables or with default rates.

Stress testing of credit risk is used in the evaluation of the Group's risk appetite, and more specifically during portfolio reviews.

CREDIT RISK DIVERSIFICATION [Audited]

The Group's gross exposure to credit risk stands at EUR 1,531 billion at 31 December 2018, compared with EUR 1,491 billion at 1 January 2018. This portfolio, which is analysed below in terms of its diversification, comprises all exposures to credit risk shown in Table 23, excluding equity exposures under the simple weighting method, shown in the section *Credit risk: equities under the simple weighting method*.

These exposure amounts are based on the gross carrying value of the financial assets. They do not include collateral taken by the Group in its normal credit risk management operations (see section *Credit risk mitigation techniques*).

No single counterparty gives rise to an excessive concentration of credit risk, due to the size of the business and the high level of industrial and geographical diversification of the client base. The breakdown of credit risks by industry and by region is presented in the tables hereafter.

This risk is mainly assessed through the monitoring of the indicators shown below.

SINGLE NAME CONCENTRATION

The single name concentration risk of the portfolio is subject to regular monitoring. It is assessed on the basis of the total commitments at client or business group level and is based on two types of monitoring:

Monitoring of large exposures

Regulation (EU) No. 575/2013 (article 395) of 26 June 2013 establishes a limit of 25% of the bank's capital for exposure by business group (after exemptions and taking credit risk mitigation techniques into account).

BNP Paribas is well below the concentration thresholds set by this regulation. The exposure (as defined above) of a client or a group of connected clients never exceeds 10% of the Bank's eligible capital.

Monitoring through individual "single name" concentration policies

The single name concentration risks are part of the Group's concentration policies. They are meant to identify and closely monitor any single business group with an excessive concentration of risk to proactively manage individual concentrations relative to the Group's Risk Appetite Statement.

5

BREAKDOWN BY ASSET EXPOSURE CLASS

TABLE 25: CREDIT RISK EXPOSURE BY ASSET CLASS AND APPROCH TYPE (EU CRB-B) [Audited]

	Exposure *In millions of euros*	31 December 2018	Average 2018	1 January 2018
1	Central governments or central banks	284,811	300,641	272,874
2	Institutions	46,859	46,360	46,730
3	Corporates	504,405	504,027	487,606
4	*of which specialised lending*	*31,404*	*38,380*	*46,793*
5	*of which SME*	*39,468*	*40,393*	*37,853*
6	Retail	263,561	261,004	256,551
7	*Secured by real estate property*	*167,907*	*164,666*	*160,862*
8	*of which SME*	*11,742*	*11,132*	*10,774*
9	*of which Non-SME*	*156,164*	*153,534*	*150,087*
10	*Qualifying revolving*	*18,031*	*18,065*	*17,760*
11	*Other retail*	*77,624*	*78,273*	*77,929*
12	*of which SME*	*28,030*	*28,769*	*30,151*
13	*of which Non-SME*	*46,618*	*49,504*	*47,779*
	Other items	833	502	381
15	**TOTAL IRB APPROACH**	**1,100,469**	**1,112,534**	**1,064,142**
16	Central governments or central banks	30,673	31,227	32,700
17	Regional governments or local authorities	6,892	6,169	5,306
18	Public sector entities	14,219	15,099	16,399
19	Multilateral development banks	120	31	1
20	International organisations	0	650	1,493
21	Institutions	11,915	11,553	14,326
22	Corporates	120,970	117,457	114,647
23	*of which SME*	*21,389*	*21,256*	*21,701*
24	Retail	129,143	126,318	121,753
25	*of which SME*	*29,650*	*29,173*	*28,686*
26	Exposures secured by mortgages on immovable property	69,850	73,185	76,269
27	*of which SME*	*17,447*	*17,145*	*18,123*
28	Exposures in default	12,632	12,962	14,090
32	Exposures in the form of units or shares in collective investment undertakings	603	641	677
33	Equity	1,063	1,205	1,453
34	Other items	32,013	30,807	28,025
35	**TOTAL STANDARDISED APPROACH**	**430,094**	**427,304**	**427,139**
36	**TOTAL**	**1,530,563**	**1,539,838**	**1,491,280**

GEOGRAPHIC DIVERSIFICATION

Country risk is the sum of the risks on all exposures to obligors in the country concerned. It is not the same as sovereign risk, which is the sum of all exposures to the central government and its various branches. Country risk reflects the Bank's exposure to a given economic and political environment, which are taken into consideration when assessing counterparty quality.

The geographic breakdown shown below is based on the counterparty's country of residence.

The geographic breakdown of the portfolios is balanced. In 2018, the Group was particularly attentive to geopolitical risks and the economic performance of emerging countries (see section *Areas of special interest in 2018* in section 5.1).

➤ TABLE 26: CREDIT RISK EXPOSURE BY GEOGRAPHIC REGION (EU CRB-C) [Audited]

	Europe(*)								
Exposure *In millions of euros*	**Total Europe**	**France**	**Belgium**	**Luxembourg**	**Italy**	**United Kingdom**	**Germany**	**Netherlands**	**Other European countries**
Central governments or central banks	**233,150**	171,321	10,739	9,855	10,901	6,821	9,536	1,223	12,754
Institutions	**25,907**	6,898	8,531	334	2,049	2,285	1,076	1,088	3,646
Corporates	**343,357**	101,304	64,083	18,753	48,305	39,074	15,084	16,122	40,633
Retail	**263,188**	133,605	74,258	7,171	36,850	155	192	62	10,895
Other items	**833**	423	366	43	-	0	0	0	0
TOTAL IRB APPROACH	**866,436**	**413,552**	**157,977**	**36,156**	**98,105**	**48,335**	**25,888**	**18,495**	**67,928**
Central governments or central banks	**17,526**	5,546	1,916	18	1,762	38	344	8	7,893
Regional governments or local authorities	**4,747**	315	774	-	3,455	13	39	7	145
Public sector entities	**4,098**	504	298	-	3,195	4	63	2	34
Multilateral development banks	**120**	0	-	120	0	-	-	-	-
International organisations	**0**	0	0	0	-	-	-	-	-
Institutions	**8,606**	5,363	274	144	695	404	483	155	1,088
Corporates	**70,320**	21,901	2,066	913	9,352	7,577	4,623	1,722	22,166
Retail	**97,458**	17,585	2,723	51	29,373	11,650	17,842	1,028	17,207
Exposures secured by mortgages on immovable property	**35,674**	10,010	1,262	112	1,139	1,988	1,058	7,275	12,830
Exposures in default	**10,275**	2,410	110	5	4,134	468	543	40	2,566
Exposures in the form of units or shares in collective investment undertakings	**603**	603	-	-	-	-	-	-	-
Equity	**1,063**	685	-	377	-	-	-	-	-
Other items	**29,533**	13,864	2,634	727	5,090	1,824	1,594	435	3,364
TOTAL STANDARDISED APPROACH	**280,023**	**78,787**	**12,055**	**2,468**	**58,194**	**23,966**	**26,590**	**10,671**	**67,292**
TOTAL	**1,146,459**	**492,339**	**170,032**	**38,624**	**156,299**	**72,302**	**52,478**	**29,166**	**135,219**

(*) *Within the scope of the European Union and the European Free Trade Association (EFTA).*

													31 December 2018
		Asia Pacific					Rest of the World						
	North America	Total Asia Pacific	Japan	North Asia	South-East Asia (ASEAN)	Indian peninsula & Pacific	Total Rest of the World	Turkey	Mediterranean	Gulf States & Africa	Latin America	Other countries	TOTAL
	20,313	**25,056**	12,444	5,845	3,431	3,335	**6,292**	1	112	2,830	1,563	1,787	**284,811**
	9,728	**7,440**	1,033	3,838	1,141	1,429	**3,784**	1,144	479	1,010	886	264	**46,859**
	83,119	**43,813**	4,426	13,381	12,785	13,221	**34,116**	2,096	237	10,537	9,701	11,546	**504,405**
	75	**81**	5	24	36	16	**218**	5	33	65	24	91	**263,561**
	-	**0**	0	-	-	-	**-**	-	-	-	-	-	**833**
	113,234	**76,389**	**17,907**	**23,089**	**17,392**	**18,001**	**44,410**	**3,245**	**861**	**14,442**	**12,174**	**13,687**	**1,100,469**
	5,787	**1,475**	1,396	5	3	70	**5,886**	3,454	1,604	509	25	295	**30,673**
	1,979	**1**	-	-	-	1	**164**	164	-	0	-	-	**6,892**
	10,076	**4**	-	4	-	-	**41**	10	1	0	-	30	**14,219**
	0	**0**	-	-	0	-	**-**	-	-	-	-	-	**120**
	-	**-**	-	-	-	-	**-**	-	-	-	-	-	**0**
	1,290	**604**	41	236	50	278	**1,414**	701	202	180	222	108	**11,915**
	28,998	**5,828**	38	3,897	1,384	509	**15,824**	6,057	5,704	1,778	769	1,517	**120,970**
	17,800	**1,130**	1	468	7	653	**12,756**	5,792	991	1,550	3,973	450	**129,143**
	27,545	**428**	0	344	79	5	**6,203**	4,119	1,787	158	9	130	**69,850**
	247	**42**	-	0	1	41	**2,068**	604	846	350	139	129	**12,632**
	-	**-**	-	-	-	-	**-**	-	-	-	-	-	**603**
	-	**-**	-	-	-	-	**-**	-	-	-	-	-	**1,063**
	850	**156**	11	60	15	71	**1,474**	416	380	183	348	146	**32,013**
	94,573	**9,668**	**1,487**	**5,015**	**1,539**	**1,627**	**45,830**	**21,316**	**11,514**	**4,708**	**5,486**	**2,806**	**430,094**
	207,807	**86,057**	**19,395**	**28,103**	**18,931**	**19,628**	**90,240**	**24,561**	**12,375**	**19,150**	**17,660**	**16,493**	**1,530,563**

Exposure *In millions of euros*	Europe(*)								
	Total Europe	France	Belgium	Luxembourg	Italy	United Kingdom	Germany	Netherlands	Other European countries
Central governments or central banks	**217,765**	153,045	13,810	11,028	9,286	6,548	8,704	1,355	13,990
Institutions	**30,992**	7,953	8,688	308	3,243	3,187	1,516	1,191	4,907
Corporates	**336,923**	103,840	59,318	17,196	50,126	35,989	16,840	16,932	36,683
Retail	**256,151**	130,585	72,420	6,236	37,061	148	168	59	9,473
Other items	**381**	-	340	41	-	-	0	-	-
TOTAL IRB APPROACH	**842,212**	**395,422**	**154,576**	**34,809**	**99,716**	**45,872**	**27,227**	**19,537**	**65,052**
Central governments or central banks	**15,732**	6,955	2,286	20	1,613	5	120	4	4,728
Regional governments or local authorities	**3,329**	300	340	-	2,563	7	21	6	93
Public sector entities	**3,605**	463	352	-	2,757	4	12	2	15
Multilateral development banks	**1**	-	-	-	0	1	-	-	-
International organisations	**1,493**	-	147	-	-	-	-	-	1,346
Institutions	**10,509**	4,316	3,038	126	545	438	708	792	546
Corporates	**59,402**	20,028	1,799	1,055	8,802	3,834	4,511	1,389	17,984
Retail	**85,906**	18,786	2,594	5	25,918	9,821	15,579	633	12,572
Exposures secured by mortgages on immovable property	**36,865**	9,934	1,346	0	1,549	1,831	917	7,314	13,974
Exposures in default	**11,632**	3,054	126	6	5,313	340	470	58	2,265
Exposures in the form of units or shares in collective investment undertakings	**677**	677	-	-	-	-	-	-	-
Equity	**1,453**	937	-	516	-	-	-	-	-
Other items	**25,566**	11,667	2,628	723	4,532	1,635	1,567	357	2,456
TOTAL STANDARDISED APPROACH	**256,172**	**77,118**	**14,655**	**2,452**	**53,593**	**17,916**	**23,904**	**10,555**	**55,978**
TOTAL	**1,098,383**	**472,541**	**169,231**	**37,262**	**153,309**	**63,788**	**51,131**	**30,093**	**121,030**

(*) Within the scope of the European Union and the European Free Trade Association (EFTA).

												1 January 2018
	Asia Pacific					Rest of the World						
North America	Total Asia Pacific	Japan	North Asia	South-East Asia (ASEAN)	Indian peninsula & Pacific	Total Rest of the World	Turkey	Mediterranean	Gulf States & Africa	Latin America	Other countries	TOTAL
25,540	22,990	10,840	5,143	3,263	3,744	6,579	12	189	2,587	1,824	1,966	272,874
4,222	8,002	1,007	4,630	989	1,377	3,514	949	361	889	1,104	210	46,730
75,079	43,387	3,945	14,411	11,775	13,256	32,217	2,135	283	10,464	7,930	11,405	487,606
77	87	5	25	43	14	237	5	33	66	31	102	256,551
-	-	-	-	-	-	-	-	-	-	-	-	381
104,918	**74,466**	**15,798**	**24,208**	**16,070**	**18,391**	**42,547**	**3,101**	**866**	**14,006**	**10,890**	**13,684**	**1,064,142**
10,377	1,015	925	8	0	83	5,576	3,452	1,544	324	24	232	32,700
1,845	0	-	-	-	0	132	130	0	2	-	-	5,306
12,781	0	0	-	-	-	13	12	1	0	-	0	16,399
0	0	-	-	0	-	-	-	-	0	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	1,493
1,026	1,034	34	325	94	582	1,757	836	243	88	324	266	14,326
31,464	8,119	26	6,011	1,754	328	15,661	7,654	5,361	1,395	483	768	114,647
19,937	860	3	261	2	595	15,050	7,986	1,240	1,473	3,854	496	121,753
31,767	430	44	309	77	0	7,207	5,623	1,463	78	-	43	76,269
335	63	0	0	30	33	2,060	500	786	258	124	392	14,090
-	-	-	-	-	-	-	-	-	-	-	-	677
-	-	-	-	-	-	-	-	-	-	-	-	1,453
873	184	7	118	6	54	1,401	454	343	173	311	121	28,025
110,405	**11,706**	**1,038**	**7,031**	**1,964**	**1,674**	**48,856**	**26,649**	**10,981**	**3,790**	**5,120**	**2,317**	**427,139**
215,322	**86,172**	**16,836**	**31,239**	**18,033**	**20,064**	**91,403**	**29,749**	**11,847**	**17,796**	**16,009**	**16,000**	**1,491,280**

INDUSTRY DIVERSIFICATION

➤ TABLE 27: CREDIT RISK EXPOSURE BY INDUSTRY (EU CRB-D) [Audited]

Exposure *In millions of euros*	Agriculture, Food, Tobacco	Insurance	Chemicals excluding Pharmaceuticals	Building & Public works	Retail trade	Energy excluding Electricity	Equipment excluding IT Electronic	Finance	Real estate
Central governments or central banks	-	75	-	-	-	-	-	210,272	230
Institutions	0	3	52	54	283	-	-	37,474	77
Corporates	20,437	14,815	14,074	25,133	23,765	21,575	32,214	40,079	57,605
Retail	824	59	69	2,724	4,568	7	720	815	16,365
Other items	17	0	1	37	24	-	10	430	34
TOTAL IRB APPROACH	**21,278**	**14,953**	**14,195**	**27,948**	**28,640**	**21,581**	**32,944**	**289,070**	**74,311**
Central governments or central banks	-	-	-	-	-	-	-	10,419	-
Regional governments or local authorities	-	-	-	-	-	-	-	0	0
Public sector entities	-	82	-	1	0	-	-	2,046	1
Multilateral development banks	-	-	-	-	-	-	-	120	-
International organisations	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	3	10,834	-
Corporates	10,287	817	1,393	3,816	8,879	697	7,553	4,585	6,403
Retail	8,304	17	24	1,251	783	10	432	39	601
Exposures secured by mortgages on immovable property	3,164	51	98	602	1,532	13	607	182	9,580
Exposures in default	806	3	38	692	344	72	395	84	681
Exposures in the form of units or shares in collective investment undertakings	-	-	-	-	-	-	-	603	-
Equity	-	-	-	-	-	-	-	-	-
Other items	525	65	41	201	190	11	961	7,849	907
TOTAL STANDARDISED APPROACH	**23,086**	**1,035**	**1,594**	**6,563**	**11,729**	**803**	**9,951**	**36,761**	**18,173**
TOTAL	**44,364**	**15,988**	**15,789**	**34,511**	**40,369**	**22,384**	**42,895**	**325,831**	**92,484**

(*) Including cement, packaging, etc.
(**) Electricity, gas, water, etc.

5

												31 December 2018
	Information technologies	Minerals, metals & materials(*)	Wholesale trade	Private individual	Health-care & Pharmaceuticals	Services to public authorities(**)	Business services	Communication services	Sovereign	Transportation & Storage	Other	TOTAL
	-	-	-	-	15	0	5	-	74,186	-	27	**284,811**
	0	88	85	81	914	1,756	49	87	3,752	455	1,649	**46,859**
	18,430	22,968	37,759	1,599	10,653	30,431	43,938	16,998	196	38,310	33,428	**504,405**
	221	364	1,222	221,910	2,051	79	8,972	23	-	344	2,224	**263,561**
	2	14	34	94	3	11	33	0	0	75	12	**833**
	18,654	**23,434**	**39,100**	**223,684**	**13,636**	**32,276**	**52,995**	**17,109**	**78,134**	**39,184**	**37,341**	**1,100,469**
	-	-	-	-	-	-	0	-	20,254	-	0	**30,673**
	-	-	-	-	0	0	1	-	6,885	0	6	**6,892**
	0	-	-	1	2,226	52	15	1	8,579	90	1,124	**14,219**
	-	-	-	-	-	-	0	-	-	-	-	**120**
	-	-	-	-	-	-	0	-	0	-	-	**0**
	-	-	533	-	-	-	546	-	-	-	-	**11,915**
	3,156	5,361	14,525	14,155	2,385	3,570	16,196	1,597	99	4,537	10,960	**120,970**
	101	194	2,734	108,468	955	66	1,516	15	-	1,372	2,262	**129,143**
	200	634	3,913	43,101	1,389	96	1,223	10	-	401	3,052	**69,850**
	62	428	1,131	6,260	54	43	625	23	45	205	641	**12,632**
	-	-	-	-	-	-	0	-	-	-	-	**603**
	-	-	-	-	-	-	-	-	-	-	1,063	**1,063**
	20	67	909	6,915	30	253	5,346	330	1,963	725	4,703	**32,013**
	3,540	**6,685**	**23,745**	**178,900**	**7,040**	**4,079**	**25,468**	**1,976**	**37,826**	**7,331**	**23,811**	**430,094**
	22,193	**30,118**	**62,845**	**402,584**	**20,676**	**36,356**	**78,463**	**19,085**	**115,960**	**46,515**	**61,151**	**1,530,563**

Exposure *In millions of euros*	Agriculture, Food, Tobacco	Insurance	Chemicals excluding Pharmaceuticals	Building & Public works	Retail trade	Energy excluding Electricity	Equipment excluding IT Electronic	Finance	Real estate
Central governments or central banks	-	45	-	-	-	-	-	200,623	230
Institutions	60	89	-	55	247	-	54	37,849	77
Corporates	24,238	10,548	13,618	23,433	22,944	24,555	31,325	34,523	52,881
Retail	893	64	58	2,523	4,624	4	681	1,285	16,151
Other items	15	0	1	34	23	0	9	6	38
TOTAL IRB APPROACH	**25,206**	**10,747**	**13,678**	**26,045**	**27,838**	**24,559**	**32,070**	**274,287**	**69,377**
Central governments or central banks	79	0	-	34	7	0	51	15,476	687
Regional governments or local authorities	3	-	-	-	1	-	-	-	0
Public sector entities	6	20	-	1	-	-	-	3,355	1
Multilateral development banks	-	-	-	-	-	-	-	1	-
International organisations	-	-	-	-	-	-	574	-	-
Institutions	10	-	0	103	56	0	35	9,895	520
Corporates	10,671	965	1,445	4,051	8,697	839	6,586	3,777	6,172
Retail	7,932	13	13	1,195	683	12	407	140	709
Exposures secured by mortgages on immovable property	3,331	57	119	805	1,707	12	591	153	12,055
Exposures in default	830	22	48	804	423	86	546	67	890
Exposures in the form of units or shares in collective investment undertakings	-	-	-	-	-	-	-	677	-
Equity	-	-	-	-	-	-	-	-	-
Other items	164	2	3	217	29	18	2,210	5,066	463
TOTAL STANDARDISED APPROACH	**23,027**	**1,080**	**1,627**	**7,210**	**11,603**	**968**	**10,999**	**38,606**	**21,497**
TOTAL	**48,234**	**11,827**	**15,305**	**33,255**	**39,441**	**25,527**	**43,068**	**312,893**	**90,873**

(*) *Including cement, packaging, etc.*

(**) *Electricity, gas, water, etc.*

												1 January 2018
	Information technologies	Minerals, metals & materials(*)	Wholesale trade	Private individual	Healthcare & Pharmaceuticals	Services to public authorities(**)	Business services	Communication services	Sovereign	Transportation & Storage	Other	TOTAL
	-	-	-	-	21	21	7	-	71,898	-	29	**272,874**
	0	0	5	-	903	1,918	103	-	3,739	93	1,537	**46,730**
	15,974	22,228	36,275	1,623	13,088	30,580	41,528	14,349	219	38,265	35,411	**487,606**
	223	347	1,151	214,536	2,102	62	9,058	26	-	389	2,372	**256,551**
	2	11	30	82	6	9	28	0	0	69	19	**381**
	16,198	**22,586**	**37,461**	**216,241**	**16,120**	**32,591**	**50,724**	**14,375**	**75,855**	**38,816**	**39,369**	**1,064,142**
	4	49	182	1,877	1	79	220	1	13,524	415	13	**32,700**
	-	-	-	-	11	0	5	-	5,227	22	36	**5,306**
	3	-	-	2	2,026	46	22	0	9,988	39	891	**16,399**
	-	-	-	-	-	-	-	-	-	-	0	**1**
	-	-	-	0	-	-	-	-	147	-	772	**1,493**
	-	2	108	3,115	-	0	126	-	74	270	10	**14,326**
	2,986	4,951	13,577	14,343	2,663	3,235	12,292	1,738	45	5,424	10,189	**114,647**
	83	188	4,177	99,545	947	50	2,574	15	0	1,171	1,899	**121,753**
	193	597	4,848	46,218	960	96	865	6	-	478	3,178	**76,269**
	94	495	1,157	6,339	70	60	966	31	132	216	815	**14,090**
	-	-	-	-	-	-	-	-	-	-	-	**677**
	-	-	-	-	-	-	4	-	-	-	1,450	**1,453**
	2	36	894	5,770	82	1,249	4,681	62	2,500	404	4,173	**28,025**
	3,365	**6,319**	**24,944**	**177,208**	**6,760**	**4,815**	**21,755**	**1,854**	**31,638**	**8,439**	**23,426**	**427,139**
	19,563	**28,904**	**62,405**	**393,449**	**22,880**	**37,406**	**72,478**	**16,229**	**107,494**	**47,255**	**62,795**	**1,491,280**

Industry risks are monitored in terms of gross exposure and RWAs, in particular:

- Leveraged finance sector:

  At 31 December 2018, the Group's exposure to Leverage Buy-Out transactions ("LBO") was low at EUR 10.7 billion, or 0.7% of the Group's gross balance sheet and off-balance sheet commitments. These exposures are individually very small with an average amount of EUR 8.4 million per loan, and mainly concern European counterparties.

  Moreover, in accordance with the ECB Guidelines, the Group has put in place a system for monitoring companies whose leverage ratio exceeds the threshold set by the regulator;
- Shipping sector:

  The Shipping sector covers a set of sub-segments with very different dynamics: bulk, oil tankers, container carriers, oil services, and cruise.

  In 2018, despite the recovery of oil prices, the oil services sub-segment (offshore and oil tankers) continued to be affected. Similarly, bulk transport suffered from trade tensions at the international level and lower growth in China. Cruise was the only sub-segment to experience continued growth.

  Shipping gross exposure stood at EUR 17.5 billion as at 31 December 2018, i.e. 1.1% of the Group's on- and off-balance sheet exposures. This exposure is carried in particular by CIB (89%) and Domestic Markets (9%) with a high client diversification by country. Doubtful loans represent 6% of Group exposure to the Shipping sector.

The Group remains diversified. No sector makes up more than 10% of total corporate lending or more than 4% of total lending in 2018.

RISK-WEIGHTED ASSETS

TABLE 28: CREDIT RISK-WEIGHTED ASSETS

RWAs *In millions of euros*	31 December 2018	1 January 2018	Variation
IRB approach	**242,323**	**243,398**	**(1,075)**
Central governments and central banks	2,201	3,056	(855)
Corporates	175,335	177,900	(2,565)
Institutions	7,184	8,226	(1,042)
Retail	57,355	54,061	3,294
Other items	248	156	92
Standardised approach	**220,383**	**216,903**	**3,480**
Central governments or central banks	6,124	5,759	365
Regional governments or local authorities	781	658	123
Public sector entities	2,413	2,003	410
Multilateral development banks	-	-	-
International organisations	-	-	-
Institutions	4,530	6,713	(2,183)
Corporates	83,292	81,217	2,075
Retail	68,394	64,336	4,058
Exposures secured by mortgages on immovable property	26,082	29,088	(3,006)
Exposures in default	5,919	5,891	28
Exposures in the form of units or shares in collective investment undertakings	77	87	(10)
Equity	213	290	(77)
Other items	22,558	20,862	1,696
Equity positions under the simple weighting method	**41,146**	**43,997**	**(2,851)**
Private equity exposures in diversified portfolios	4,382	3,627	755
Listed equity exposures	3,912	5,445	(1,533)
Other equity exposures	32,851	34,925	(2,074)
CREDIT RISK	**503,851**	**504,298**	**(447)**

➤ TABLE 29: CREDIT RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU CR8)

In millions of euros	RWAs – Credit risk Total	RWAs – Credit risk of which IRB approach	Capital Requirements – Credit risk Total	Capital Requirements – Credit risk of which IRB approach
1 January 2018	**504,298**	**243,398**	**40,344**	**19,472**
Asset size	25,489	17,590	2,039	1,407
Asset quality	(30,056)	(26,411)	(2,404)	(2,113)
Model update	3,484	3,604	279	288
Methodology and policy	2,278	2,278	182	182
Acquisitons and disposals	(2,475)	(25)	(198)	(2)
Currency	977	1,985	78	159
Others	(144)	(95)	(12)	(8)
31 DECEMBER 2018	**503,851**	**242,323**	**40,308**	**19,386**

Credit risk-weighted assets decreased by EUR 0.5 billion in 2018, primarily as a result of the following:

- an increase of EUR 25 billion in line with business activity, including an increase of EUR 10 billion in Domestic Markets, EUR 9 billion in International Financial Services and EUR 6 billion in CIB;
- an improvement in asset quality resulting in a decrease of -EUR 30 billion, with improvement in risk parameters and the implementation of three securitisation programmes;
- an increase of EUR 3 billion relating to the update of models;
- an increase of EUR 2 billion linked to methodological changes, mainly related to the macro-prudential measure of mortgages in Belgium;
- a net fall of EUR 2 billion related to scope changes, in particular following the disposal of First Hawaiian Bank (FHB) and the acquisition of the core banking activities of Raiffeisen Bank in Poland.

CREDIT RISK: INTERNAL RATINGS BASED APPROACH (IRBA)

The internal rating system developed by the Group covers the entire Bank. The IRBA framework, validated in December 2007, covers the portfolio described in *Approaches used to calculate capital requirements* in the section entitled *Exposure to credit risk*.

The Group has developed specific internal models adapted for the most common categories of exposure and clients in its loan portfolio. BNP Paribas bases these developments on internal data gathered over long periods. Each of these models is developed and maintained by a specialist team, in conjunction with relevant RISK and business line experts. Moreover, verification is performed to ensure compliance with the floors set by the regulation on these models. The Bank does not use models developed by external suppliers.

Counterparty rating (or the Probability of Default) and the Loss Given Default is determined either using purely statistical models for portfolios with the highest degree of granularity (loans to individuals or to very small enterprises) or a combination of models and expert judgement based on indicative values.

Loss Given Default is defined as the loss that the Bank would suffer in the event of the counterparty's default in times of economic downturn, as required by regulations. For each transaction, it is measured using the recovery rate for a senior unsecured exposure to the counterparty, adjusted for any risk mitigation techniques (collaterals or guarantees). Amounts recoverable against these mitigants are estimated each year using conservative assumptions as well as haircuts calibrated to reflect economic downturn conditions.

The Bank models its own conversion factors on financing commitments by using internal default data. Conversion factors are used to measure the off-balance sheet exposure at risk in the event of a default. This parameter is assigned automatically depending on the transaction type for all portfolios and therefore, is not determined by the Credit Committees.

The breakdown of the main models used by the Group, their characteristics and main exposures covered are presented below.

TABLE 30: MAIN MODELS: PD, LGD AND CCF/EAD

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default/loss data	Main asset class
PD	Sovereigns	1	Qualitative	> 10 years	Central governments and central banks
	Banks	1	Quantitative + expert opinion	> 10 years	Institutions
	Insurance	1	Quantitative + expert opinion	> 10 years	Corporate – other
	Regulated funds & Agency arrangements	1	Qualitative	> 10 years	Corporate – other
	Large corporates	2	Quantitative + expert opinion	> 10 years	Corporate – other
	Real Estate non retail in France	1	Qualitative	> 10 years	Corporate – other
	Project financing	1	Qualitative	> 10 years	Corporate – specialised lending
	Energy and commodity financing	1	Quantitative + expert opinion	> 10 years	Corporate – specialised lending
	Non Retail Rating Global Policy	1	Qualitative	> 10 years	Corporate – other
	French Retail Banking – SME Corporate	1	Quantitative + expert opinion	> 10 years	Corporate – SME
	French Retail Banking – Professionals & Entrepreneurs	10	Quantitative	> 10 years	Retail – other SME
	French Retail Banking – Private life (Individuals & Professionnals)	8	Quantitative	> 10 years	Retail – other non-SME/qualifying Revolving/secured by real estate non-SME
	Personal Finance – France	1	Quantitative	> 10 years	Retail – other non-SME
	Belgian Retail Banking – SME	2	Quantitative + expert opinion	> 10 years	Retail – other/secured by real estate SME
	Belgian Retail Banking – Professionals	8	Quantitative	> 10 years	Retail – other SME/secured by real estate SME
	Belgian Retail Banking – Individuals	3	Quantitative	> 10 years	Retail – Secured by real estate non-SME
	Banca Nazionale del Lavoro – SME Corporate	2	Quantitative – logistic regression	6 years	Corporate – SME
	Banca Nazionale del Lavoro – Individuals	7	Quantitative – logistic regression	8 years	Retail – other non-SME
	Banca Nazionale del Lavoro – Professionals and Retail SME	7	Quantitative – logistic regression	8 years	Retail – other SME

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default/loss data	Main asset class
LGD	Sovereigns	1	Qualitative	> 10 years	Central governments and central banks
	Banks	1	Quantitative – calibrated on internal data	> 10 years	Institutions
	Insurance	1	Qualitative	> 10 years	Corporate – other
	Regulated funds & Agency arrangements	1	Qualitative	> 10 years	Corporate – other
	Large corporates	2	Quantitative – calibrated on internal data	> 10 years	Corporate – other
	Real Estate non retail in France	1	Qualitative – Asset valuation haircut	> 10 years	Corporate – other
	Project financing	1	Quantitative – calibrated on internal data	> 10 years	Corporate – specialised lending
	Energy and commodity financing	1	Quantitative – calibrated on internal data	> 10 years	Corporate – specialised lending
	Non Retail Rating Global Policy	1	Qualitative	> 10 years	Corporate – other
	French Retail Banking – SME Corporate	1	Quantitative – calibrated on internal data	> 10 years	Corporate – SME
	French Retail Banking – Professionals & Entrepreneurs	5	Quantitative – calibrated on internal data	> 10 years	Retail – other SME
	French Retail Banking – Private life (Individuals & Professionnals)	8	Quantitative – calibrated on internal data	> 10 years	Retail – other SME/qualifying Revolving/secured by real estate non-SME
	Personal Finance – France	1	Quantitative – calibrated on internal data	> 10 years	Retail – other non-SME
	Belgian Retail Banking – Professionnals & SME	1	Quantitative – calibrated on internal data	> 10 years	Retail – other SME/secured by real estate non-SME
	Belgian Retail Banking – Individuals	2	Quantitative – calibrated on internal data	> 10 years	Retail – Secured by real estate non-SME
	Banca Nazionale del Lavoro – Small Corporate	1	Quantitative – calibrated on internal data	> 10 years	Corporate – SME
	Banca Nazionale del Lavoro – Retail Individuals	2	Quantitative – calibrated on internal data	10 years	Retail – other non-SME
	Banca Nazionale del Lavoro – Professionals and Retail SME	2	Quantitative – calibrated on internal data	10 years	Retail – other SME

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default/loss data	Main asset class
CCF/EAD	CCF for corporates, banks and sovereigns	1	Quantitative – calibrated on internal data	> 10 years	Central governments and central banks
	French Retail Banking – Retail	4	Quantitative – calibrated on internal data	10 years	Retail
	Personal Finance – France	1	Quantitative – calibrated on internal data	> 10 years	Retail
	Belgian Retail Banking – Professionnals & SME	1	Quantitative – calibrated on internal data	> 10 years	Retail
	Belgian Retail Banking – Individuals	2	Quantitative – calibrated on internal data	> 10 years	Retail
	Banca Nazionale del Lavoro – Retail Individuals	1	CCF = 100%	-	Retail

BACKTESTING

Each of the three credit risk parameters (PD, LGD, CCF/EAD) is backtested and probability of default benchmarked annually to check the system's performance for each of the Bank's business segments. Backtesting consists in comparing estimated and actual outcomes for each parameter. Benchmarking consists in comparing the parameters estimated internally with those of external organisations.

For the non-Retail IRBA scope, all ratings, including default ratings 11 and 12, for all counterparties to which the Bank has a credit risk exposure, have been recorded over a long period of time. Likewise, observed losses on defaulted exposures during this period are also archived. Backtesting is performed on the basis of this information for each of the risk inputs, both globally and across the scope of each rating model. These exercises aim to measure overall performance and the performance of each rating method, and in particular, to verify the model's discriminatory power (*i.e.* the less well rated counterparties ought to default more often than the better rated ones) as well as the predictive, conservative nature of the parameters. For this purpose, observed losses and default rates are compared with estimated Global Recovery Rates and Probability of default for each rating. The "through the cycle" or "downturn" nature of these ratings and loss rates in the event of default (LGD) is also verified.

For benchmarking work on non-Retail exposures, internal ratings are compared with the external ratings of several agencies based on the mapping between internal and external rating scales. Around 10% of the Group's corporate clients have an external rating and the benchmarking studies reveal a conservative approach to internal ratings.

Performance measurements are also carried out on sub-scopes of homogeneous asset classes for Retail portfolios. If the predictive power or the conservative nature of a model has deteriorated, the model is recalibrated or redeveloped as appropriate. These changes are submitted to the regulator for approval in line with the regulations. Pending implementation of the new model, the bank takes conservative measures to enhance the conservatism of the existing model where necessary.

Backtesting of Loss Given Default is based mainly on analysing recovery cash flows for exposures in default. When the recovery process is closed for a given exposure, all recovered amounts are discounted back to the default date and then compared to the exposure amount. When the recovery process is not closed, the future recoveries are estimated by using either the amount of provisions, or historically calibrated statistical profiles. The recovery rate determined in this way is then compared with the initially forecasted rate one year before the default occurred. As with ratings, recovery rates are analysed on an overall basis and by rating policy and geographical area. Variances are analysed taking into account the marked bimodal distribution of recovery rates.

All of this work is reviewed annually in the Capital Committee (see section 5.2 under *Capital management*). Backtesting is also certified internally by an independent team and the results sent to the Supervisor.

The following two tables present an overview of the performance of models for regulatory risk parameters (PD and LGD) within the context of the Group's IRBA scope, using the following indicators:

- arithmetical average of the PD: average probability of default of performing loans weighted by the number of number of obligors in the portfolio in question;
- historic average default rates: average annual default rate (number of obligors defaulting during a financial year relative to the number of performing obligors at the end of the previous year) observed over a long historical period (see Table 30: *Main models: PD, LGD and CCF/EAD*);
- arithmetical average of the estimated LGD: average rate of loss in the event of default weighted by the number of obligors or by the amount of EAD depending on the portfolio in question;
- arithmetical average of the historic LGD observed: the rate of loss in the event of default observed over a long historical period (see Table 30: *Main models: PD, LGD and CCF/EAD*).

➤ TABLE 31: BACKTESTING OF PD (EU CR9)

				2017(*)			
Portfolio	BNP Paribas rating	Long-term issuer's credit rating	PD range	Arithmetical average PD	Number of non-defaulted obligors at the beginning of the exercise	Number of defaults among the non-defaulted obligors at the beginning of the exercise	Historic average default rates
Sovereigns and public sector entities	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.03%	107	-	0.00%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.27%	82	-	0.48%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	3.64%	32	-	0.28%
	9+ to 10-	B to C	8.76 to < 100%	17.64%	16	-	4.76%
Institutions(**)	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.05%	1,089	-	0.08%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.24%	890	-	0.15%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.63%	1,065	3	0.34%
	9+ to 10-	B to C	8.76 to < 100%	14.51%	69	2	1.88%
Large corporates(***)	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.06%	2,421	-	0.06%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.27%	5,308	2	0.15%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.74%	7,860	41	0.90%
	9+ to 10-	B to C	8.76 to < 100%	15.30%	471	31	12.27%
Individuals	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.04%	2,797,776	1,432	0.04%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.28%	1,838,568	5,323	0.28%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.40%	1,223,339	24,443	2.24%
	9+ to 10-	B to C	8.76 to < 100%	19.26%	116,362	18,881	17.82%
Professionals & SME retail	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.06%	73,674	71	0.07%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.31%	269,424	852	0.27%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.93%	373,505	8,835	2.24%
	9+ to 10-	B to C	8.76 to < 100%	23.98%	55,474	11,410	19.28%
SME corporate	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.08%	2,016	3	0.16%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.33%	27,523	52	0.26%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.51%	62,509	965	2.14%
	9+ to 10-	B to C	8.76 to < 100%	19.34%	5,092	734	17.37%

(*) Data based on the 2016 backtesting exercise for the Individuals, Professionals & SME retail and SME corporate portfolios.
(**) Including the Banks, Insurance and Regulated funds & Agency arrangements portfolios.
(***) Including the Large corporates, Real Estate non-retail in France, Project financing and Energy and Commodity financing portfolios.

➤ TABLE 32: BACKTESTING OF LGD

	2017(*)	
Portfolio	Arithmetical average of the estimated LGD	Historic arithmetic average of the observed LGD
Sovereigns and public sector entities	42%	27%
Institutions(**)	40%	29%
Large corporate(***)	27%	8%
Individuals	26%	19%
Professionals and SME retail (France and Italy)	36%	30%
SME corporate (France and Italy)	41%	29%
SME retail & SME corporate (Belgium)	29%	23%

(*) Data based on the 2016 backtesting exercise for the Individuals, Professionals & SME retail and SME corporate portfolios.
(**) Including the Banks, Insurance and Regulated funds & Agency arrangements portfolios.
(***) Including the Large corporates, Real Estate non-retail in France, Project financing and Energy and commodity financing portfolios.

INTERNAL RATING SYSTEM – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

[Audited]

The IRBA for sovereigns, financial institutions, corporates and specialised financing portfolios is based on a consistent rating procedure in which RISK has the final say regarding the rating assigned to the counterparty and the Global Recovery Rate (GRR) assigned to transactions. Credit Conversion Factors (CCF) of off-balance sheet transactions are automatically assigned according to counterparty and transaction type (see paragraph *Rating system* in the section *Credit risk management policy*).

The generic process for assigning a rating to each segment is as follows:

- for large corporates and specialised financing, an analysis is carried out by the unit proposing a rating and a Global Recovery Rate to the Credit Committee, using the rating models and tools developed by RISK. The rating and Global Recovery Rate are validated or revised by the RISK representative during the Credit Committee meeting. The Committee decides whether or not to grant or renew a loan and, if applicable, reviews the counterparty rating at least once a year;
- for financial institutions, the analysis is carried out by analysts in the RISK Function. Counterparty ratings and Global Recovery Rates are determined during review committees by geographical area to ensure comparability between similar banks;
- for sovereigns, the ratings are proposed by the Economic Research Department and approved at Country Committee (Rating Committee) meetings which take place several times a year. The Committee comprises members of Executive Management, the RISK Function and the business lines;
- for small and medium-sized companies (other than retail customers), a score is assigned by the RISK analysts.

For each of these sub-portfolios, the risk parameters are measured using a model certified and validated by the RISK teams, based mainly on an analysis of the Bank's historical data. The model is supported as far as possible by Group-wide shared tools to ensure consistent use. The method is supplemented by expert judgement provided it can be justified.

The method for assessing risk parameters is based on a set of common principles, and particularly the "two pairs of eyes" principle which requires at least two people, at least one of whom has no commercial involvement, to give their opinion on each counterparty rating and each transaction Global Recovery Rate.

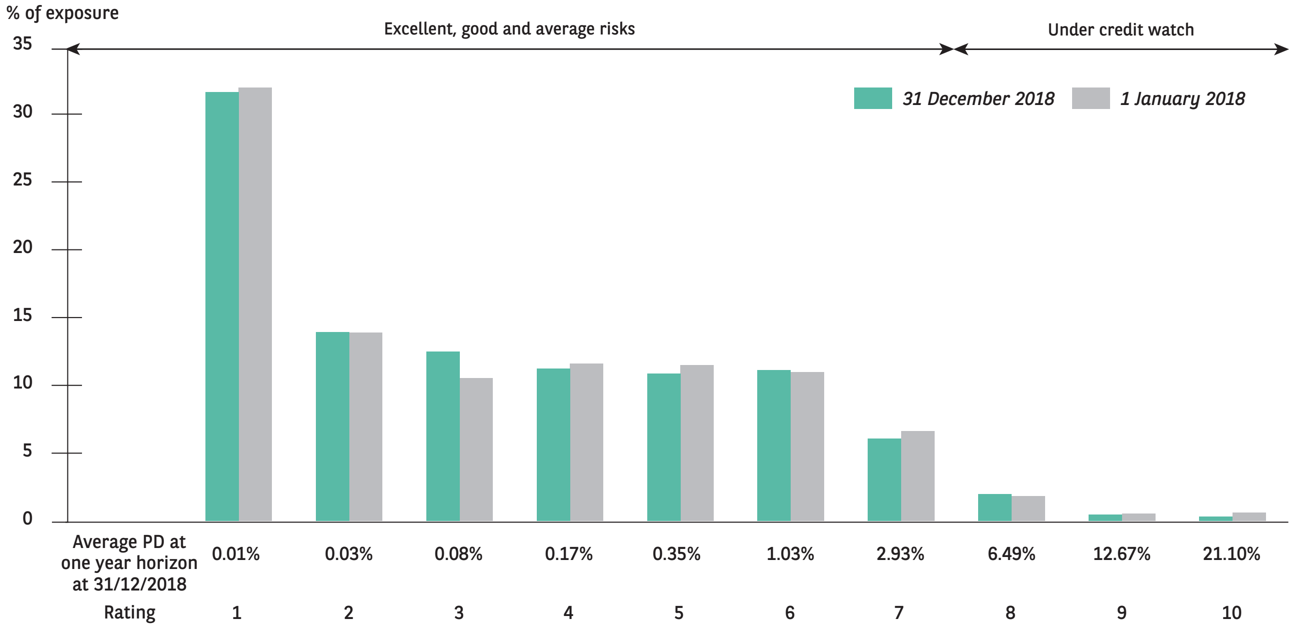
The same definition of default is used consistently throughout the Group for each asset class, in accordance with regulations.

The chart below shows a breakdown by credit rating of performing loans and commitments for the asset classes: central governments and central banks, financial institutions, corporates for all the Group's business lines, measured using the internal ratings based approach.

This exposure represented EUR 823 billion at 31 December 2018 compared with EUR 791 billion at 1 January 2018.

The majority of commitments are towards borrowers rated as good or excellent quality, reflecting the heavy weighting of large multinational groups and financial institutions in the Bank's client base. A significant proportion of commitments to non-investment grade borrowers are highly structured or secured by high quality guarantees implying a high recovery rate in the event of default. They include export financing covered by export credit insurance written by international agencies, project finance, structured finance and transaction financing.

➤ FIGURE 7: IRBA EXPOSURE BY INTERNAL RATING – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS [Audited]



SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

The table below presents the breakdown by PD range of the corporate loans and commitments for the asset classes: central governments and central banks, institutions and corporates for all the Group's business lines using the advanced IRB Approach. This exposure represented EUR 836 billion at 31 December 2018, including EUR 823 billion of performing loans and EUR 13 billion of non-performing loans, compared with EUR 807 billion at 1 January 2018, including EUR 791 billion of performing loans and EUR 16 billion of non-performing loans.

The table also gives the weighted averages of the main risk parameters in the Basel framework:

- average probability of default weighted by exposure at default: average PD ;
- weighted average of Credit Conversion Factor (CCF) for off-balance sheet items defined as the ratio of the exposure at default divided by the off-balance sheet exposure: average CCF;
- average Loss Given Default weighted by exposure at default: average LGD;
- average of residual maturities (in years) weighted by the exposure at default: average maturity;
- as well as the average risk weight: average RW defined as the ratio between risk-weighted assets and exposure at default (EAD).

The column "Expected loss" presents the expected loss at a one-year horizon.

➤ TABLE 33: IRBA EXPOSURE BY PD SCALE AND ASSET CLASS – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS (EU CR6)

		31 December 2018												
In millions of euros	PD range	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Number of obligors	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Central governments and central banks	0.00 to < 0.15%	275,585	1,815	277,400	55%	276,903	0.01%	1,000 to 10,000	1%	2	513	0%	1	
	0.15 to < 0.25%	1,525	18	1,543	52%	1,535	0.19%	0 to 100	16%	3	316	21%	0	
	0.25 to < 0.50%	2,509	81	2,590	63%	2,560	0.30%	0 to 100	22%	2	609	24%	2	
	0.50 to < 0.75%	799	732	1,530	55%	1,202	0.69%	0 to 100	12%	2	234	19%	1	
	0.75 to < 2.50%	163	1	164	64%	163	1.08%	0 to 100	29%	2	92	56%	0	
	2.50 to < 10.0%	717	164	881	64%	822	5.94%	0 to 100	9%	3	246	30%	4	
	10.0 to < 100%	403	197	600	75%	551	14.61%	0 to 100	6%	3	192	35%	7	
	100% (defaults)	101	1	103	55%	102	100.00%	0 to 100		2	0	0%	9	
SUB-TOTAL		**281,801**	**3,009**	**284,811**	**57%**	**283,837**	**0.10%**		**2%**	**2**	**2,201**	**1%**	**23**	**9**
Institutions	0.00 to < 0.15%	20,134	15,589	35,723	50%	27,919	0.05%	1,000 to 10,000	17%	2	2,632	9%	3	
	0.15 to < 0.25%	2,126	1,256	3,381	52%	2,778	0.18%	100 to 1,000	37%	2	953	34%	2	
	0.25 to < 0.50%	2,141	703	2,844	43%	2,443	0.34%	1,000 to 10,000	29%	2	976	40%	2	
	0.50 to < 0.75%	1,059	620	1,679	41%	1,317	0.67%	100 to 1,000	17%	2	849	64%	1	
	0.75 to < 2.50%	1,300	792	2,091	43%	1,646	1.28%	100 to 1,000	33%	2	1,089	66%	7	
	2.50 to < 10.0%	384	354	738	45%	545	4.44%	100 to 1,000	31%	2	493	90%	9	
	10.0 to < 100%	22	67	88	84%	78	21.34%	100 to 1,000	45%	2	183	234%	7	
	100% (defaults)	270	46	315	78%	305	100.00%	0 to 100		4	10	3%	206	
SUB-TOTAL		**27,434**	**19,426**	**46,859**	**49%**	**37,030**	**1.09%**		**21%**	**2**	**7,184**	**19%**	**237**	**250**
Corporates	0.00 to < 0.15%	56,531	131,721	188,253	52%	125,641	0.07%	10,000 to 20,000	38%	2	25,709	20%	32	
	0.15 to < 0.25%	29,955	30,598	60,553	47%	44,496	0.18%	10,000 to 20,000	35%	2	15,286	34%	28	
	0.25 to < 0.50%	47,249	32,567	79,816	48%	63,185	0.35%	40,000 to 50,000	33%	3	28,955	46%	72	
	0.50 to < 0.75%	15,525	15,420	30,945	32%	20,608	0.68%	20,000 to 30,000	27%	3	12,510	61%	37	
	0.75 to < 2.50%	50,140	27,051	77,192	44%	62,210	1.34%	60,000 to 70,000	28%	3	41,661	67%	233	
	2.50 to < 10.0%	32,532	16,626	49,158	48%	40,655	4.33%	50,000 to 60,000	32%	3	43,644	107%	503	
	10.0 to < 100%	3,186	2,274	5,461	54%	4,422	16.56%	1,000 to 10,000	30%	3	6,949	157%	220	
	100% (defaults)	11,551	1,476	13,028	40%	12,159	100.00%	10,000 to 20,000		2	621	5%	6,907	
SUB-TOTAL		**246,670**	**257,735**	**504,405**	**49%**	**373,376**	**4.29%**		**34%**	**3**	**175,335**	**47%**	**8,032**	**8,401**
TOTAL		**555,905**	**280,170**	**836,075**	**49%**	**694,244**	**2.41%**		**20%**	**2**	**184,720**	**27%**	**8,292**	**8,660**

(*) *Add-on included.*

(**) *The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.*

In millions of euros	PD range	1 January 2018 Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Number of obligors	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Central governments and central banks	0.00 to < 0.15%	263,607	2,146	265,754	65%	265,216	0.01%	100 to 1,000	2%	2	1,014	0%	1	
	0.15 to < 0.25%	595	20	615	53%	606	0.16%	0 to 100	10%	2	39	6%	0	
	0.25 to < 0.50%	2,734	48	2,782	54%	2,760	0.34%	0 to 100	29%	2	1,017	37%	3	
	0.50 to < 0.75%	865	819	1,684	55%	1,316	0.69%	0 to 100	12%	2	271	21%	1	
	0.75 to < 2.50%	241	2	243	71%	242	1.49%	0 to 100	24%	3	157	65%	1	
	2.50 to < 10.0%	828	158	987	55%	915	6.26%	100 to 1,000	8 %	3	260	28%	4	
	10.0 to < 100%	484	236	720	74%	659	16.20%	0 to 100	8 %	3	293	44%	10	
	100% (defaults)	90	-	90	-	90	100.00%	0 to 100		3	5	6%	19	
SUB-TOTAL		**269,444**	**3,430**	**272,874**	**63%**	**271,804**	**0.11%**		**2 %**	**2**	**3,056**	**1%**	**38**	**60**
Institutions	0.00 to < 0.15%	19,192	12,899	32,092	59%	26,765	0.05%	1,000 to 10,000	18%	2	2,568	10%	3	
	0.15 to < 0.25%	2,137	3,688	5,825	49%	3,931	0.17%	100 to 1,000	35%	2	1,081	28%	2	
	0.25 to < 0.50%	3,317	852	4,169	43%	3,693	0.32%	100 to 1,000	23%	2	1,249	34%	3	
	0.50 to < 0.75%	1,014	430	1,445	31%	1,147	0.67%	100 to 1,000	27%	2	1,241	108%	2	
	0.75 to < 2.50%	1,179	813	1,992	61%	1,674	1.33%	100 to 1,000	32%	2	1,170	70%	7	
	2.50 to < 10.0%	480	331	811	44%	628	4.05%	100 to 1,000	40%	2	806	128%	10	
	10.0 to < 100%	14	61	75	82%	64	22.94%	100 to 1,000	33%	1	101	159%	5	
	100% (defaults)	294	28	322	100%	321	100.00%	0 to 100		4	9	3%	197	
SUB-TOTAL		**27,628**	**19,102**	**46,730**	**55%**	**38,225**	**1.11%**		**22%**	**2**	**8,226**	**22%**	**229**	**288**
Corporates	0.00 to < 0.15%	48,114	122,603	170,718	53%	113,366	0.07%	10,000 to 20,000	38%	2	23,510	21%	28	
	0.15 to < 0.25%	26,561	34,126	60,687	48%	43,253	0.18%	10,000 to 20,000	37%	3	16,106	37%	29	
	0.25 to < 0.50%	47,043	33,110	80,154	50%	63,703	0.35%	30,000 to 40,000	35%	3	31,097	49%	77	
	0.50 to < 0.75%	15,682	14,174	29,856	33%	20,537	0.68%	20,000 to 30,000	27%	3	11,799	57%	38	
	0.75 to < 2.50%	48,022	25,951	73,973	43%	59,548	1.36%	50,000 to 60,000	29%	3	39,927	67%	229	
	2.50 to < 10.0%	31,527	17,969	49,495	48%	40,216	4.27%	40,000 to 50,000	32%	3	43,361	108%	536	
	10.0 to < 100%	4,650	2,655	7,305	48%	5,963	18.25%	1,000 to 10,000	33%	2	10,738	180%	379	
	100% (defaults)	13,749	1,670	15,419	47%	14,517	100.00%	10,000 to 20,000		2	1,362	9%	8,181	
SUB-TOTAL		**235,348**	**252,258**	**487,606**	**49%**	**361,101**	**5.16%**		**35%**	**3**	**177,900**	**49%**	**9,498**	**9,382**
TOTAL		**532,420**	**274,790**	**807,210**	**50%**	**671,130**	**2.89%**		**20%**	**2**	**189,182**	**28%**	**9,766**	**9,731**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

Most of the Group's Central government and central bank counterparties are of very high credit quality and based in developed countries, meaning that they have very good internal ratings and very low average Loss Given Default.

The majority of the Group's corporate commitments concerns counterparties of excellent or good quality, reflecting the large part of multinationals in BNP Paribas' customer base. Other exposures are mainly structured transactions or transactions secured by high-quality assets, reflected in their average LGD levels.

On average, the probability of default excluding counterparty default stands at 0.61%. It is 1.07% for Corporates.

➤ TABLE 34: AVERAGE PD AND LGD OF THE CORPORATE ASSET CLASS BY GEOGRAPHIC REGION

	31 December 2018		
In millions of euros	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	328,755	1.10%	34%
of which France	*100,575*	*1.07%*	*37%*
of which Belgium	*62,970*	*1.65%*	*26%*
of which Luxembourg	*16,442*	*0.97%*	*31%*
of which Italy	*42,613*	*1.17%*	*40%*
North America	85,985	0.81%	35%
Asia Pacific	45,829	1.10%	35%
Rest of the World	30,809	1.30%	29%
TOTAL	**491,378**	**1.07%**	**34%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

	1 January 2018		
In millions of euros	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	322,218	1.17%	35%
of which France	*102,242*	*1.09%*	*38%*
of which Belgium	*59,307*	*1.60%*	*27%*
of which Luxembourg	*15,507*	*1.05%*	*30%*
of which Italy	*43,706*	*1.31%*	*42%*
North America	75,332	1.06%	35%
Asia Pacific	46,376	1.08%	38%
Rest of the World	28,262	1.90%	27%
TOTAL	**472,187**	**1.19%**	**35%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

INTERNAL RATING SYSTEM SPECIFIC TO RETAIL CUSTOMERS [Audited]

Retail customers are characterised by a high degree of granularity, small unit volumes and a standard risk profile.

The majority of retail borrowers are assigned a behavioural score which serves as a basis to determine the probability of default and, for each transaction, the Global Recovery Rate (GRR) and Exposure at Default (EAD). These parameters are calculated every month on the basis of the most up-to-date information. They are supplemented by different scores that are made available to the commercial function. The latter has no involvement in determining risk parameters. These methods are used consistently for all retail customers. The general principles of the rating system are set out in the *Rating System* paragraph in the section *Credit Risk Management Policy*.

Scoring techniques are used to assign retail customers to risk groups presenting the same default risk characteristics. This also applies to the other credit risk inputs: EAD and LGD.

The chart below shows a breakdown by credit rating of performing loans and commitments in the retail book for all the Group's business lines, measured using the internal ratings based approach.

This exposure to performing loans represented EUR 253 billion at 31 December 2018, an increase compared with EUR 245 billion at 1 January 2018.

➤ **FIGURE 8: IRBA EXPOSURE BY INTERNAL RATING – RETAIL PORTFOLIO** [Audited]

RETAIL PORTFOLIO

The following table gives the breakdown by PD range of the retail loans and commitments for all of the Group's business lines using the advanced IRB Approach. Total exposure represented EUR 264 billion as at 31 December 2018 compared with EUR 257 billion as at 1 January 2018.

➤ TABLE 35: IRBA EXPOSURE BY INTERNAL RATING AND ASSET CLASS – RETAIL PORTFOLIO (EU CR6)

		31 December 2018											
In millions of euros	PD scale	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Mortgages	0.00 to < 0.15%	67,090	2,860	69,950	100%	69,958	0.06%	12%	5	1,416	2%	5	
	0.15 to < 0.25%	15,839	531	16,370	100%	16,372	0.18%	13%	5	945	6%	4	
	0.25 to < 0.50%	34,751	1,002	35,753	95%	35,743	0.36%	16%	5	3,698	10%	20	
	0.50 to < 0.75%	13,211	619	13,829	68%	13,645	0.64%	15%	5	4,746	35%	13	
	0.75 to < 2.50%	16,004	855	16,859	81%	16,730	1.44%	15%	5	4,937	30%	37	
	2.50 to < 10.0%	7,812	299	8,112	66%	8,028	4.85%	17%	5	4,760	59%	65	
	10.0 to < 100%	2,995	69	3,064	70%	3,045	20.77%	16%	5	3,074	101%	102	
	100% (defaults)	3,952	17	3,969	56%	3,964	100.00%		4	1,849	47%	1,204	
SUB-TOTAL		**161,655**	**6,252**	**167,907**	**91%**	**167,485**	**3.29%**	**14%**	**5**	**25,425**	**15%**	**1,450**	**1,446**
Revolving exposures	0.00 to < 0.15%	171	6,192	6,363	88%	5,932	0.08%	64%	1	180	3%	3	
	0.15 to < 0.25%	66	973	1,039	84%	921	0.18%	63%	1	62	7%	1	
	0.25 to < 0.50%	151	1,459	1,610	51%	942	0.34%	64%	1	80	9%	2	
	0.50 to < 0.75%	196	712	907	43%	519	0.62%	65%	1	140	27%	2	
	0.75 to < 2.50%	1,202	2,036	3,238	46%	2,177	1.37%	53%	1	795	37%	15	
	2.50 to < 10.0%	1,707	852	2,559	65%	2,279	5.31%	51%	1	1,380	61%	62	
	10.0 to < 100%	964	200	1,164	66%	1,114	24.73%	53%	1	772	69%	148	
	100% (defaults)	1,117	33	1,150	78%	1,144	100.00%		1	358	31%	867	
SUB-TOTAL		**5,573**	**12,458**	**18,031**	**72%**	**15,028**	**10.53%**	**59%**	**1**	**3,768**	**25%**	**1,101**	**1,080**
Other exposures	0.00 to < 0.15%	10,281	2,736	13,017	88%	12,785	0.07%	40%	3	972	8%	4	
	0.15 to < 0.25%	2,922	1,116	4,038	86%	3,937	0.19%	41%	2	626	16%	3	
	0.25 to < 0.50%	11,539	2,538	14,078	91%	14,029	0.34%	36%	3	2,789	20%	17	
	0.50 to < 0.75%	6,591	1,568	8,159	61%	7,622	0.63%	37%	3	3,853	51%	18	
	0.75 to < 2.50%	15,205	3,011	18,216	87%	17,988	1.44%	36%	3	8,706	48%	93	
	2.50 to < 10.0%	9,524	1,301	10,825	84%	10,723	4.86%	37%	3	6,414	60%	191	
	10.0 to < 100%	3,684	153	3,837	95%	3,866	26.00%	37%	3	2,772	72%	383	
	100% (defaults)	5,356	98	5,454	88%	5,450	100.00%		2	2,030	37%	3,579	
SUB-TOTAL		**65,102**	**12,522**	**77,624**	**85%**	**76,400**	**9.62%**	**37%**	**3**	**28,163**	**37%**	**4,287**	**4,158**
TOTAL		**232,329**	**31,232**	**263,561**	**81%**	**258,913**	**5.58%**	**23%**	**4**	**57,355**	**22%**	**6,837**	**6,685**

(*) *Add-on included.*

(**) *The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.*

In millions of euros	PD scale	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
													1 January 2018
Mortgages	0.00 to < 0.15%	63,006	2,838	65,844	100%	65,852	0.06%	12%	5	1,322	2%	5	
	0.15 to < 0.25%	16,008	558	16,566	100%	16,567	0.18%	13%	5	926	6%	4	
	0.25 to < 0.50%	32,848	915	33,763	96%	33,768	0.36%	16%	5	3,480	10%	19	
	0.50 to < 0.75%	12,089	595	12,684	67%	12,507	0.64%	15%	5	3,395	27%	12	
	0.75 to < 2.50%	16,002	837	16,839	79%	16,697	1.48%	15%	5	4,452	27%	37	
	2.50 to < 10.0%	7,517	272	7,789	64%	7,715	4.81%	16%	5	3,958	51%	60	
	10.0 to < 100%	3,090	65	3,155	70%	3,139	22.29%	16%	5	2,733	87%	110	
	100% (defaults)	4,202	20	4,222	53%	4,216	100.00%		4	1,711	41%	1,188	
SUB-TOTAL		**154,762**	**6,100**	**160,862**	**91%**	**160,461**	**3.62%**	**14%**	**5**	**21,979**	**14%**	**1,435**	**1,601**
Revolving exposures	0.00 to < 0.15%	109	5,741	5,850	94%	5,768	0.09%	62%	1	187	3%	3	
	0.15 to < 0.25%	45	655	700	65%	501	0.19%	70%	1	36	7%	1	
	0.25 to < 0.50%	107	1,973	2,081	53%	1,203	0.32%	60%	1	97	8%	2	
	0.50 to < 0.75%	166	451	617	49%	404	0.63%	67%	1	106	26%	2	
	0.75 to < 2.50%	1,137	2,355	3,493	43%	2,170	1.31%	51%	1	732	34%	14	
	2.50 to < 10.0%	1,629	915	2,545	67%	2,260	5.03%	48%	1	1,255	56%	55	
	10.0 to < 100%	1,040	253	1,292	58%	1,202	23.74%	55%	1	880	73%	172	
	100% (defaults)	1,147	36	1,183	75%	1,175	100.00%		1	247	21%	909	
SUB-TOTAL		**5,381**	**12,379**	**17,760**	**72%**	**14,684**	**11.00%**	**58%**	**1**	**3,542**	**24%**	**1,158**	**1,211**
Other exposures	0.00 to < 0.15%	9,669	2,591	12,260	88%	12,031	0.07%	41%	3	914	8%	3	
	0.15 to < 0.25%	2,820	1,000	3,821	85%	3,786	0.19%	41%	3	606	16%	3	
	0.25 to < 0.50%	12,119	2,366	14,485	91%	14,602	0.35%	36%	3	2,862	20%	18	
	0.50 to < 0.75%	6,574	1,477	8,051	59%	7,548	0.64%	38%	3	3,599	48%	18	
	0.75 to < 2.50%	15,698	3,018	18,715	86%	18,577	1.47%	36%	3	8,772	47%	98	
	2.50 to < 10.0%	9,289	1,272	10,562	81%	10,467	4.88%	37%	3	5,924	57%	187	
	10.0 to < 100%	3,809	148	3,957	93%	3,985	26.51%	41%	2	2,899	73%	481	
	100% (defaults)	5,980	99	6,079	83%	6,069	100.00%		2	2,964	49%	3,793	
SUB-TOTAL		**65,958**	**11,971**	**77,929**	**83%**	**77,066**	**10.41%**	**38%**	**3**	**28,540**	**37%**	**4,601**	**4,878**
TOTAL		**226,100**	**30,451**	**256,551**	**80%**	**252,211**	**6.12%**	**23%**	**4**	**54,061**	**21%**	**7,195**	**7,691**

(*) Add-on included.
(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

Most of the mortgage exposures concern French Retail Banking, Belgian Retail Banking and Luxembourg Retail Banking. Mortgages are issued according to strict and well-defined procedures. Average probability of default on retail clients' performing loans is 1.56%. The low average Loss Given Default level reflects the guarantees put in place when the mortgages were granted. Since 2013, all credit institutions have implemented an add-on for risk-weighted assets on the Belgian mortgage portfolio at the supervisor's request.

Most of the revolving exposures and other exposures relate to consumer loans subsidiaries that have a wider range of customers in terms of credit quality and a lower level of guarantees.

TABLE 36: AVERAGE PD AND LGD OF THE RETAIL PORTFOLIO BY GEOGRAPHIC REGION

In millions of euros	31 December 2018		
	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	252,638	1.56%	23%
of which France	*128,986*	*1.50%*	*24%*
of which Belgium	*73,131*	*1.37%*	*18%*
of which Luxembourg	*7,067*	*0.92%*	*23%*
of which Italy	*32,673*	*1.66%*	*24%*
North America	69	n.s.	n.s.
Asia Pacific	78	n.s.	n.s.
Rest of the World	202	n.s.	n.s.
TOTAL	**252,988**	**1.56%**	**23%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

In millions of euros	1 January 2018		
	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	244,693	1.65%	23%
of which France	*125,927*	*1.59%*	*24%*
of which Belgium	*71,211*	*1.51%*	*18%*
of which Luxembourg	*6,162*	*0.87%*	*23%*
of which Italy	*32,133*	*1.77%*	*25%*
North America	71	n.s.	n.s.
Asia Pacific	85	n.s.	n.s.
Rest of the World	220	n.s.	n.s.
TOTAL	**245,068**	**1.65%**	**23%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

5

CREDIT RISK: STANDARDISED APPROACH

For exposures under the standardised approach, BNP Paribas uses the external ratings from External Credit Assessment Institutions (ECAIs) Standard & Poor's, Moody's, Fitch Ratings, Euler Hermes Rating GmbH, Cerved and Banque de France in accordance with the instructions issued by the supervisor.

When there is no directly applicable external rating, the issuer's senior unsecured rating may, if available, be obtained from external databases and used for risk-weighting purposes in some cases.

As at 31 December 2018, standardised approach exposure represents 28% of the BNP Paribas Group's total gross exposures to credit risk, stable compared with 1 January 2018.

The following table shows a summary of standardised risk-weighted exposures broken down by regulatory asset class. The equity exposures weighted using the standardised approach consist primarily of asset value guarantees given to fund unit holders.

➤ TABLE 37: STANDARDISED CREDIT RISK EXPOSURE BY STANDARD EXPOSURE CLASS (EU CR4) [Audited]

	31 December 2018					
	Gross exposure		EAD			
In millions of euros	Balance sheet	Off-balance sheet	Balance sheet	Off-balance sheet	RWAs	RWA density
Central governments or central banks	30,663	10	34,956	4	6,124	18%
Regional governments or local authorities	4,130	2,762	4,137	610	781	16%
Public sector entities	12,397	1,823	12,855	386	2,413	18%
Multilateral development banks	120	-	120	-	-	0%
International organisations	0	-	0	-	-	0%
Institutions	10,609	1,306	11,582	483	4,530	38%
Corporates	87,591	33,379	80,838	13,182	83,292	89%
Retail	98,592	30,551	93,768	3,151	68,394	71%
Exposures secured by mortgages on immovable property	62,704	7,146	56,321	1,635	26,082	45%
Exposures in default	12,278	354	5,127	115	5,919	113%
Exposures in the form of units or shares in collective investment undertakings	-	603	-	188	77	41%
Equity	-	1,063	-	213	213	100%
Other items	32,013	-	32,013	-	22,558	70%
TOTAL	**351,097**	**78,997**	**331,718**	**19,968**	**220,383**	**63%**

	1 January 2018					
	Gross exposure		EAD			
In millions of euros	Balance sheet	Off-balance sheet	Balance sheet	Off-balance sheet	RWAs	RWA density
Central governments or central banks	32,695	5	36,291	2	5,759	16%
Regional governments or local authorities	3,401	1,904	3,385	624	658	16%
Public sector entities	14,515	1,884	14,996	448	2,003	13%
Multilateral development banks	1	-	1	-	-	0%
International organisations	1,346	147	1,346	147	-	0%
Institutions	13,068	1,258	13,111	700	6,713	49%
Corporates	81,936	32,711	75,851	13,046	81,217	91%
Retail	91,905	29,848	87,749	3,495	64,336	71%
Exposures secured by mortgages on immovable property	68,796	7,474	63,374	1,658	29,088	45%
Exposures in default	13,808	282	5,273	107	5,891	109%
Exposures in the form of units or shares in collective investment undertakings	-	677	-	186	87	47%
Equity	4	1,450	-	290	290	100%
Other items	28,025	-	28,025	-	20,862	74%
TOTAL	**349,500**	**77,639**	**329,402**	**20,703**	**216,903**	**62%**

The EUR 3.3 billion increase, excluding currency effects, in exposures treated by using the standard approach is related to the increased exposures from the growth of Personal Finance as well as the acquisition of the core banking activities of Raiffeisen Bank in Poland offset by reduced exposures in the United States following the sale of First Hawaiian Bank.

The following table gives the breakdown by standard asset class, the distribution by risk weight of the loans and commitments in the book for all the Group's business lines using the standardised approach. Exposure at default was EUR 352 billion at 31 December 2018 compared to EUR 350 billion at 1 January 2018.

TABLE 38: STANDARDISED CREDIT EAD (EU CR5) [Audited]

Risk weight *In millions of euros*									31 December 2018	
										EAD
	0%	20%	35%	50%	75%	100%	150%	Other	Total	of which unrated(*)
1 Central governments or central banks	27,167	1,455	-	1,012	-	5,326	-	-	**34,960**	17,237
2 Regional governments or local authorities	1,466	3,125	-	0	-	156	-	-	**4,747**	1,306
3 Public sector entities	8,336	3,067	-	76	-	1,761	-	-	**13,241**	7,711
4 Multilateral development banks	120	0	-	-	-	-	-	-	**120**	0
5 International organisations	0	0	-	-	-	-	-	-	**0**	0
6 Institutions	804	7,645	-	1,239	-	2,371	7	-	**12,066**	1,153
7 Corporates	1,330	7,206	-	6,217	-	78,378	891	-	**94,021**	66,297
8 Retail	-	-	-	-	96,919	-	-	-	**96,919**	96,919
9 Exposures secured by mortgages on immovable property	-	-	30,249	18,768	6,108	2,804	27	-	**57,956**	57,034
10 Exposures in default	-	-	-	-	-	3,887	1,355	-	**5,242**	5,198
14 Exposures in the form of units or shares in collective investment undertakings	68	54	-	-	-	66	-	-	**188**	188
15 Equity	-	-	-	-	-	213	-	-	**213**	213
16 Other items	3,622	113	-	90	-	13,343	-	14,845	**32,013**	30,192
17 TOTAL	**42,912**	**22,665**	**30,249**	**27,403**	**103,027**	**108,305**	**2,281**	**14,845**	**351,686**	**283,447**

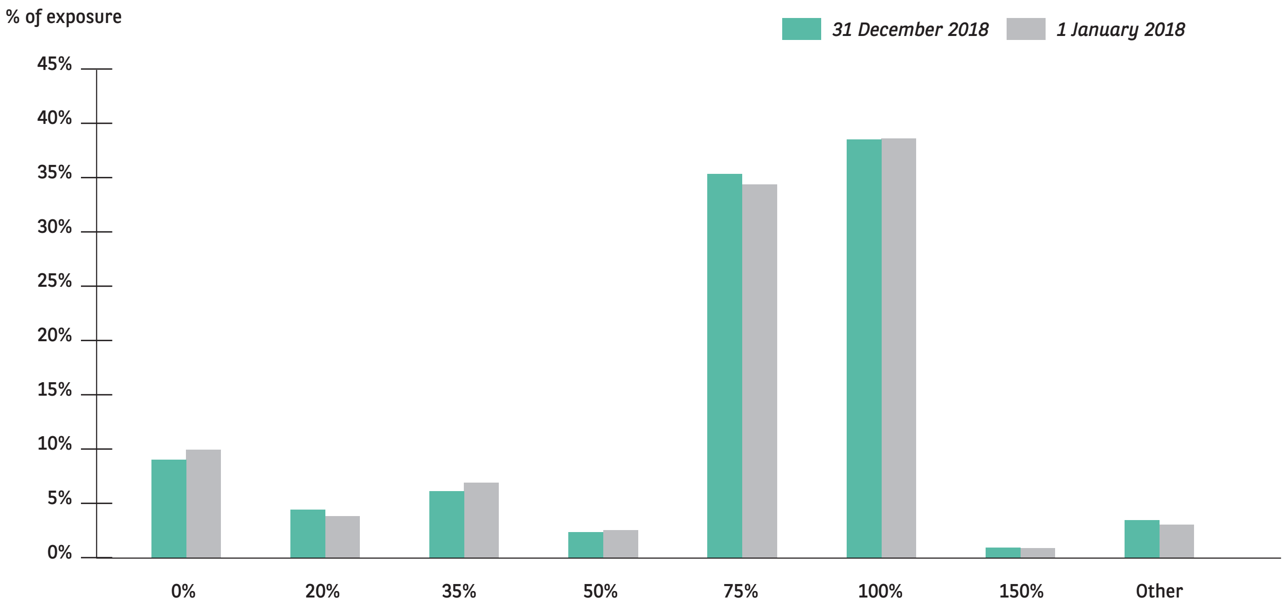
(*) *Exposures to counterparties without a credit rating from external rating agencies.*

Risk weight *In millions of euros*	1 January 2018									
	EAD									
	0%	20%	35%	50%	75%	100%	150%	Other	Total	of which unrated(*)
1 Central governments or central banks	28,960	960	-	1,187	-	4,937	-	248	**36,293**	17,527
2 Regional governments or local authorities	1,267	2,602	-	0	-	135	-	3	**4,008**	1,433
3 Public sector entities	10,578	3,519	-	47	-	1,268	-	33	**15,445**	9,950
4 Multilateral development banks	1	0	-	-	-	-	-	-	**1**	-
5 International organisations	1,493	0	-	-	-	-	-	-	**1,493**	147
6 Institutions	-	6,247	-	4,124	-	3,356	1	83	**13,811**	2,304
7 Corporates	-	4,510	-	4,752	-	77,726	930	980	**88,897**	70,832
8 Retail	-	-	-	-	90,855	0	-	390	**91,245**	91,244
9 Exposures secured by mortgages on immovable property	-	-	33,669	20,484	6,614	3,508	31	725	**65,032**	63,981
10 Exposures in default	-	-	-	-	-	3,990	1,087	302	**5,380**	5,357
14 Exposures in the form of units or shares in collective investment undertakings	57	53	-	-	-	76	-	-	**186**	186
15 Equity	-	-	-	-	-	290	-	-	**290**	290
16 Other items	3,446	171	-	112	-	14,141	-	10,156	**28,025**	27,714
17 TOTAL	**45,802**	**18,062**	**33,669**	**30,707**	**97,469**	**109,427**	**2,049**	**12,920**	**350,105**	**290,965**

(*) *Exposures to counterparties without a credit rating from external rating agencies.*

The following chart shows a breakdown by risk weight of EAD outstandings relating to credit risk for all the Group's business lines, measured using the standardised approach:

FIGURE 9: STANDARDISED EXPOSURES BY RISK WEIGHT



CREDIT RISK: EQUITIES UNDER THE SIMPLE WEIGHTING METHOD

EXPOSURE [Audited]

Exposures under the simple weighting method at 31 December 2018 amounted to EUR 13.0 billion, versus EUR 13.6 billion at 1 January 2018.

Scope

The shares held by the Group outside trading portfolios are securities conferring residual and subordinated rights on issuer's assets or income, or securities representing a similar economic nature. They encompass:

- listed and unlisted shares, including shares in investment funds;
- embedded options of convertible bonds, redeemable or exchangeable for shares;
- equity options;
- Super Subordinated Securities;
- private funds commitments;
- equity holdings hedge;
- shares of consolidated entities using the equity method.

The scope of exposures benefiting from the simple weighting method does not include the following items:

- stakes higher than 10% in credit or financial institutions, mainly consolidated by the equity method or held as financial assets at fair value through equity, are exempt from the equity deduction, being weighted at a flat rate of 250% (exposure of EUR 3.3 billion at 31 December 2018);
- asset value guarantees given to UCITS unit holders are weighted using the standardised approach (exposure of EUR 1.3 billion at 31 December 2018).

Accounting principles and valuation methods

Accounting principles and valuation methods are set out in note 1.e to the consolidated financial statements – *Financial assets and liabilities*.

Total gains and losses

Total unrealised gains and losses recorded in shareholders' equity are set out in note 5.c. to the consolidated financial statements – *Financial assets at fair value through equity*.

RISK-WEIGHTED ASSETS

Equity risk is calculated according to the simple weighting method, which gives the following weightings:

- 190% for investments held for medium/long-term valuation purposes within the framework of the Principal Investments business, as well as private equity exposures in diversified portfolios in line with the Bank's business line activities;
- 290% for exposures in the form of listed securities, including primarily investments related to the Bank's business line activities. In addition, some exposures relating to Principal Investments are also included in this category;
- 370% for all other exposures in the form of equities, primarily including entities consolidated using the equity method (including the Group's insurance entities in the prudential scope that are included in the Table 40: *Insurance undertakings*). Furthermore, this weighting is also applied to unlisted investments in non-diversified portfolios.

➤ **TABLE 39: EQUITY POSITIONS UNDER THE SIMPLE WEIGHTING METHOD (EU CR10)** [Audited]

	31 December 2018						
	Gross exposure						
In millions of euros	On-balance-sheet amount	Off-balance-sheet amount	Total	EAD	Risk weight	RWAs	Capital requirement
Private equity exposures in diversified portfolios	1,983	648	2,630	2,306	190%	4,382	351
Listed equity exposures	1,193	213	1,405	1,349	290%	3,912	313
Other equity exposures	8,834	89	8,923	8,879	370%	32,851	2,628
TOTAL	**12,010**	**949**	**12,959**	**12,534**		**41,146**	**3,292**

In millions of euros	1 January 2018						
	Gross exposure						
	On-balance-sheet amount	Off-balance-sheet amount	Total	EAD	Risk weight	RWAs	Capital requirement
Private equity exposures in diversified portfolios	1,626	566	2,192	1,909	190%	3,627	290
Listed equity exposures	1,434	488	1,922	1,878	290%	5,445	436
Other equity exposures	9,367	140	9,507	9,439	370%	34,925	2,794
TOTAL	**12,427**	**1,194**	**13,621**	**13,226**		**43,997**	**3,520**

TABLE 40: INSURANCE UNDERTAKINGS (EU INS1) [Audited]

	31 December 2018	1 January 2018
Holdings in insurance companies(*) (before 370% risk weight)	6,648	7,138
TOTAL RISK-WEIGHTED ASSETS	**24,599**	**26,411**

(*) *Significant financial holdings in insurance companies consolidated by the equity method in the prudential scope, benefiting from the provisions of article 49 of Regulation (EU) No. 575/2013 on exemptions from deduction from regulatory capital of holdings in an insurance company. Under the provisions of article 48 of Regulation (EU) No. 575/2013, a potential deduction from regulatory capital would have a limited impact with a decrease of less than 10 basis points in the CET1 ratio.*

TABLE 41: EQUITY RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER

In millions of euros	1 January 2018	Key driver							Total variation	31 December 2018
		Asset size	Asset quality	Model updates	Methodology and policy	Acquisitions and disposals	Currency	Other		
Risk-Weighted Assets	43,997	(1,826)	(33)	-	-	(815)	2	(179)	(2,851)	41,146

The reduction in risk-weighted assets in 2018 is mainly due to disposals of investment stakes during the year.

EXPOSURE IN DEFAULT, PROVISIONS AND COST OF RISK

Impaired exposures (stage 3) related to assets at amortised cost and financing and guarantee commitments given, as well as the guarantees received as collateral are presented in note 5.f to the financial statements.

The following table shows the carrying amounts of the financial assets subject to impairment provisions for credit risk broken down by stage of impairment and by BNP Paribas internal rating in the prudential scope.

Financial assets subject to impairment are recognised in the following accounting categories:

- amounts due from central banks (exclusing cash);
- debt securities at fair value through equity or at amortised cost;
- loans and advances at amortised cost;
- financing and guarantee commitments given (off-balance-sheet).

TABLE 42: BREAKDOWN OF FINANCIAL ASSETS SUBJECT TO IMPAIRMENT BY STAGE AND INTERNAL RATING [Audited]

In millions of euros	31 December 2018							
	Gross carrying value						Impairments	Net carrying value
	BNP Paribas rating or equivalent					TOTAL		
	1 to 3	4 to 5	6 to 8	9 to 10	Defaulted			
Central Banks	**177,283**	**1,381**	**2,897**	**183**	**-**	**181,744**	**(15)**	**181,729**
Stage 1	177,283	1,381	2,897	-	-	181,561	(14)	181,547
Stage 2	-	-	-	183	-	183	(1)	182
Stage 3	-	-	-	-	-	-	-	-
Debt securities at fair value through equity	**52,878**	**1,690**	**2,443**	**261**	**114**	**57,386**	**(140)**	**57,246**
Stage 1	52,878	1,680	2,221	-	-	56,779	(7)	56,772
Stage 2	-	10	222	261	-	493	(21)	472
Stage 3	-	-	-	-	114	114	(112)	2
Loans and advances at amortised cost	**181,102**	**238,038**	**349,087**	**16,971**	**34,662**	**819,860**	**(24,473)**	**795,387**
Stage 1	181,102	221,165	294,071	-	-	696,338	(1,544)	694,794
Stage 2	-	16,873	55,016	16,971	-	88,860	(3,356)	85,504
Stage 3	-	-	-	-	34,662	34,662	(19,573)	15,089
Debt securities at amortised cost	**68,488**	**5,661**	**1,884**	**70**	**194**	**76,297**	**(130)**	**76,167**
Stage 1	68,488	5,218	1,628	-	-	75,334	(21)	75,313
Stage 2	-	443	256	70	-	769	(31)	738
Stage 3	-	-	-	-	194	194	(78)	116
Financing and guarantee commitments	**214,378**	**121,557**	**109,592**	**3,322**	**1,929**	**450,778**	**(775)**	**450,003**
Stage 1	214,378	117,554	99,693	-	-	431,625	(237)	431,388
Stage 2	-	4,003	9,899	3,322	-	17,224	(220)	17,004
Stage 3	-	-	-	-	1,929	1,929	(318)	1,611
TOTAL	**694,129**	**368,327**	**465,903**	**20,807**	**36,899**	**1,586,065**	**(25,533)**	**1,560,532**

The following tables show the breakdown by regulatory asset class, geographic area, and economic sector of doubtful assets and impairments limited to the scope of exposures subject to credit risk (see Table 10: *Prudential balance sheet by risk type (EU LI1-B)*). The exposure amounts are gross of impairments and before accounting for credit risk mitigation techniques (funded or unfunded credit protection).

Non-performing loans were down by EUR 4.3 billion in 2018, including -EUR 3.2 billion in Italy, mainly due to the disposal of portfolios of defaulted exposures.

TABLE 43: DEFAULTED EXPOSURES AND PROVISIONS BY ASSET CLASS (EU CR1-A)

		31 December 2018				
		Gross exposure				
	In millions of euros	Defaulted exposures	Non-defaulted exposures	Total	Stage 3 provisions	Stage 1 and stage 2 provisions
1	Central governments or central banks	103	284,708	284,811	9	
2	Institutions	315	46,544	46,859	206	
3	Corporates	13,028	491,378	504,405	7,049	
4	*of which specialised lending*	*418*	*30,985*	*31,404*	*259*	
5	*of which SMEs*	*3,305*	*36,162*	*39,468*	*1,881*	
6	Retail	10,574	252,988	263,561	5,716	
7	*Secured by real estate property*	*3,969*	*163,938*	*167,907*	*1,305*	
8	*SMEs*	*687*	*11,055*	*11,742*	*216*	
9	*Non-SMEs*	*3,282*	*152,882*	*156,164*	*1,089*	
10	*Qualifying revolving*	*1,150*	*16,881*	*18,031*	*869*	
11	*Other retail*	*5,454*	*72,169*	*77,624*	*3,542*	
12	*SMEs*	*2,478*	*25,552*	*28,030*	*1,462*	
13	*Non-SMEs*	*2,976*	*46,618*	*49,593*	*2,080*	
	Other items	0	833	833	0	
15	**TOTAL IRB APPROACH**	**24,019**	**1,076,450**	**1,100,469**	**12,979**	**2,365**
16	Central governments or central banks	2	30,673	30,675	2	
17	Regional governments or local authorities	42	6,892	6,934	9	
18	Public sector entities	8	14,219	14,228	4	
19	Multilateral development banks	0	120	120	0	
20	International organisations	0	0	0	0	
21	Institutions	35	11,915	11,950	15	
22	Corporates	3,287	120,970	124,257	1,859	
23	*of which SMEs*	*875*	*21,389*	*22,264*	*487*	
24	Retail	5,827	129,143	134,970	3,654	
25	*of which SMEs*	*1,684*	*29,650*	*31,334*	*968*	
26	Exposures secured by mortgages on immovable property	3,430	69,850	73,280	1,531	
27	*of which SMEs*	*1,068*	*17,447*	*18,515*	*548*	
28	Exposures in default					
32	Exposures in the form of units or shares in collective investment undertakings	0	603	603	0	
33	Equity	0	1,063	1,063	0	
34	Other items	0	32,013	32,013	0	
35	**TOTAL STANDARDISED APPROACH**	**12,632**	**417,462**	**430,094**	**7,073**	**3,075**
36	**TOTAL**	**36,651**	**1,493,912**	**1,530,563**	**20,052**	**5,440**

TABLE 44: DEFAULTED EXPOSURES AND PROVISIONS BY GEOGRAPHIC BREAKDOWN (EU CR1-C)

In millions of euros		31 December 2018				
		Gross exposure			Stage 3 provisions	Stage 1 and stage 2 provisions
		Defaulted exposures	Non-defaulted exposures	Total		
Europe[(*)]		**31,064**	**1,115,396**	**1,146,459**	**16,828**	
	France	8,357	483,981	492,339	4,856	
	Belgium	2,720	167,312	170,032	980	
	Luxembourg	301	38,323	38,624	143	
	Italy	14,039	142,260	156,299	8,187	
	United Kingdom	1,393	70,909	72,302	796	
	Germany	692	51,785	52,478	371	
	Netherlands	95	29,072	29,166	46	
	Other European countries	3,467	131,753	135,219	1,448	
North America		**1,075**	**206,731**	**207,807**	**581**	
Asia Pacific		**353**	**85,705**	**86,057**	**102**	
	Japan	0	19,394	19,395	0	
	North Asia	8	28,095	28,103	7	
	South-East Asia (ASEAN)	178	18,753	18,931	23	
	Indian peninsula & Pacific	167	19,462	19,628	72	
Rest of the World		**4,159**	**86,081**	**90,240**	**2,541**	
	Turkey	608	23,953	24,561	332	
	Mediterranean	853	11,522	12,375	540	
	Gulf States & Africa	1,586	17,563	19,150	870	
	Latin America	320	17,340	17,660	278	
	Other countries	791	15,702	16,493	521	
TOTAL		**36,651**	**1,493,912**	**1,530,563**	**20,052**	**5,440**

(*) Within the European Union and the European Free Trade Association (EFTA).

➤ TABLE 45: DEFAULTED EXPOSURES AND PROVISIONS BY INDUSTRY (EU CR1-B)

In millions of euros	31 December 2018				
	Gross exposure			Stage 3 provisions	Stage 1 and stage 2 provisions
	Defaulted exposures	Non-defaulted exposures	Total		
Agriculture, Food, Tobacco	1,476	42,888	44,364	818	
Insurance	17	15,971	15,988	5	
Chemicals excluding Pharmaceuticals	75	15,715	15,789	53	
Building & Public works	4,126	30,385	34,511	2,147	
Retail trade	1,147	39,223	40,369	762	
Energy excluding Electricity	907	21,477	22,384	535	
Equipment excluding IT Electronic	968	41,927	42,895	566	
Finance	813	325,018	325,831	613	
Real estate	3,916	88,567	92,484	1,873	
Information technologies	227	21,966	22,193	117	
Minerals, metals & materials (including cement, packaging, etc.)	1,038	29,081	30,118	621	
Wholesale trade	2,269	60,576	62,845	1,470	
Private individual	13,610	388,974	402,584	7,491	
Healthcare & Pharmaceuticals	146	20,530	20,676	78	
Services to public authorities (electricity, gas, water, etc.)	366	35,990	36,356	187	
Business services	1,691	76,772	78,463	807	
Communication services	320	18,765	19,085	113	
Sovereign	187	115,772	115,960	33	
Transportation & Storage	1,415	45,100	46,515	607	
Other	1,937	59,215	61,151	1,158	
TOTAL	**36,651**	**1,493,912**	**1,530,563**	**20,052**	**5,440**

The cost of risk and the changes in impairments related to credit risk are presented in the consolidated financial statements – note 3.h – *Cost of risk*.

TABLE 46: AGEING OF PAST DUE EXPOSURES(*) (EU CR1-D)

In millions of euros	31 December 2018								
	Non-defaulted exposures						Defaulted exposures		
	≤ 30 days	> 30 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year	Total	> 90 days ≤ 180 days	> 180 days ≤ 1 year	≥ 1 year
Loans	10,710	5,147	372	181	821	17,231	1,634	1,780	25,723
Debt securities	0	0	0	0	0	0	0	0	117
TOTAL	**10,710**	**5,147**	**372**	**181**	**821**	**17,231**	**1,634**	**1,780**	**25,841**

In millions of euros	1 January 2018								
	Non-defaulted exposures						Defaulted exposures		
	≤ 30 days	> 30 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year	Total	> 90 days ≤ 180 days	> 180 days ≤ 1 year	≥ 1 year
Loans	8,358	4,629	423	235	437	14,082	1,303	1,199	31,956
Debt securities	0	0	0	0	0	0	0	0	261
TOTAL	**8,358**	**4,629**	**423**	**235**	**437**	**14,082**	**1,303**	**1,199**	**32,217**

(*) *Based on a prudential scope, gross exposure (balance sheet) before collateral or other credit risk mitigation effects.*

RESTRUCTURED LOANS [Audited]

When a borrower is bordering on or in financial difficulties, he may receive a concession from the bank that would otherwise not have been granted had the borrower not met with financial difficulty. The concession may be:

- a change to the contract terms and conditions;
- partial or total refinancing of the debt.

The loan is then said to be "restructured". It must retain the status of "restructured" during a period of observation, known as a probation period, for at least two years. The concept of restructuring is described in the accounting principles (note 1.e.5 to the consolidated financial statements).

According to the principles for identifying the restructured exposure amounts for the Group as a whole, for the non-retail business, exposures are identified individually during the loan process, notably in the Credit Committees. As for restructured exposures for retail customers, they are usually identified via a systematic process requiring the use of algorithms whose parameters are validated by the RISK and Finance Functions. Information on restructured loans is reported to the supervisory authority on a quarterly basis.

The tables that follow show the gross value and impairment amounts of doubtful loans that have been restructured, as well as restructured loans subsequently reclassified as non-doubtful loans.

TABLE 47: RESTRUCTURED LOANS BY ASSET CLASS [Audited]

	31 December 2018					
				Of which doubtful outstandings		
In millions of euros	Gross amount	Provision	Net amount	Gross amount	Provisions	Net amount
Loans and advances	**11,302**	**(3,878)**	**7,424**	**6,516**	**(3,049)**	**3,467**
Central governments and central banks	8	(2)	6	3	(0)	3
Corporates	5,374	(1,947)	3,427	4,057	(1,874)	2,183
Institutions	9	(8)	1	9	(8)	1
Retail	5,911	(1,921)	3,990	2,447	(1,167)	1,280
Debt securities	**162**	**(47)**	**115**	**162**	**(47)**	**115**
Off-balance sheet committments	**593**	**(19)**	**574**	**131**	**(2)**	**129**
TOTAL	**12,057**	**(3,944)**	**8,113**	**6,809**	**(3,098)**	**3,711**

TABLE 48: RESTRUCTURED LOANS BY GEOGRAPHIC REGION [Audited]

		31 December 2018					
					Of which doubtful outstandings		
In millions of euros		Gross amount	Provision	Net amount	Gross amount	Provisions	Net amount
Europe		**9,912**	**(3,451)**	**6,461**	**5,676**	**(2,663)**	**3,013**
	France	2,897	(1,184)	1,713	1,283	(649)	634
	Belgium	345	(112)	233	262	(112)	150
	Luxembourg	179	(67)	112	169	(67)	102
	Italy	2,951	(1,144)	1,807	2,426	(1,084)	1,342
	Germany	526	(133)	393	190	(84)	106
	Other European countries	3,014	(811)	2,203	1,346	(667)	679
North America		**617**	**(80)**	**537**	**268**	**(76)**	**192**
Asia Pacific		**62**	**(14)**	**48**	**57**	**(13)**	**44**
Rest of the World		**1,466**	**(399)**	**1,067**	**808**	**(346)**	**462**
	Turkey	317	(51)	266	11	(10)	1
	Gulf States & Africa	402	(159)	243	358	(155)	203
	Other countries	747	(189)	558	439	(181)	258
TOTAL		**12,057**	**(3,944)**	**8,113**	**6,809**	**(3,098)**	**3,711**

CREDIT RISK MITIGATION TECHNIQUES

Credit risk mitigants (CRM) are taken into account according to the regulation. In particular, their effect is assessed under conditions characteristic of an economic downturn. The CRM fall into two main categories:

- funded credit protection (collateral) pledged to the Bank is used to secure timely performance of a borrower's financial obligations;
- unfunded credit protection (personal guarantee) is the commitment by a third party to replace the primary obligor in the event of default. By extension, credit insurance and credit derivatives (purchased protection) fall into this category.

For the scope under the IRB Approach, personal guarantees and collaterals are taken into account, provided they are eligible, by decreasing the Loss Given Default (LGD) parameter corresponding to an increase in the Global Recovery Rate (GRR) that applies to the transactions of the banking book. The value taken into consideration takes account, where relevant, of currency and maturity mismatches and, for funded credit protection, of a haircut applied to the market value of the pledged asset based on a default scenario during an economic downturn. The amount of unfunded credit protection to which a haircut is applied depends on the enforceable nature of the commitment and the risk of simultaneous default by the borrower and guarantor.

For the scope under the standardised approach, unfunded credit protection is taken into account provided it is, by applying the more favourable risk weight of the guarantor to a portion of the secured exposure adjusted for currency and maturity mismatches. Funded credit protection is taken into account as a decrease in the exposure, after adjustment for any currency and maturity mismatches and a discount to take account of volatility in market value for financial security collaterals.

The assessment of credit risk mitigating effect follows a methodology that is approved for each activity and is used throughout the Group. These techniques are monitored in accordance with the monitoring and portfolio management procedures described in the *Credit risk management policy* section.

Close to 70% of exposure to property loans is concentrated in our two main Domestic Markets (France, Belgium). In view of the specific features of these markets (amortising long-term financing, primarily at fixed rates), the LTV (Loan-to-value) ratio is not a key monitoring indicator at Group level.

FUNDED CREDIT PROTECTION

Funded credit protection is divided into two categories:

- financial collateral: this consists of cash amounts (including gold), mutual fund units, equities (listed or unlisted) and bonds;
- other diverse forms of collateral: these include real estate mortgages or ship mortgages, pledge of equipment or inventories, transfer of commercial receivables or any other rights to an asset of the counterparty.

To be eligible, funded credit protection must fulfil the following conditions:

- the value of the collateral must not be highly correlated with the risk on the obligor (in particular, shares of the obligor are not eligible);
- the pledge must be documented;
- the pledged asset must be traded on a liquid secondary market to enable rapid resale;
- the Bank must have a consistently updated value of the pledged asset;
- the Bank must have reasonable comfort in the potential appropriation and realisation of the asset concerned.

In the Retail Banking business, the presence or absence of a particular type of collateral may, depending on the coverage ratio, lead to assigning the exposure to particular LGD class on a statistical basis.

UNFUNDED CREDIT PROTECTION

Guarantors are subject to the same rigorous credit risk assessment process as primary obligors and are assigned risk parameters according to similar methods and procedures.

Guarantees are granted by the obligor's parent company or by other entities such as financial institutions. Other examples of guarantees are credit derivatives, guarantees from public insurers for export financing or private insurers.

Consideration of a guarantee consists of determining the average amount the Bank can expect to recover if the borrower defaults and the guarantee is called in. It depends on the amount of the guarantee, the risk of simultaneous default by the borrower and the guarantor (which is a function of the probability of default of the borrower, of the guarantor, and the degree of correlation between borrower and guarantor default, which is high if they belong to the same business group or the same sector and low if not) and the enforceable nature of the guarantee.

OPTIMISING CREDIT RISK MANAGEMENT THROUGH CDS

As part of its role of optimising credit risk management for CIB, Portfolio Management (PM) sets up hedges using credit derivatives, and mainly credit default swaps (CDS). These CDS are used as part of an active management policy, the main aim being to hedge migration and concentration risks and manage major exposures. The underlying assets are loans made to large corporates by CIB Corporate Banking, and occasionally those made by Retail Banking.

Considered to be guarantees and treated under the IRB approach, CDS hedges totalled EUR 444 million at 31 December 2018, compared with EUR 439 million at 1 January 2018. Provided they are eligible, they have the effect of decreasing the estimated Loss Given Default for the underlying asset, and, therefore, reducing its consumption in terms of risk-weighted assets. At 31 December 2018, the reduction in risk-weighted assets resulting from hedging operations via CDS (EU CR7) concerns only the corporate asset class, and represents EUR 140 million.

The following tables give for the central governments and central banks, corporates and institutions portfolios the breakdown of the risk mitigation resulting from all the collaterals and guarantees relating to the portfolio of loans and credit commitments for all the Group's business lines.

➤ TABLE 49: IRBA – CREDIT RISK MITIGATION FOR SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

	31 December 2018				1 January 2018			
		Risk mitigation				Risk mitigation		
In millions of euros	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collateral	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collateral
Central governments and central banks	284,811	3,757	6	3,763	272,874	3,988	5	3,994
Corporates	504,405	77,229	70,144	147,373	487,606	80,052	53,890	133,942
Institutions	46,859	3,407	771	4,178	46,730	3,358	1,024	4,382
TOTAL	**836,075**	**84,393**	**70,921**	**155,314**	**807,210**	**87,398**	**54,920**	**142,318**

➤ TABLE 50: STANDARDISED APPROACH – CREDIT RISK MITIGATION FOR SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

	31 December 2018				1 January 2018			
		Risk mitigation				Risk mitigation		
In millions of euros	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collateral	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collateral
Central governments and central banks	34,131	1	3	4	37,033	0	2	2
Corporates	140,153	5,712	23,484	29,196	139,516	1,921	24,711	26,633
Institutions	19,369	637	24	661	17,718	8	17	25
TOTAL	**193,653**	**6,351**	**23,510**	**29,860**	**194,267**	**1,930**	**24,731**	**26,660**

5.5 Securitisation in the banking book

Securitisation means a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched, having the following characteristics:

- payments made in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures;
- the subordination of tranches determines the distribution of losses during the life of the risk transfer.

Any commitment (including derivatives and liquidity lines) granted to a securitisation operation must be treated as a securitisation exposure. Most of these commitments are held in the prudential banking book (section 5.5). Commitments held in the trading book are set out in Market risk (section 5.7).

The securitisation transactions described below are those that meet the definition set out in Regulation (EU) No. 575/2013.

Assets securitised as part of proprietary securitisation transactions that meet Basel eligibility criteria, particularly in terms of significant risk transfer (efficient securitisation), are excluded from the credit risk framework. Only positions held by the Bank and any commitments subsequently granted to the securitisation structure are included in the capital requirement calculation as explained in this section, with the exception of positions deducted from CET1 (EUR 153 million at 31 December 2018).

Proprietary securitisation exposures that do not meet the Basel eligibility criteria (inefficient securitisation) remain in the portfolio to which they were initially assigned. The capital requirement is calculated as if they had not been securitised and is included in the section on credit risk.

Consequently, the securitisation transactions discussed below only cover:

- the programmes originated by the Group deemed to be efficient under Basel 3 regulatory framework;
- the programmes sponsored by the Group, in which it has retained positions;
- the programmes originated by other parties to which the Group has subscribed.

ACCOUNTING METHODS [Audited]

(See note 1 to the consolidated financial statements – Summary of significant accounting policies applied by the Group).

The accounting classification of securitisation positions in the banking book is shown in Table 10: *Prudential balance sheet by risk type (EU LI1-B).*

Securitisation positions classified as “Financial assets at amortised cost” are measured using the method described in note 1.e.1 to the financial statements: the effective interest rate used to recognise interest income is measured on the basis of an expected cash flow model. From the outset, these positions are subject to an impairment calculation for expected credit risk losses (see note 1.e.5).

Securitisation positions classified on an accounting basis as “Financial assets at fair value through equity” are measured using the method described in note 1.e.2 to the financial statements. Changes in fair value determined according to the principles listed in note 1.e.10 to the financial statements (excluding revenue recognised using the effective interest method) are presented in a specific subsection of shareholders’ equity along with expected credit risk losses calculated using the methods described in note 1.e.5 to the financial statements. Upon disposal, amounts previously recognised in recyclable equity are transferred to the profit and loss account.

Securitisation positions classified on an accounting basis as “Financial instruments at fair value through profit or loss” are measured using the method described in note 1.e.7 to the financial statements.

Proceeds from the sale of securitisation positions are recognised in accordance with rules for the category of origin of positions sold.

Synthetic securitisations in the form of credit default swaps or received guarantees follow the same accounting rules as transaction derivatives (see note 5.a to the consolidated financial statement) or financial guarantee received.

Assets pending securitisation are classified as:

- financial instruments at amortised cost or at fair value through equity and in the prudential banking book in the case of exposures resulting from the bank’s balance sheet, for which the bank will be originator in the future securitisation within the meaning of Basel 3;
- financial instruments at fair value through profit or loss and in the prudential banking book in the case of exposures purchased and put into warehousing, for which the bank will be sponsor in the future securitisation within the meaning of regulation.

SECURITISATION RISK MANAGEMENT [Audited]

The risk management framework for securitisation is part of the risk management described in section 5.3.

The Business represents the first line of defence with responsibility for understanding all the risks incurred in order to ensure correct evaluation. RISK acts independently, as a second line of defence.

Positions taken are monitored to measure changes in individual and portfolio risks.

The monitoring of securitised assets covers credit, counterparty, market and liquidity risks on the underlying assets.

CREDIT RISK ON SECURITISED ASSETS

Securitisation assets outside the trading book are subject to specific approval by the Credit Committees. For new transactions, a credit proposal is prepared by the business, and a comprehensive risk analysis is carried out by the RISK analysts before presentation to the Credit Committee. All approvals are subject to an annual review. Exposures are monitored to ensure that they do not exceed the limits set by the Credit Committees.

The risk exposure of securitisation tranches is intrinsically linked to that of the underlying assets, whether for securitisation or re-securitisation. Through the customary governance of Credit Committees, the Group monitors changes in the quality of underlying assets for the entire duration of the programme concerned.

COUNTERPARTY RISK ON SECURITISATION RELATED TO INTEREST RATES OR FX DERIVATIVES

Securitisation-related derivative instruments are also subject to the approval of the Securitisation Credit Committees. BNP Paribas integrates counterparty risk into the securitisation structure. The principles are the same as those described above in respect of credit risk.

MARKET RISK WITHIN THE BANKING BOOK

On fixed rate ABS positions, a macro hedge consisted of fixed/variable rate swaps is put in place to cover interest rate risk. The hedge is recorded in accordance with the rules of hedge accounting.

LIQUIDITY/FUNDING RISK

Securitisation positions are financed internally by the ALM – Treasury or via conduits sponsored by BNP Paribas.

BNP PARIBAS SECURITISATION ACTIVITY [Audited]

The Group's activities in each of its roles as originator, sponsor and investor, are described below:

➤ **TABLE 51: SECURITISED EXPOSURES AND SECURITISATION POSITIONS (HELD OR ACQUIRED) BY ROLE** [Audited]

In millions of euros	31 December 2018		1 January 2018	
BNP Paribas role	**Securitised exposures originated by BNP Paribas(*)**	**Securitised positions held or acquired (EAD)(**)**	**Securitised exposures originated by BNP Paribas(*)**	**Securitised positions held or acquired (EAD)(**)**
Originator	21,506	18,919	8,046	6,303
Sponsor	18	19,222	44	14,832
Investor	0	5,467	0	4,799
TOTAL	**21,524**	**43,608**	**8,089**	**25,934**

(*) *Securitised exposures originated by the Group correspond to the underlying exposures recognised on the Group's balance sheet which have been securitised.*

(**) *Securitisation positions correspond to tranches retained in securitisation transactions originated or arranged by the Group, tranches acquired by the Group in securitisation transactions arranged by other parties, and off-balance sheet commitments. Excluding securitisation positions deducted from CET1 capital, since 31 December 2017.*

PROPRIETARY SECURITISATION (ORIGINATOR)

As part of the day-to-day management of its liquidity, the Group can securitise loans granted to Retail Banking customers (mortgages, consumer loans), as well as loans granted to corporate customers, in order to transform them into liquid assets.

Efficient securitisations

Exposures retained in securitisation positions originated by BNP Paribas amounted to EUR 18.9 billion at 31 December 2018, corresponding to positions in efficient securitisation under Basel rules.

At 31 December 2018, nine transactions are efficient due to significant risk transfer, and are included in the previous table. Three efficient securitisation programs were set up in 2018 by CIB in partnership with French Retail Banking, BNL and Personal Finance (see paragraph Securitised Exposures).

Inefficient securitisations

Furthermore, for securitisation transactions that are inefficient under Basel rules, the securitised exposures are included in customer loans. These transactions do not reduce the regulatory capital calculated because no material risk transfer took place.

As at 31 December 2018, BNP Paribas originated thirty-three securitisation transactions, for a total amount of EUR 68.2 billion of securitised exposures. The main transactions concern: BNP Paribas Fortis (EUR 37.5 billion), BNP Paribas Personal Finance (EUR 15.5 billion), French Retail Banking (EUR 12.6 billion) and BNL (EUR 2.4 billion). Four transactions took place in 2018, two by Personal Finance, one by BancWest and one by BNL. The relevant exposures are therefore included in the section on credit risk (see section 5.4).

SECURITISATION ON BEHALF OF CLIENTS AS SPONSOR

CIB Fixed Income Credit and Commodities carries out securitisation programmes on behalf of its customers. Under these programmes, liquidity facilities and, where appropriate, guarantees are granted to special purpose entities. Commitments and positions retained or acquired by BNP Paribas on securitisations as sponsor on behalf of clients, amounted to EUR 19.2 billion at 31 December 2018.

Short-term refinancing

At 31 December 2018, two consolidated multiseller conduits (Starbird and Matchpoint) were sponsored by the Group. These conduits, by seeking refinancing on the local short-term commercial paper market, are able to provide CIB clients, large corporates and institutions with an attractive financing solution in exchange for some of their loans (commercial and industrial loans, finance leases for automobiles or various equipment, credit card receivables, etc.).

BNP Paribas provides each of these conduits with a liquidity line which amounted to EUR 16.1 billion at 31 December 2018, compared with EUR 13.5 billion at 1 January 2018.

Medium/long-term refinancing

In Europe and North America, the BNP Paribas Group's structuring platform provides securitisation solutions to its clients, based on products adapted to current conditions in terms of risk and liquidity. The total of these facilities amounted to EUR 2.9 billion at 31 December 2018 compared with EUR 0.6 billion at 1 January 2018.

SECURITISATION AS INVESTOR

The securitisation positions of BNP Paribas as an investor amounted to EUR 5.5 billion at 31 December 2018. This business is mainly carried out by CIB and Asset Management. It also includes the legacy positions held by BNP Paribas Fortis and managed in run-off.

CIB Fixed Income Credit and Commodities continued its securitisation activity as an investor, monitoring and managing a securitisation portfolio which represented a total of EUR 4.0 billion at 31 December 2018 compared with EUR 2.9 billion at 1 January 2018, attesting to new investments made in 2018.

Total exposure of the portfolio managed in run-off at CIB Fixed Income Credit and Commodities and Asset Management amounted to EUR 0.1 billion at 31 December 2018, stable compared to EUR 0.1 billion at 1 January 2018.

BNP Paribas Fortis' portfolio of structured loans, which was not assigned to a business line and is housed in the "Corporate Centre", was worth EUR 1.3 billion at 31 December 2018 compared with EUR 1.7 billion at 1 January 2018. This portfolio is managed in run-off.

SECURITISED EXPOSURES

At 31 December 2018, the main securitisation transactions recognised as effective are the following:

- a transaction initiated in 2018 by CIB Portfolio Management in partnership with French Retail Banking concerning an EUR 11.5 billion portfolio of large corporates loans;
- a transaction initiated in 2018 by BNL concerning a EUR 2.4 billion portfolio of loans to large corporates;
- a transaction initiated in 2018 by Personal Finance concerning a EUR 1.7 billion portfolio of consumer loans;
- a transaction initiated in 2017 by CIB Portfolio Management concerning a EUR 3.2 billion portfolio of loans to large corporates;
- a transaction initiated in 2017 by CIB Portfolio Management in partnership with French Retail Banking on a portfolio of large corporate loans in the amount of EUR 1.7 billion.

BNP Paribas did not securitise for its own account revolving exposures subject to early amortisation treatment.

At 31 December 2018, there are no assets awaiting securitisation.

➤ TABLE 52: SECURITISED EXPOSURES ORIGINATED BY BNP PARIBAS

In millions of euros		Securitised exposures originated by BNP Paribas	
Securitisation type	**Calculation approach**	**31 December 2018**	**1 January 2018**
Traditional	IRBA	1,673	0
	Standard	1,095	1,453
Sub-Total		**2,768**	**1,453**
Synthetic	IRBA	18,756	6,636
TOTAL		**21,524**	**8,089**

➤ TABLE 53: SECURITISED EXPOSURES BY BNP PARIBAS BY UNDERLYING ASSET CATEGORY(*)

	31 December 2018				
	Originator		Sponsor(**)		
Originated securitised exposures *In millions of euros*	**Traditional**	**Synthetic**	**Traditional**	**Synthetic**	**Total**
Residential mortgages	20	2,351	88		2,459
Consumer loans	2,536		6,098		8,634
Credit card receivables			1,805		1,805
Loans to corporates		16,405	25,844		42,250
Trade receivables			4,943		4,943
Commercial mortgages			54		54
Finance leases			4,108		4,108
Other assets	194		419		614
TOTAL	**2,750**	**18,756**	**43,360**		**64,866**

	1 January 2018				
	Originator		Sponsor(**)		
Originated securitised exposures *In millions of euros*	**Traditional**	**Synthetic**	**Traditional**	**Synthetic**	**Total**
Residential mortgages	22		89		111
Consumer loans	1,193		3,736		4,929
Credit card receivables			1,070		1,070
Loans to corporates		6,636	535		7,172
Trade receivables			4,463		4,463
Commercial mortgages			47		47
Finance leases			4,189		4,189
Other assets	194		692		886
TOTAL	**1,409**	**6,636**	**14,821**		**22,867**

(*) *This breakdown is based on the predominant underlying asset of the securitisation.*
(**) *Within the securitised exposures on behalf of clients, EUR 18 millions correspond to originated exposures (from BNP Paribas balance sheet) at 31 December 2018 (compared with EUR 44 million at 1 January 2018).*

SECURITISATION POSITIONS

This section shows all the securitisation positions held or acquired by the Group, except for positions deducted from CET1 capital.

TABLE 54: SECURITISATION POSITIONS HELD OR ACQUIRED BY UNDERLYING ASSET CATEGORY

In millions of euros		Securitisation positions held or acquired (EAD)	
BNP Paribas role	**Asset category(*)**	**31 December 2018**	**1 January 2018**
Originator	Residential mortgages	2,235	19
	Consumer loans	1,361	94
	Loans to corporates	15,323	6,189
	Other assets	1	1
TOTAL ORIGINATOR		**18,919**	**6,303**
Sponsor	Residential mortgages	118	107
	Consumer loans	5,077	3,739
	Credit card receivables	1,826	1,070
	Loans to corporates	2,678	529
	Trade receivables	4,944	4,515
	Commercial mortgages	54	47
	Finance leases	4,115	4,192
	Other assets	411	632
TOTAL SPONSOR		**19,222**	**14,832**
Investor	Residential mortgages	2,155	1,865
	Consumer loans	1,425	1,846
	Credit card receivables	40	21
	Loans to corporates	1,587	752
	Commercial mortgages	0	0
	Finance leases	182	253
	Other assets	79	62
TOTAL INVESTOR		**5,467**	**4,799**
TOTAL		**43,608**	**25,934**

(*) *Based on the predominant asset class in the asset pool of the securitisation in which the position is held. If the underlying asset is a securitisation or re-securitisation position, regulations require the ultimate underlying asset of the relevant program to be reported.*

TABLE 55: SECURITISATION POSITIONS, EXPOSURE IN DEFAULT AND PROVISIONS BY UNDERLYING ASSET'S GEOGRAPHIC REGION(*)

	31 December 2018				
		EAD in default			
In millions of euros	EAD	Standardised approach	IRB approach	Total	Stage 3 provisions
Europe	31,272	1	0	1	0
North America	11,511	0	17	17	5
Asia Pacific	740	0	0	0	0
Rest of the world	84	0	0	0	0
TOTAL	**43,608**	**1**	**17**	**18**	**5**

In millions of euros	1 January 2018				
		EAD in default			
	EAD	Standardised approach	IRB approach	Total	Stage 3 provisions
Europe	11,236	1	0	1	0
North America	14,267	0	14	14	5
Asia Pacific	244	0	0	0	0
Rest of the world	187	0	0	0	0
TOTAL	**25,934**	**1**	**14**	**15**	**5**

(*) *This breakdown is based on the predominant underlying asset of the securitisation.*

Stage 1 and stage 2 provisions totalled EUR 48 million at 31 December 2018, compared with EUR 40 million at 1 January 2018.

➤ TABLE 56: BANKING BOOK SECURITISATION POSITION QUALITY

In millions of euros	Securitisation positions held or acquired (EAD)	
Tranche quality	31 December 2018	1 January 2018
Senior tranche	43,042	25,292
Mezzanine tranche	442	502
First-loss tranche	124	139
TOTAL	**43,608**	**25,934**

At 31 December 2018, 99% of the securitisation positions held or acquired by the Group were senior tranches, stable compared with 1 January 2018, reflecting the high quality of the Group's portfolio. The corresponding risk weights are given in the following tables.

RISK-WEIGHTED ASSETS

Under the standardised approach, risk-weighted assets are calculated by multiplying exposure at default by a risk weight based on an external rating of the securitisation position, as required by article 251 of Regulation (EU) No. 575/2013. In a small number of cases, a look-through approach may be applied. For positions having a rating of B+ or lower, or with no external rating, the regulations provide for either a weighting at 1,250%, or the deduction of Common Equity Tier 1 (CET1) capital. Since 31 December 2017, the Group has opted for the capital deduction. The standardised approach is used for securitisation investments made by BancWest and the Asset Management Division.

Under the IRB Approach, risk-weighted assets are calculated according to one of the following methods:

- for exposures with an external rating, the positions risk weight is determined using the so-called "ratings-based method", whereby the position's risk weight is determined directly according to its rating, from a correspondence table provided by the banking supervisor;
- for exposures that do not have an external rating, and if BNP Paribas is the originator or sponsor, the Group uses the Supervisory Formula Approach (SFA) when the necessary conditions according to article 259 1) b. of EU Regulation No. 575/2013 are fulfilled. In this approach, the risk weight is calculated from a formula provided by the banking supervisor that factors in the internal credit rating of the underlying asset portfolio, as well as the structure of the transaction (most notably the level of credit enhancement subscribed out by the Group);
- the Internal Assessment Approach (IAA) was applied until 30 September 2018 for liquidity facilities in the ABCP programmes of the BNP Paribas Fortis portfolio for which there are no external ratings;

- in all other cases, Regulation (EU) No. 575/2013 stipulates either a weighting of 1,250% or the deduction of CET1 capital. Since 31 December 2017, the Group has opted for the capital deduction.

At 31 December 2018, the IRB Approach is used for positions held by CIB, French Retail Banking, BNL bc and BNP Paribas Fortis scope.

For rated securitisation positions, the Group uses external ratings from the Standard & Poor's, Moody's, Fitch, and DBRS rating agencies. The correspondence between these ratings and equivalent credit quality levels as required by the regulation framework is in accordance with the instructions issued by the supervisor.

The following tables show all the securitisation positions held or acquired by the Bank, except those deducted from CET1 capital.

➤ TABLE 57: SECURITISATION POSITIONS AND RISK-WEIGHTED ASSETS BY APPROACH

In millions of euros	31 December 2018		1 January 2018		Variation	
Calculation approach	Securitisation positions held or acquired (EAD)	RWAs	Securitisation positions held or acquired (EAD)	RWAs	Securitisation positions held or acquired (EAD)	RWAs
IRBA	41,534	5,976	24,398	2,602	17,135	3,374
Standardised	2,075	1,064	1,535	776	539	288
TOTAL	**43,608**	**7,040**	**25,934**	**3,378**	**17,674**	**3,663**

Risk-weighted assets corresponding to securitisation positions held or acquired by the Group amounted to EUR 7 billion at 31 December 2018, or 1.1% of BNP Paribas total risk-weighted assets, compared with EUR 3.4 billion at 1 January 2018 (0.5% of Group total risk-weighted assets).

➤ TABLE 58: SECURITISATION RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER

		Key driver								
RWAs *In millions of euros*	1 January 2018	Asset size	Asset quality	Model updates	Methodology and policy	Acquisitions and disposals	Currency	Other	Total variation	31 December 2018
Securitisation	3,378	565	535	2,560	-	5	63	(64)	3,663	7,040

The increase in risk-weighted assets from securitisation in the banking book is mainly related to model updates applied to the ABCP Matchpoint and Starbird conduits.

TABLE 59: SECURITISATION POSITIONS AND RISK-WEIGHTED ASSETS BY RISK WEIGHT

IRB approach

In millions of euros	31 December 2018			
	EAD		RWAs	
Risk weight	Securitisation positions	Re-securitisation positions	Securitisation positions	Re-securitisation positions
7% – 10%	5,831		440	
12% – 18%	2,890		384	
20% – 35%	195		38	
40% – 75%	437		247	
100%	180		110	
150%				
225%				
250%	7		7	
350%				
425%	99		388	
650%	9		60	
850%				
External ratings based method	**9,647**		**1,675**	
Internal Assessment Approach (IAA)	**0**		**0**	
[0 -7%]	20,473		1,404	
]7% – 100%]	11,362		2,520	
]100% – 350%]	0		0	
]350% – 1,250%]	52		376	
Supervisory Formula Approach	**31,887**		**4,301**	
TOTAL	**41,534**	**-**	**5,976**	**-**

In millions of euros	1 January 2018			
	EAD		RWAs	
Risk weight	Securitisation positions	Re-securitisation positions	Securitisation positions	Re-securitisation positions
7% – 10%	2,558		225	
12% – 18%	123		49	
20% – 35%	185		92	
40% – 75%	16		16	
100%	131		44	
150%				
225%				
250%	4		11	
350%				
425%	55		265	
500%				
650%	4		11	
850%				
External ratings based method	**3,076**		**712**	
Internal Assessment Approach (IAA)	**741**		**66**	
[0 -7%]	12,610		862	
]7% – 100%]	7,955	1	759	0
]100% – 350%]				
]350% – 1,250%]	16		202	
Supervisory Formula Approach	**20,581**	**1**	**1,823**	**0**
TOTAL	**24,398**	**1**	**2,601**	**0**

Out of the EUR 9.6 billion of securitisation positions with an external rating:

- 70% of EAD was rated above A+ at 31 December 2018, compared with 86% at 1 January 2018;
- the vast majority (97% of EAD) was rated above BBB+ at 31 December 2018 (a slight increase compared with 94% at 1 January 2018).

➤ *Standardised approach*

In millions of euros	31 December 2018			
	EAD		RWAs	
Risk weight	Securitisation positions	Re-securitisation positions	Securitisation positions	Re-securitisation positions
20%	53		11	
40%				
50%	36		18	
100%	2		2	
225%				
350%	1		3	
External ratings based method	**92**		**34**	
Weighted average method	**1,983**		**1,031**	
TOTAL	**2,075**	**-**	**1,064**	**-**

In millions of euros	1 Januray 2018			
	EAD		RWAs	
Risk weight	Securitisation positions	Re-securitisation positions	Securitisation positions	Re-securitisation positions
20%	73		15	
40%				
50%	19		10	
100%	24		24	
225%				
350%	1		3	
External ratings based method	**117**		**51**	
Weighted average method	**1,418**		**725**	
TOTAL	**1,535**	**-**	**776**	**-**

Guarantees on securitisation positions amounted to EUR 1.1 billion as at 31 December 2018, compared with EUR 0.4 billion as at 1 January 2018.

5.6 Counterparty credit risk

Counterparty credit risk is the translation of the credit risk embedded in financial transactions, investments and/or settlement transactions between counterparties. Those transactions include bilateral contracts such as over-the-counter (OTC) derivatives contracts as well as contracts settled through clearing houses. The amount of this risk may vary over time in line with changing market parameters which then impacts the replacement value of the relevant transactions.

Counterparty risk lies in the event that a counterparty defaults on its obligations to pay the Bank the full present value of the flows relating to a transaction or a portfolio for which the Bank is a net receiver. Counterparty credit risk is also linked to the replacement cost of a derivative or portfolio in the event of counterparty default. Hence, it can be seen as a market risk in case of default or a contingent risk.

In respect of counterparty risk, the RISK Function is structured according to five main priorities:

- measuring exposure to counterparty credit risk;
- checking and analysing these exposures and the limits that apply to them;
- introducing mechanisms to reduce risk;
- calculating and managing credit valuation adjustments (CVA);
- defining and implementing stress tests.

COUNTERPARTY CREDIT RISK VALUATION

COUNTERPARTY EXPOSURE CALCULATION

Exposure to counterparty risk is measured using two approaches:

Modelled exposure – Internal model approach

With regard to modelling counterparty risk exposure, the exposure at default (EAD) for counterparty risk is calculated based on the Effective Expected Positive Exposure (EEPE) indicator multiplied by the alpha regulatory factor as defined in article 284-4 of Regulation (EU) No. 575/2013. The Effective Expected Positive Exposure (EEPE) is measured using an internal exposure valuation model to determine exposure profiles. The model was developed by the Group and approved by the supervisor.

The principle of the model is to simulate the main risk factors, such as commodity and equity prices, interest rates and foreign exchange rates, affecting the counterparty exposure, based on their initial respective values. The Bank uses Monte-Carlo simulations to generate thousands of time trajectories (corresponding to thousands of potential market scenarios) to define potential changes in risk factors. The diffusion processes used by the model are calibrated on the most recent historic data set over a four-year period.

Based on all the risk factor simulations, the model assesses the value of the positions from the simulation date to the transaction maturity date (from one day to more than thirty years for the longest-term transactions) to generate an initial set of exposure profiles.

Exposure may be reduced by a Master Agreement, and may also be covered by a Credit Support Annex (CSA). For each counterparty, the model aggregates the exposures taking into consideration any netting agreements and credit support annexes, as well as the potentially risky nature of the collateral exchanged.

Based on the breakdown of exposure to the counterparty, the model determines the following in particular:

- the average risk profile, the Expected Positive Exposure (EPE), from which the EEPE (Effective Expected Positive Exposure) is calculated:

  The Expected Positive Exposure (EPE) profile is calculated as the average of the breakdown of counterparty exposures at each point in the simulation, with the negative portions of the trajectories set to zero (the negative portions correspond to situations where BNP Paribas Group is a risk for the counterparty). The EEPE is calculated as the first-year average of the non-decreasing EPE profile: at each simulation date, the value taken is the maximum of the EPE value and the value on the previous simulation date;
- the Potential Future Exposure (PFE) profile:

  The Potential Future Exposure (PFE) profile is calculated as a 90% percentile of the breakdown of exposure to the counterparty at each point in the simulation. This percentile is raised to 99% for hedge fund counterparties. The highest Potential Future Exposure value (Max PFE) is used to monitor maximum limits.

Since 1 January 2014, date of entry into force of Regulation (EU) No. 575/2013, the system for measuring exposures to counterparty risk takes into account:

- extension of the margin periods of risk in accordance with article 285 of the CRR;
- inclusion of the specific correlation risk;
- determination of a stressed EEPE calculated based on a calibration reflecting a particular period of stress.

Non-modelled exposure – Mark-to-market method

For non-modelled counterparty credit risk exposures, the exposure at default is based on market price evaluation (Net Present Value + Add On). The add-on is calculated in accordance with article 274 of Regulation (EU) No. 575/2013 as a fixed percentage according to the type of transaction and its remaining life.

LIMIT/MONITORING FRAMEWORK

Limits reflecting the principles of the Group's Risk Appetite Statement are defined for the counterparty credit risk. These limits are set in accordance with the type of counterparty (banks, institutional investors, asset managers, hedge funds, corporates). For each counterparty, the maximum Potential Future Exposure value (MaxPFE) calculated by the internal model is compared on a daily basis with the limits assigned to each counterparty to check compliance with credit decisions.

These limits are defined and calibrated as part of the risk approval process. They are approved in the following committees (listed in ascending order of discretionary authority): Local Credit Committee, Regional Credit Committee, Global Credit Committee, General Management Credit Committee.

These measures are complemented by sets of directives (covering contingent market risk sensitivities per counterparty which are extracted from the market risk system) which provide further tools in the monitoring of counterparty credit risk and the prevention of systemic risk concentrations.

MITIGATION OF COUNTERPARTY CREDIT RISK

As part of its risk management, the BNP Paribas Group implemented three counterparty risk mitigation mechanisms:

- the signature of netting agreements for OTC transactions;
- clearing through central counterparties, in the case of OTC or listed derivative transactions.
- Bilateral initial margin exchange

Netting agreements

Netting is used by the Bank in order to mitigate counterparty credit risk associated with derivatives trading. The main instance where netting occurs is in case of trades termination: if the counterparty defaults, all the trades are terminated at their current market value, and all the positive and negative market values are summed to obtain a single amount (net) to be paid to or received from the counterparty. The balance ("close-out netting") may be collateralised with cash, securities or deposits.

The Bank also applies settlement netting in order to mitigate counterparty credit risk in cases of currency settlement. This corresponds to the netting of all payments and receipts between the Bank and one counterparty in the same currency to be settled in the same day. The netting results in a single amount (for each currency) to be paid either by the Bank or by the counterparty.

Transactions affected by this are processed in accordance with bilateral or multilateral agreements respecting the general principles of the national or international framework. The main forms of bilateral agreements are those issued by Fédération Bancaire Française (FBF) and on an international basis by International Swaps and Derivatives Association (ISDA).

Trade clearing through central counterparties

Trade clearing through central counterparties (CCPs) is part of BNP Paribas usual capital market activities. As a global clearing member, BNP Paribas contributes to the risk management framework of the CCPs through payment to a default fund as well as daily margin calls. The rules which define the relationships between BNP Paribas and the CCPs of which it is a member are described in each CCP's rulebook.

For Europe and the US in particular, this scheme enables the reduction of notional amounts through the netting of the portfolio, on one hand, and, on the other, a transfer of the risk from several counterparties to a single central counterparty with a robust risk management framework.

In its clearing for third parties activity, BNP Paribas requests as well, and on a daily basis, the payment of margin calls from its clients.

Since default by one or more clearing houses would affect BNP Paribas, it has introduced dedicated monitoring of these central counterparties and closely tracks concentrations with them.

Bilateral initial margin exchange

Regulation (EU) No. 648/2012 (EMIR) stipulates the establishment of additional constraints for players in the derivatives markets, including the obligation to exchange collateral for contracts that are not centrally cleared. An initial guarantee deposit must be made by the Bank's most significant financial and non-financial counterparties. The purpose of this exchange is to mitigate the counterparty credit risk associated with over-the-counter derivatives trading that is not centrally cleared. The Bank's transactions with sovereign borrowers, central banks, and supranational entities are excluded from this system.

If the counterparty defaults, all the trades are terminated at their current market value by the Bank. The initial guarantee deposit hedges the variation in transactions during this liquidation period. The initial deposit reflects an extreme but plausible estimate of potential losses corresponding to an unilateral interval of confidence of 99% over a ten-day period, based on historic data including an episode of significant financial tensions.

The initial deposit must be bilaterally traded on a gross basis between the Bank and the counterparty. It is kept by a third party so as to guarantee that the Bank immediately has access to the counterparty's deposit and that the Bank's deposit be protected in case the counterparty defaults.

CREDIT VALUATION ADJUSTMENTS (CVA)

The valuation of financial OTC-trades carried out by BNP Paribas as part of its trading activities (mainly Global Markets) includes Credit Valuation Adjustments (CVA). CVA is an adjustment of the trading portfolio valuation to take into account each counterparty's credit risk. It is the fair value on any expected loss arising from counterparty exposure based on the potential positive value of the contract, the counterparty default probability and the estimated recovery rate in case of default.

The majority of counterparty credit risk exposures on derivatives are related to the Group's interest rate, credit and foreign exchange activities, all underlying assets, and all business lines combined.

The credit valuation adjustment is not only a function of the expected exposure but also the credit risk level of the counterparty, which is linked to the level of the Credit Default Swaps (CDS) spreads used in the default probability calculation.

In order to reduce the risk associated with the credit quality deterioration embedded in a financial operations portfolio, BNP Paribas uses a dynamic hedging strategy, involving the purchase of market instruments such as credit derivative instruments. (See *CVA risk management in section Counterparty risk management*).

Risk related to the volatility of CVAs (CVA risk)

To protect banks against the risk of losses due to CVA variations, Regulation (EU) No. 575/2013 introduced a dedicated capital charge, the CVA charge. This charge aims at capitalising the risk of loss caused by changes in the credit spread of a counterparty to which the BNP Paribas Group is exposed. The CVA charge is computed by the Group using mainly the advanced method and relies on the Bank's model on market risk (see section CVA Risk hereafter).

STRESS TESTS AND WRONG WAY RISK

The BNP Paribas counterparty risk stress testing framework is consistent with the market risk framework (see section 5.7 *Market risk related to trading activities*). As such, the counterparty stress testing framework is implemented in conjunction with the market risk stress testing and employs consistent market shifts where scenarios are shared. Testing also comprises factors specific to counterparty risk such as deteriorations in counterparty credit quality.

Such risk analysis is present within the Executive Management reporting framework which shares some common forums with the market risk reporting set up such as the CMRC, core risk committee for market and counterparty credit risk. Both counterparty and market risk stress testing frameworks are governed by the Stress Testing Steering Committee.

Wrong Way Risk (or unfavourable correlation risk) is the case of exposure to a counterparty being inversely correlated with the counterparty's credit quality.

Such risk can be split in two parts:

- General Wrong Way Risk (GWWR), which corresponds to the risk that the probability of default by counterparty is positively correlated with general market risk factors;
- Specific Wrong Way Risk (SWWR), which corresponds to the risk arising when future exposure to a specific counterparty is positively correlated with the counterpart's probability of default due to the nature of the transactions with the counterparty or of the collateral received.

BNP Paribas' monitoring and analysis of General Wrong Way Risk is performed through stress tests that highlight the risk factors negatively correlated with the counterparty's credit quality. It combines a top down approach and a bottom up approach:

- for the top down approach, the GWWR policy defines the generic rules and criteria to be used to detect GWWR. These criteria are based on the countries of incorporation of the counterparties, the region of which they are part and the industries in which they are involved. Derivative positions, structured financing, and collateral that counterparties may have with BNP Paribas have been defined as the situations where GWWR should be analysed and reported;
- the GWWR framework relies upon a robust bottom up approach with the expertise of the counterparty credit analysts specifically needed to define the most impacting scenarios at portfolio level (the approach consists of the use of stressed market parameters reflecting extreme but realistic conditions).

When a legal link between the exposure underlyings and the counterparty is established, the SWWR is subject to prescribed regulatory capital treatment.

EXPOSURE TO COUNTERPARTY CREDIT RISK [Audited]

The table below shows exposure to counterparty credit risk (measured as the value at risk) by Basel asset class on derivatives contracts and securities lending/borrowing transactions, after the impact of any netting agreement. Bilateral transactions between the Bank and customers (bilateral counterparty risk) are distinguished from transactions related to the clearing activities of the Bank, including essentially exposures to central counterparties (CCP).

TABLE 60: COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY ASSET CLASS (EXCL. CVA RISK CHARGE) [Audited]

EAD *In millions of euros*	31 December 2018			31 December 2017			Variation
	IRBA approach	Standardised approach	Total	IRBA approach	Standardised approach	Total	Total
Bilateral counterparty credit risk	**103,699**	**1,243**	**104,942**	**113,023**	**1,054**	**114,077**	**(9,135)**
Central governments and central banks	25,393	2	25,395	27,631	4	27,635	(2,239)
Corporates	56,656	846	57,502	59,689	729	60,418	(2,916)
Institutions(*)	21,649	390	22,039	25,703	315	26,018	(3,979)
Retail	0	5	5	0	6	7	(1)
Exposure to CCP related to clearing activites	**3,060**	**37,358**	**40,419**	**2,969**	**39,766**	**42,735**	**(2,317)**
TOTAL	**106,759**	**38,601**	**145,360**	**115,992**	**40,820**	**156,812**	**(11,452)**

(*) *Institutions asset class comprises credit institutions and investment firms, including those recognised in other countries, it also includes some exposures to regional and local authorities, public sector agencies and multilateral development banks that are not treated as central government authorities.*

For bilateral counterparty credit risk, the share of exposures under the IRB approach represents 99% at 31 December 2018, stable compared with 31 December 2017.

The following table summarises the exposures to counterparty credit risk with a breakdown by product. An indication of the Group's business volume on derivative financial instruments booked in the trading portfolio is presented in note 5.a to the consolidated financial statements.

TABLE 61: COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY PRODUCT (EXCL. CVA RISK CHARGE) [Audited]

EAD *In millions of euros*	31 December 2018					31 December 2017				
	Bilateral counterparty credit risk		Exposure to CCP related to clearing activites		Total	Bilateral counterparty credit risk		Exposure to CCP related to clearing activites		Total
OTC derivatives	71,349	88.4%	9,382	11.6%	80,731	75,020	93.0%	5,648	7.0%	80,668
Securities Financing Transactions	33,593	96.1%	1,378	3.9%	34,971	39,057	93.4%	2,777	6.6%	41,834
Listed derivatives			26,513	100.0%	26,513			30,876	100.0%	30,876
Default fund contribution			3,145	100.0%	3,145			3,434	100.0%	3,434
TOTAL	**104,942**	**72.2%**	**40,419**	**27.8%**	**145,360**	**114,077**	**72.7%**	**42,735**	**27.3%**	**156,812**

BILATERAL COUNTERPARTY CREDIT RISK

The bilateral counterparty risk corresponds to the contracts treated bilaterally (or over the counter) by BNP Paribas with its clients.

The exposure at default (EAD) is primarily measured with the aid of internal models (see paragraph *Counterparty exposure calculation*). For the perimeter not covered by internal models (limited mainly to subsidiaries BNL, BancWest and TEB), EAD is calculated using the Mark-to-Market method (Net Present Value + Add-On).

Risk-weighted assets linked to counterparty credit risk are computed by multiplying EAD by an appropriate weighting according to the approach used (standardised or IRBA).

The following table shows a summary, by approach, of the regulatory exposures of counterparty credit risk and associated risk-weighted assets for the entire scope of the BNP Paribas Group's bilateral activities, which represents the bulk of counterparty credit risk exposures.

➤ TABLE 62: BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY APPROACH (EU CCR1)

								31 December 2018
		b+c	d	e	f	g		
In millions of euros		NPV(***)+ Add-on	EEPE(**)	Multiplier	EAD post CRM	RWAs	of which standardised approach	of which IRBA
1	Mark-to-market method	1,899			1,313	998	950	48
4	Internal model method (IMM)		64,768	1.6	103,629	19,702	3	19,699
5	*of which SFT(*)*		*20,994*	*1.6*	*33,591*	*2,690*	*0*	*2,690*
6	*of which derivatives and long settlement transactions*		*43,774*	*1.6*	*70,038*	*17,012*	*2*	*17,009*
11	**TOTAL**				**104,942**	**20,700**	***953***	***19,747***

(*) Securities Financing Transactions.
(**) Effective Expected Positive Exposure.
(***) Net Present Value.

								31 December 2017
		b+c	d	e	f	g		
In millions of euros		NPV(***)+ Add-on	EEPE(**)	Multiplier	EAD post CRM	RWAs	of which standardised approach	of which IRBA
1	Mark-to-market method	1,830			1,134	1,045	840	205
4	Internal model approach (IMM)		70,589	1.6	112,943	20,802	4	20,798
5	*of which SFTs(*)*		*24,404*	*1.6*	*39,046*	*3,266*	*0*	*3,266*
6	*of which derivatives and long settlement transactions*		*46,185*	*1.6*	*73,896*	*17,536*	*4*	*17,531*
11	**TOTAL**				**114,077**	**21,847**	***845***	***21,002***

(*) Securities Financing Transactions.
(**) Effective Expected Positive Exposure.
(***) Net Present Value.

The following tables provide: the calculation of risk-weighted assets according to the Basel risk parameters using an IRB approach (see paragraph *Sovereign, financial institution, corporate and specialised financing portfolios* in *Credit risk: Internal Ratings Based Approach (IRBA)* in section 5.4) then using the standardised approach.

TABLE 63: IRBA BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT (EU CCR4)

								31 December 2018
		a	b	c	d	e	f	g
In millions of euros	PD scale	EAD	Average PD	Number of obligors	Average LGD	Average marturity	RWAs	Average RW
Central governments or central banks	0.00 to < 0.15%	25,247	0.03%	100 to 1,000	1%	3	116	0%
	0.15 to < 0.25%	18	0.17%	0 to 100	26%	2	5	26%
	0.25 to < 0.50%	36	0.33%	0 to 100	49%	2	20	55%
	0.50 to < 0.75%	9	0.69%	0 to 100	50%	2	7	85%
	0.75 to < 2.50%	0	1.13%	0 to 100	39%	2	0	81%
	2.50 to < 10.0%	1	4.39%	0 to 100	68%	1	1	205%
	10.0 to < 100%	83	13.52%	0 to 100	60%	3	262	318%
	100% (defaults)	-	0.00%	-			-	-
	Sub-total	**25,393**	**0.07%**		**2%**	**3**	**412**	**2%**
Institutions	0.00 to < 0.15%	18,675	0.05%	1,000 to 10,000	22%	1	1,471	8%
	0.15 to < 0.25%	1,254	0.19%	100 to 1,000	45%	1	451	36%
	0.25 to < 0.50%	1,120	0.35%	100 to 1,000	50%	1	660	59%
	0.50 to < 0.75%	222	0.69%	100 to 1,000	50%	1	202	91%
	0.75 to < 2.50%	180	1.27%	100 to 1,000	51%	2	199	111%
	2.50 to < 10.0%	181	3.91%	100 to 1,000	57%	1	338	187%
	10.0 to < 100%	16	11.44%	0 to 100	19%	1	14	86%
	100% (defaults)	1	100.00%	0 to 100			-	0%
	Sub-total	**21,649**	**0.13%**		**26%**	**1**	**3,336**	**15%**
Corporates	0.00 to < 0.15%	43,038	0.06%	1,000 to 10,000	32%	1	6,257	15%
	0.15 to < 0.25%	4,850	0.17%	1,000 to 10,000	37%	2	1,499	31%
	0.25 to < 0.50%	3,284	0.36%	1,000 to 10,000	41%	2	1,674	51%
	0.50 to < 0.75%	1,128	0.69%	100 to 1,000	31%	3	665	59%
	0.75 to < 2.50%	2,974	1.30%	1,000 to 10,000	52%	2	3,488	117%
	2.50 to < 10.0%	1,141	4.33%	1,000 to 10,000	55%	2	2,044	179%
	10.0 to < 100%	154	17.75%	100 to 1,000	46%	2	373	242%
	100% (defaults)	88	100.00%	0 to 100			0	0%
	Sub-total	**56,656**	**0.45%**		**34%**	**1**	**15,999**	**28%**
Retail	**Sub-total**	**0**	**n.s.**		**n.s.**	**n.s.**	**0**	**n.s.**
	TOTAL	**103,699**	**0.29%**		**24%**	**2**	**19,747**	**19%**

								31 December 2017
		a	b	c	d	e	f	g
In millions of euros	PD scale	EAD	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	Average RW
Central governments or central banks	0.00 to < 0.15%	26,633	0.02%	100 to 1,000	2%	3	118	0%
	0.15 to < 0.25%	17	0.17%	0 to 100	21%	1	3	16%
	0.25 to < 0.50%	43	0.33%	0 to 100	50%	1	21	50%
	0.50 to < 0.75%	767	0.69%	0 to 100	28%	1	301	39%
	0.75 to < 2.50%	59	1.96%	0 to 100	46%	1	62	105%
	2.50 to < 10.0%	21	6.37%	0 to 100	8%	4	5	23%
	10.0 to < 100%	91	26.06%	0 to 100	60%	4	335	366%
	100% (defaults)	-	0.00%	-			-	-
	Sub-total	**27,631**	**0.14%**		**3%**	**3**	**845**	**3%**
Institutions	0.00 to < 0.15%	22,567	0.05%	1,000 to 10,000	21%	1	2,194	10%
	0.15 to < 0.25%	1,268	0.17%	100 to 1,000	43%	1	410	32%
	0.25 to < 0.50%	990	0.34%	100 to 1,000	48%	1	557	56%
	0.50 to < 0.75%	393	0.69%	100 to 1,000	51%	1	366	93%
	0.75 to < 2.50%	238	1.40%	0 to 100	55%	1	294	123%
	2.50 to < 10.0%	191	3.68%	100 to 1,000	54%	1	333	175%
	10.0 to < 100%	53	14.11%	0 to 100	68%	0	185	348%
	100% (defaults)	3	100.00%	0 to 100			-	0%
	Sub-total	**25,703**	**0.15%**		**25%**	**1**	**4,340**	**17%**
Corporates	0.00 to < 0.15%	42,837	0.05%	1,000 to 10,000	30%	1	5,320	12%
	0.15 to < 0.25%	6,873	0.17%	1,000 to 10,000	33%	2	1,610	23%
	0.25 to < 0.50%	3,879	0.37%	1,000 to 10,000	43%	2	2,023	52%
	0.50 to < 0.75%	1,635	0.69%	100 to 1,000	32%	3	1,073	66%
	0.75 to < 2.50%	2,873	1.39%	1,000 to 10,000	51%	2	3,309	115%
	2.50 to < 10.0%	1,197	4.12%	1,000 to 10,000	55%	2	2,104	176%
	10.0 to < 100%	158	20.09%	100 to 1,000	42%	3	374	237%
	100% (defaults)	236	100.00%	100 to 1,000			4	2%
	Sub-total	**59,689**	**0.70%**		**32%**	**1**	**15,817**	**26%**
Retail	**Sub-total**	**0**	**n.s.**		**n.s.**	**n.s.**	**0**	**n.s.**
	TOTAL	**113,023**	**0.44%**		**23%**	**2**	**21,002**	**19%**

➤ TABLE 64: STANDARDISED BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT (EU CCR3)

	31 December 2018									
	EAD									
Risk weight *In millions of euros*	0%	20%	35%	50%	75%	100%	150%	Total	*Of which unrated(*)*	RWAs
Central governments or central banks						2		**2**	-	2
Corporates		319		59		11		**390**	*0*	104
Insitutions			0	7		838	1	**846**	*819*	843
Retail					5			**5**	*5*	4
TOTAL	**-**	**319**	**0**	**66**	**5**	**851**	**1**	**1,243**	***824***	**953**

(*) *Exposure to counterparties without a credit rating from external rating agencies.*

	31 December 2017									
	EAD									
Risk weight *In millions of euros*	0%	20%	35%	50%	75%	100%	150%	Total	*Of which unrated(*)*	RWAs
Central governments or central banks	0			0		4		**4**	-	4
Corporates		237		51		27	0	**315**	*6*	100
Insitutions			0	0	0	714	15	**729**	*724*	736
Retail					6			**6**	*6*	5
TOTAL	**0**	**237**	**0**	**51**	**6**	**744**	**15**	**1,054**	***736***	**845**

(*) *Exposure to counterparties without a credit rating from external rating agencies.*

The table below presents the EAD distribution of OTC derivatives portfolio by rating. For each element, the table gives the part of netted transactions.

➤ TABLE 65: BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY RATING

	31 December 2018		31 December 2017	
	Distribution of EAD	of which netted transactions	Distribution of EAD	of which netted transactions
AAA	12%	100%	10%	99%
AA	43%	96%	45%	95%
A	22%	93%	21%	89%
BBB	9%	90%	10%	91%
BB	6%	88%	6%	82%
B	5%	84%	6%	82%
Other	3%	88%	3%	84%

With respect to the OTC derivatives portfolio at 31 December 2018, the share of collateralised transactions represents more than 75% of the total in number of transactions.

COUNTERPARTY CREDIT RISK FOR EXPOSURES TO CENTRAL COUNTERPARTIES ASSOCIATED WITH CLEARING ACTIVITIES

The capital requirements related to central counterparties (CCP) exposures correspond to an extension of the bilateral counterparty credit risk perimeter to clearing activities; it covers the cleared part of the OTC derivatives, repo portfolio as well as the listed derivatives portfolio.

It is equal to the sum of the following three elements:

- a charge resulting from exposures generated by clearing activities (proprietary and client clearing);
- a requirement resulting from the non-segregated initial margins posted to the CCP;
- a requirement resulting from the default fund contribution of the central counterparties.

For central counterparties (CCP), Regulation (EU) No. 648/2012 distinguishes qualifying central counterparties (QCCP) from non-qualified central counterparties.

Regulation (EU) No. 575/2013 also provides for the use of an alternative method for calculating capital requirements for exposures to an eligible central counterparty, based only on transaction exposures and prefunded default fund contributions.

The table below presents the breakdown of the risk-weighted assets by method and category of exposure to central counterparties:

➤ TABLE 66: EXPOSURE TO CENTRAL COUNTERPARTIES (CCP) (EU CCR8)

		31 December 2018		31 December 2017	
	In millions of euros	EAD	RWAs	EAD	RWAs
1	**Exposure to QCCP (total)**		**2,621**		**2,979**
2	Exposure for trades at QCCPs (excluding initial margin and default fund contributions)	26,735	1,235	29,696	1,426
3	*of which OTC derivatives*	*3,748*	*75*	*1,506*	*287*
4	*of which exchange-traded derivatives*	*22,384*	*1,145*	*27,104*	*1,114*
5	*of which SFTs(*)*	*603*	*15*	*1,086*	*25*
8	Non-segregated initial margin(**)	9,873	261	8,595	212
9	Prefunded default fund contributions	3,099	1,069	3,240	1,257
10	Alternative calculation		56		83
10.a	*of which exposure for trades at QCCPs*	*139*	*10*	*530*	*36*
10.b	*of which segregated initial margin*	*311*	*6*	-	-
10.c	*of which non-segregated initial margin(**)*	*211*	*38*	*481*	*36*
10.d	*of which prefunded default fund contributions*	*32*	*1*	*193*	*12*
11	**Exposure to non-QCCPs (total)**		**222**		**-**
12	Exposure to non-QCCPs (excluding initial margin and default fund contribution)	1	1	-	-
13	*of which OTC derivatives*	*1*	*1*	-	-
18	Non-segregated initial margin(**)	3	3	-	-
19	Prefunded default fund contributions	4	55	-	-
20	Unfunded default fund contributions	11	164	-	-
	TOTAL	**40,419**	**2,843**	**42,735**	**2,979**

(*) *Securities Financing Transactions.*
(**) *Not bankruptcy remote in accordance with article 300.1 Regulation (EU) No. 575/2013.*

CVA RISK

The CVA risk measures the risk of losses caused by changes in the credit valuation adjustments resulting from credit spread changes associated with the counterparties to whom the Group is exposed (see paragraph *Credit Valuation Adjustments (CVA)*)

Using the standardised approach, the capital requirement for credit valuation adjustment risk (CVA) is calculated according to the supervisory formula.

Using the IRB approach, the CVA risk capital charge is the sum of two elements:

- CVA VaR charge, which represents the own funds requirement measured from a VaR computation on CVA sensitivities to credit spreads;
- CVA SVaR charge, which represents the own funds requirement measured from a stressed VaR computation on CVA sensitivities to credit spreads.

➤ TABLE 67: CVA RISK CAPITAL CHARGE (EU CCR2)

		31 December 2018		31 December 2017	
	In millions of euros	EAD	RWAs	EAD	RWAs
1	**Advanced approach**	**51,688**	**2,676**	**32,901**	**1,693**
2	CVA VaR charge		427		200
3	CVA SVaR charge		2,249		1,493
4	**Standardised approach**	**653**	**414**	**546**	**217**
5	**TOTAL**	**52,341**	**3,090**	**33,447**	**1,910**

COUNTERPARTY CREDIT RISK MANAGEMENT

CREDIT RISK MITIGATION TECHNIQUES

In the context of liquidity management and counterparty credit risk management, the BNP Paribas Group systematically monitors the collateral guarantees received and posted, for both the portion hedging the contracts' market value (*variation margin*) and the risk of an adverse change in these market values in the event of a counterparty default (*initial margin*). The collateral posted and received used in derivative contracts is mainly comprised of cash, and to a lesser extent, debt securities. The impact of the collateral received in clearing contracts is shown in the financial statements in note 5.q *Offsetting of financial assets and liabilites*.

As a general rule, when EAD is modelled in EEPE and weighted according to the IRB approach, the LGD (Loss Given Default) is not adjusted according to the collateral received since they are already taken into account in the "Effective Expected Positive Exposure" computation (see section *Bilateral counterparty risk*).

Collateral guarantees used in the standardised approach to reduce the EAD totalled EUR 552 million at 31 December 2018, compared with EUR 562 million at 31 December 2017.

The table below shows the breakdown of the collateral posted and received in respect of initial margins, margin calls as well as amounts in cash and in securities of repurchase agreements and securities lending and borrowing.

TABLE 68: COMPOSITION OF COLLATERAL (EU CCR5-B)

	31 December 2018			
	Collateral used in derivative transactions		Collateral used in SFTs(*)	
In millions of euros	Fair value of collateral received	Fair value of posted collateral	Fair value of collateral received	Fair value of posted collateral
Cash – euro	28,121	31,484	109,329	132,595
Cash – other currencies	16,936	21,439	193,962	159,840
Sovereign debt – euro	2,908	4,436	81,068	110,872
Sovereign debt – other currencies	3,933	4,454	58,884	101,304
Corporate and institutional debt	6,148	5,033	156,448	141,375
Equity	230	-	106,304	142,327
Other	78	-	0	118
TOTAL	**58,353**	**66,846**	**705,995**	**788,432**

(*) Securities Financing Transactions.

5

CVA RISK MANAGEMENT

CVA sensitivities to credit spreads are partially offset by the recognition of hedges. These hedges correspond to credit derivatives on certain identified counterparties or indices composed of identifiable counterparties.

Instruments authorised as hedges in the calculation of the capital requirements for credit valuation adjustment risk form a sub-set of the credit derivatives used as hedge by the Global Markets business in the management of its CVA.

The following table summarises all the notional amounts and market values of the trading portfolio credit derivatives and highlights derivatives authorised as hedges.

TABLE 69: CREDIT DERIVATIVES EXPOSURES (EU CCR6)

	31 December 2018			
	Credit derivative hedges		Other credit derivatives	
In millions of euros	Protection bought	Protection sold	Protection bought	Protection sold
Notionals	**4,614**	**1,104**	**446,447**	**421,177**
Single-name credit default swaps	2,728	503	203,252	203,229
Index credit default swaps	1,386	601	183,693	175,199
Total return swaps	-	-	23,654	-
Credit options	500	-	35,124	42,749
Other credit derivatives	-	-	725	-
Fair values	**(31)**	**10**	**(2,150)**	**1,956**
Positive fair value (asset)	20	11	2,431	4,411
Negative fair value (liability)	(51)	(2)	(4,581)	(2,455)

In millions of euros	31 December 2017			
	Credit derivative hedges		Other credit derivatives	
	Protection bought	Protection sold	Protection bought	Protection sold
Notionals	**4,988**	**776**	**431,340**	**409,114**
Single-name credit default swaps	2,991	444	213,635	215,415
Index credit default swaps	1,997	332	164,626	151,350
Total return swaps	-	-	13,927	-
Credit options	-	-	39,134	42,349
Other credit derivatives	-	-	18	-
Fair values	**(113)**	**15**	**(6,729)**	**6,160**
Positive fair value (asset)	11	18	648	6,876
Negative fair value (liability)	(124)	(3)	(7,377)	(716)

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

TABLE 70: COUNTERPARTY CREDIT RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

In millions of euros	RWAs			Capital requirements		
	31 December 2018	31 December 2017	Variation	31 December 2018	31 December 2017	Variation
Bilateral counterparty credit risk	20,700	21,847	(1,147)	1,656	1,748	(92)
Exposure to CCP related to clearing activites	2,843	2,979	(136)	227	238	(11)
CVA charge	3,090	1,910	1,180	247	153	94
COUNTERPARTY CREDIT RISK	**26,634**	**26,736**	**(102)**	**2,131**	**2,139**	**(8)**

TABLE 71: COUNTERPARTY CREDIT RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU CCR7)

In millions of euros	RWAs – Counterparty credit risk		Capital Requirements – Counterparty credit risk	
	a		b	
	Total	of which internal model method (IMM)	Total	of which internal model method (IMM)
1 January 2018	**26,736**	**20,802**	**2,139**	**1,664**
Asset size	262	(1,211)	21	(97)
Asset quality	(731)	(497)	(59)	(40)
Model update	(66)	89	(5)	7
Methodology and policy	375	375	30	30
Acquisitons and disposals	11	-	1	-
Currency	(14)	1	(1)	-
Other	61	143	5	11
31 DECEMBER 2018	**26,634**	**19,702**	**2,131**	**1,576**

2018 was marked by the reduction in exposure to bilateral counterparty credit risk, a consequence of the changed volumes of activity, combined with an increase in CVA risk related to the widening credit spreads.

5.7 Market risk

Market risk is the risk of incurring a loss of value due to adverse trends in market prices or parameters, whether directly observable or not.

Observable market parameters include, but are not limited to, exchange rates, prices of securities and commodities (whether listed or obtained by reference to a similar asset), prices of derivatives, and other parameters that can be directly inferred from them, such as interest rates, credit spreads, volatilities and implied correlations or other similar parameters.

Non-observable factors are those based on working assumptions such as parameters contained in models or based on statistical or economic analyses, non-ascertainable in the market.

In fixed income trading books, credit instruments are valued on the basis of bond yields and credit spreads, which represent market parameters in the same way as interest rates or foreign exchange rates. The credit risk arising on the issuer of the debt instrument is therefore a component of market risk known as issuer risk.

Liquidity is an important component of market risk. In times of limited or no liquidity, instruments or goods may not be tradable or may not be tradable at their estimated value. This may arise, for example, due to low transaction volumes, legal restrictions or a strong imbalance between demand and supply for certain assets.

The market risk related to banking activities encompasses the interest rate and foreign exchange risks stemming from banking intermediation activities.

Market risk is presented in this section in two parts:

- market risk linked to trading activities and corresponding to trading instruments and derivative contracts;
- market risk linked to banking activities encompassing the interest rate and foreign exchange risks stemming from banking intermediation activities.

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS FOR MARKET RISK

➤ TABLE 72: MARKET RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

In millions of euros	RWAs			Capital requirements		
	31 December 2018	31 December 2017	Variation	31 December 2018	31 December 2017	Variation
Internal model approach	17,726	14,852	2,874	1,418	1,188	230
Standardised approach	1,780	1,147	633	142	92	50
Trading book securitisation positions	442	667	(225)	35	53	(18)
TOTAL MARKET RISK	**19,948**	**16,666**	**3,282**	**1,596**	**1,333**	**263**

Within the BNP Paribas Group, market risk is primarily handled using the internal model approach.

2018 saw an increase in market risk related in particular to the change in asset volumes and model updates.

TABLE 73: MARKET RISK UNDER THE INTERNAL MODEL APPROACH (EU MR2-A)

In millions of euros		31 December 2018		31 December 2017	
		RWAs	Capital requirements	RWAs	Capital requirements
1	**VaR(*) (higher of values 1.a and 1.b)**	**5,488**	**439**	**4,335**	**347**
1.a	Previous day's VaR		124		79
1.b	Average of the daily VaR on each of the preceding sixty business days x multiplication factor		439		347
2	**SVaR(*) (higher of values 2.a and 2.b)**	**9,323**	**746**	**7,330**	**586**
2.a	Latest SVaR		212		132
2.b	Average of the SVaR during the preceding sixty business days x multiplication factor		746		586
3	**IRC(*)(**) (higher of values 3.a and 3.b)**	**2,436**	**195**	**2,597**	**208**
3.a	Most recent IRC value		177		207
3.b	Average of the IRC number over the preceding twelve weeks		195		208
4	**CRM(***) (higher of values 4.a, 4.b and 4.c)**	**479**	**38**	**590**	**47**
4.a	Most recent risk number for the correlation trading portfolio		35		47
4.b	Average of the risk number for the correlation trading portfolio over the preceding twelve weeks		38		47
4.c	8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio		30		27
6	**TOTAL**	**17,726**	**1,418**	**14,852**	**1,188**

(*) VaR, SVaR and IRC values include all the components taken into account in the calculation of risk-weighted assets.
(**) Incremental Risk Charge.
(***) Comprehensive Risk Measure.

The market risk calculated using the standardised approach covers the market risk of some entities of the Group that are not covered by internal models. The standardised approach is used to calculate foreign exchange risk for banking book (See section 5.7 *Market risk related to banking activities*).

TABLE 74: MARKET RISK UNDER THE STANDARDISED APPROACH (EU MR1)

		31 December 2018		31 December 2017	
		RWAs	Capital requirements	RWAs	Capital requirements
	Outright products				
1	Interest rate risk (general and specific)	260	21	172	14
2	Equity risk (general and specific)	0	0	0	0
3	Foreign exchange risk	1,513	121	975	78
	Options				
7	Scenario approach	7	1	-	-
8	**Securitisation (specific risk)**	**442**	**35**	**667**	**53**
9	**TOTAL**	**2,222**	**178**	**1,814**	**145**

TABLE 75: MARKET RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU MR2-B)

		a	b	c	d		f	g
In millions of euros		VaR	SVaR	IRC(*)	CRM(**)	Standardised approach	Total RWAs	Total capital requirements
1	31 December 2017	4,335	7,330	2,597	590	1,814	16,666	1,333
2.a	Asset size	579	1,507	(580)	(24)	(67)	1,415	113
2.b	Asset quality	215	120	(8)	(86)	(240)	1	
3	Model update	369	373	426	-	(0)	1,168	93
4	Methodology and policy	-	-	-	-	-	-	-
5	Acquisitons and disposals	-	-	-	-	-	-	-
6	Currency	-	-	-	-	-	-	-
7	Other	(10)	(7)	(0)	-	715	698	56
8	**31 DECEMBER 2018**	**5,488**	**9,323**	**2,436**	**479**	**2,222**	**19,948**	**1,596**

(*) Incremental Risk Charge.
(**) Comprehensive Risk Measure.

The VaR and SVaR increased in 2018 mainly relating to increases in asset volumes market parameters and model updates.

IRC fell in 2018 due to an increase in hedging instruments and a reduction of positions offsetting the increased effects of the model updates.

MARKET RISK RELATED TO TRADING ACTIVITIES

INTRODUCTION [Audited]

Market risk arises mainly from trading activities carried out within Corporate and Institutional Banking (CIB), mainly within Global Markets and encompasses different risk factors defined as follows:

- interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates;
- foreign exchange risk is the risk that the value of an instrument will fluctuate due to changes in foreign exchange rates;
- equity risk arises from changes in the market prices and volatilities of equity shares and/or equity indices;
- commodities risk arises from changes in the market prices and volatilities of commodities and/or commodity indices;
- credit spread risk arises from the change in the credit quality of an issuer and is reflected in changes in the cost of purchasing protection on that issuer;
- option products carry by nature volatility and correlation risks, for which risk parameters can be derived from option market prices observed in an active market.

Trading activities at BNP Paribas are directly related to economic relations with business line customers, or indirectly as part of market-making activities. BNP Paribas's proprietary trading activities were transferred to the Opera Trading Capital subsidiary in mid-2015.

MARKET RISK MANAGEMENT ORGANISATION [Audited]

The market risk management system aims to track and control market risks as well as control financial instrument valuation whilst ensuring that the control functions remain totally independent from the business lines.

Within RISK, three departments are responsible for monitoring market risk:

- Global Markets RISK (GM RISK) covers Global Markets activities;
- Enterprise Risk Architecture (ERA – ALMT RISK) covers ALM-Treasury activities;
- International Retail Banking RISK (IRB RISK) covers International Retail Banking activities.

This mission consists of defining, measuring and analysing risk factors and sensitivities, as well as measuring and controlling Value at Risk (VaR), the global indicator of potential losses. RISK ensures that all business activity complies with the limits approved by the various committees and approves new activities and major transactions, reviews and approves position valuation models and conducts a monthly review of market parameters (MAP review) in association with the Valuation and Risk Control Department (V&RC).

Market Risk and financial instrument valuation monitoring is structured around several formal committees:

- the Capital Markets Risk Committee (CMRC) is the main committee governing the risks related to capital markets. It is responsible for addressing, in a coherent manner, the issues related to market and counterparty risk. The CMRC follows the evolution of the main exposures and stress risk and sets the high level trading limits. It meets approximately monthly and is chaired by either the Group Chief Executive Officer or by a Deputy Bank's Chief Operating Officer;
- the Product and Financial Control Committee (PFC) is the arbitration and pricing decision-making committee regarding financial instrument valuation matters. It meets quarterly and discusses the conclusions of the CIB Financial Control teams and their work to enhance control effectiveness and the reliability of the measurement and recognition of the results of market transactions. It is chaired by the Group Chief Financial Officer and brings together the Directors of Finance-Accounting, Corporate & Institutional Banking and RISK;
- at business line level, the Valuation Review Committee (VRC) meets monthly to examine and approve the results of Market parameters review (MAP review) and any changes in reserves. The Valuation Review Committee also acts as the referee in any disagreements between trading and control functions. The Committee is chaired by the Senior Trader and other members include representatives from trading, RISK, the CIB Valuation and Risk Control Group (V&RC) team, and Finance. Any disagreement is escalated to the PFC;
- the Valuation Methodology Committee (VMC) meets quarterly per business line to monitor model approvals and reviews, follow up relevant recommendations and present model governance improvements. This Committee is chaired by RISK GM and includes representatives from trading, research, and the valuation and risk control (V&RC) team of CIB and Finance. Any disagreement can be escalated to the PFC, which can make an arbitration decision.

VALUATION CONTROL [Audited]

Financial instruments in the prudential trading book are valued and reported at market or model value through P&L, in compliance with applicable accounting standards. Such can also be the case of financial instruments classified in the banking book.

Portfolio valuation control is described in the Charter of Responsibility for Valuation, which sets out the division of responsibilities. These governance policies and practices also apply to all ALM Treasury activities.

In addition to the Charter, the relevant valuation controls are detailed in specific policies. The main processes that together form the valuation control governance mechanism are set out below.

Transaction accounting control

This control is under the responsibility of middle-office teams. However, the most complex transactions are controlled by RISK.

Market Parameter (MAP) review – Independent Price Verification

Price verification is managed jointly by Valuation and Risk Control (V&RC) and RISK. Daily controls are performed on the most liquid parameters and a comprehensive and formal review of all the market parameters is performed at month end. The types of parameters controlled by V&RC are listed precisely; these are essentially the parameters for which an automatic control against external sources can be implemented (security prices, vanilla parameters); this may include the use of consensus price services. RISK is in charge of controlling valuation methodologies as well as the most complex parameters that are very dependent on the choice of models.

The general principles of the Market Parameter review are described in the Charter of Responsibility for Valuation as well as specialised global policies such as the Global Marking and Independent Price Verification Policy and MAP Review Principles. The specific methodologies are described in documents known as the MAP Books organised by product lines and regularly updated. The responsibilities of RISK and V&RC are defined for each point in time and the conclusions of the Market Parameter reviews are documented in the MAP review finding documents.

The outcome of the Market parameter review is the estimation of valuation adjustments communicated to the middle-office which enters it in the accounting records. The results are communicated to the Trading management during the Valuation Review Committees, where final decision or escalation is made. The opinion of the control functions prevails, however, significant and persistent disagreement can be escalated to the PFC.

Model Approval and Reviews

The governance of model controls is described in the Valuation Methodology Control Policy (VMCP).

Front office quantitative analysts design and propose the methodologies used to value the product and measure the risks that are used to take trading decisions. The research team and IT are responsible for the implementation of these models in the systems.

The independent control of the valuation models falls under the responsibility of RISK and includes:

- Models' validation, by which a formal decision to approve or reject a model is taken, including following any modification of the valuation methodology called a "Valuation Model Event". In all cases, the approval decisions are taken by a senior RISK analyst during a specific VMC. The review required by the validation process can be fast track or comprehensive; in the latter case, the reasons and conditions for approval are detailed in a model approval document;

- the review of models can be conducted at inception (linked to an approval) or during the life of a model (re-calibration); it consists of an examination of the suitability of the model used to value certain products in the context of a given market environment;
- the control of the use and implementation of models, consists of continuous control of the correct parameterisation and configuration of the models as well as their suitability for the relevant products.

Reserve and other valuation adjustments

RISK defines and calculates "reserves". These are adjustments to the market or model value affecting both the accounting valuation and regulatory capital. They can be considered either as the exit cost of a position or as a premium for risks that cannot be diversified or hedged, as appropriate.

The reserves primarily cover:

- the bid-offer spreads and liquidity risk;
- the model or market parameters uncertainties;
- the reduction of non hedgeable risks (smoothing digital or barrier pay-offs).

A general valuation adjustment policy exists. Reserve methodologies are documented by RISK for each product line and these documentations are updated regularly. The analysis of reserve variations is reported at the monthly VRC.

Reserve methodologies are improved regularly and any change is a Valuation Model Event. Reserve improvements are generally motivated by the conclusion of a model review or by the calibration to market information during the Market parameter review process.

Additional Valuation Adjustments (AVA) are calculated in accordance with the Commission delegated Regulation (EU) No. 2016/101 of 26 November 2015, published in the OJEU on 28 January 2016.

This delegated regulation supplements the requirements of article 105 of the CRR with regard to regulatory technical standards for prudent valuation of financial instruments in the trading portfolio. It specifies that the scope of application of these requirements covers all instruments measured according to article 34 of the CRR, based on the proportion of the accounting valuation change that impacts Common Equity Tier 1 capital.

The regulatory technical standards set out the definitions and a framework for measurement and control for the elements of valuation uncertainty that must be considered when determining a prudent valuation under article 105. The standard also sets a target level of valuation certainty: the Bank must be 90% confident that it could liquidate the instrument at a better price than the prudent valuation.

To apply these requirements, the first step is to define Prudent Valuation Adjustments (PVA). These adjustments correspond to the different types of risks and costs that could lead to exit costs, relative to the mid-market value (or the expected value). The main categories are the liquidation cost, the risk related to uncertainties regarding market prices, concentration risk and valuation model risk. PVAs are calculated for each exposure on a granular level.

Based on these PVAs and for each exposure and risk type, BNP Paribas calculates the AVA (Additional Valuation Adjustments) that may be necessary, in addition to the reserves already taken into account in the valuation for the same exposure and risk type, to achieve the target valuation certainty level.

For some types of risk, the calculation of AVAs includes a diversification effect, which reflects the fact that the additional adjustments that may be necessary with respect to all positions are less than the sum of the additional adjustments that may be required for the individual positions or risks.

The AVA amounts are deducted from Common Equity Tier 1 capital.

Day One profit or loss

Some transactions are valued with "non-observable" parameters. Accounting norms require the recognition of any Day One P&L for non-observable transactions to be deferred where the initial model value has to be calibrated with the transaction price. The deferred net margin on reserves is recognised through profit or loss in proportion to the anticipated duration of the transaction or the period for which the inputs will be non-observable.

RISK works with Finance, middle-offices, and business lines on the process of identifying and handling these profit and loss items, in order to determine whether a type of parameter or transaction is observable or not in accordance with the observability rules, which are moreover duly documented and approved in the Valuation Methodology Committee.

The P&L impact of the P&L deferral is calculated by the middle-office or the Finance teams, according to the scope.

Observability rules are also used for the financial disclosures required by the IFRS 7 accounting standard.

MARKET RISK EXPOSURE

Market risk is first analysed by systematically measuring portfolio sensitivity to various market parameters. The results of these sensitivity analyses are compiled at various aggregate position levels and compared with market limits.

Risk monitoring set up and limit setting [Audited]

The Group uses an integrated system to follow the trading positions on a daily basis and manage VaR calculations. This system not only tracks the VaR, but also detailed positions and sensitivities to market parameters based on various criteria (such as by currency, product, counterparty). This system is also configured to include trading limits, reserves and stress tests.

Responsibility for limit setting and monitoring is delegated at three levels, which are, in order of decreasing importance, CMRC, followed by the head of the business line and finally the manager of a trading portfolio. Limits may be changed either temporarily or permanently, in accordance with the level of delegation and the prevailing procedures. Appropriate escalation mechanisms are in place to ensure that the independent view from the RISK Function on the level of limits is heard.

Core risk analysis and reporting to Executive Management [Audited]

RISK reports, through various risk analyses and dashboards, to Executive Management and business lines Senior Management on its risk analysis work (limit, VaR monitoring, core risk analysis, etc.). The MCLAR (Market, Counterparty and Liquidity Analysis and Reporting) team within RISK is responsible for compiling/circulating main global risk reports.

The following risk reports are generated on a regular basis:

- weekly “Main Position” reports for each business line (equity derivatives, commodities, credit G10 rates and FX & Local Markets), summarising all positions and highlighting items needing particular attention; these reports are mainly intended for business line managers;
- monthly local “bottom up” stress testing reports for Executive Management identifying key risk concentrations around the globe;
- supporting documentation for the CMRC comprising markets and risk event summaries, global counterparty exposure summary, VaR/Stressed VaR evolution, market and counterparty risk Stress Testing and Capital evolution summaries, market and counterparty risk backtesting;
- geographical and global risk dashboards;
- reports on valuation adjustments in the trading book, in particular regarding market and CVA sentivities.

VaR (Value at Risk) [Audited]

The VaR is a statistical measure indicating the worst loss expected for a given portfolio over a given time horizon and within a given confidence interval under normal market movements. It is not a maximum loss and it can potentially be exceeded in some cases, for example in the event of abnormal market conditions.

The BNP Paribas VaR methodology aims to accurately compute a one-day Value at Risk at the 99% confidence level. The BNP Paribas VaR calculation uses an internal model which has been approved by the banking supervisor.

The VaR calculation is based on a Monte-Carlo approach, which not only performs normal or log-normal simulations but also accounts for the non-normality often observed in financial markets as well as correlation between risk factors. An equally weighted one-year rolling window of historical market data (updated every month) is used to calibrate the Monte-Carlo simulation.

The principle groups of simulated factors includes: interest rates, credit spreads, exchange rates, equity prices, commodities prices, and associated volatilities. Changes in risk factors are proportional (share prices, volatility, CDS spreads) or absolute (rates excluding OIS, spreads, repo rates, correlations).

The valuation method used varies depending not upon the product but upon the type of risk we are capturing. To generalise, the methods used are either sensitivity based or full revaluation based on grid interpolation to incorporate both linear and, especially for derivatives, non-linear effects. In both cases, BNP Paribas calculates the general and specific risk as a whole, taking into account the diversification effect by correlating market parameters.

The algorithms, methodologies and sets of indicators are reviewed and improved regularly to take into account the capital market evolution.

The scope of the BNP Paribas internal model covers the majority of capital market activities (Global Markets, BNP Paribas Securities Services, ALM Treasury). As an indication, market risk based on standardised approach (excluding securitisation positions in the trading book) represents less than 9% of the total market risk capital requirement at 31 December 2018, including foreign exchange risk.

VaR is a statistical measure that does not take into account losses outside a given confidence interval, and does not apply to losses related to intraday market movements. Other risk measures, such as Stressed VaR (SVaR), IRC and CRM, complement the BNP Paribas Group’s market risk monitoring and management system.

Evolution of the VaR (1-day, 99%) [Audited]

The VaR set out below are calculated from an internal model, which uses parameters that comply with regulations in place. They correspond to measurements taken into account within the framework of monitoring market limits. They are based on a one-day time horizon and a 99% confidence interval.

In 2018, total average VaR for BNP Paribas was EUR 25 million (with a minimum of EUR 18 million and a maximum of EUR 37 million), after taking into account the -EUR 30 million netting effect between the different types of risks. These amounts break down as follows:

TABLE 76: VALUE AT RISK (1-DAY, 99%) [Audited]

In millions of euros	Year to 31 Dec. 2018				Year to 31 Dec. 2017	
	Minimum(**)	Average	Maximum(**)	Last measure	Average	Last measure
Interest rate risk	13	17	28	20	17	16
Credit risk	9	11	20	10	13	11
Foreign exchange risk	4	7	12	9	10	6
Equity price risk	9	15	31	17	13	12
Commodity price risk	2	4	9	6	4	3
Netting effect(*)		*(30)*		*(32)*	*(31)*	*(28)*
TOTAL VALUE AT RISK	**18**	**25**	**37**	**30**	**26**	**20**

(*) Note that the minimum and maximum figures shown above for the various risk types are computed on a standalone basis (i.e. independently from each other as well as the total VaR). While the minimum or maximum for each risk type may not necessarily be observed on the same date, minimum/maximum Netting Effects are not considered relevant.

(**) For minima and maxima, total VaR cannot be read as the sum of VaR by risk type.

VaR (1 day, 99%) remained at a low level throughout 2018 with a slight increase at the end of the year due to the impact of increased market volatility and market movements on the Group's market risk profile (see Figure 10 hereafter).

Backtesting the VaR

Risk continuously tests the accuracy of its internal model through a variety of techniques, including in particular a regular comparison over a long-term horizon between actual daily losses on capital market transactions and one-day VaR.

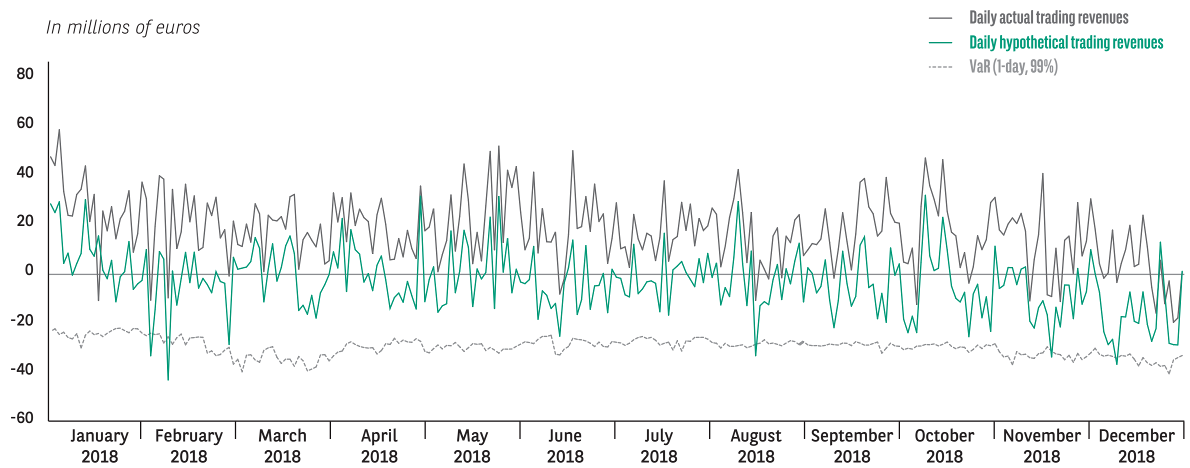
This backtesting consists of making a comparison between the daily global trading book VaR and the actual result. In accordance with the regulation, BNP Paribas supplements this "actual backtesting" method with a comparison between the daily VaR and the hypothetical result generated by the trading book, which is also known as "hypothetical backtesting". The hypothetical result includes all components of the actual result, except the intra-day revenues, fees and commissions. A backtesting event is declared when a real or hypothetical loss exceeds the daily VaR amount. The confidence interval selected for calculating daily VaR is 99%, which in theory means the observation of two to three events per year.

The number of events is calculated at least quarterly and is equal to the highest of the number of excesses for the hypothetical and actual variations in the portfolio value.

In 2018, five hypothetical backtesting events were recorded at Group level (no actual backtesting event was observed):

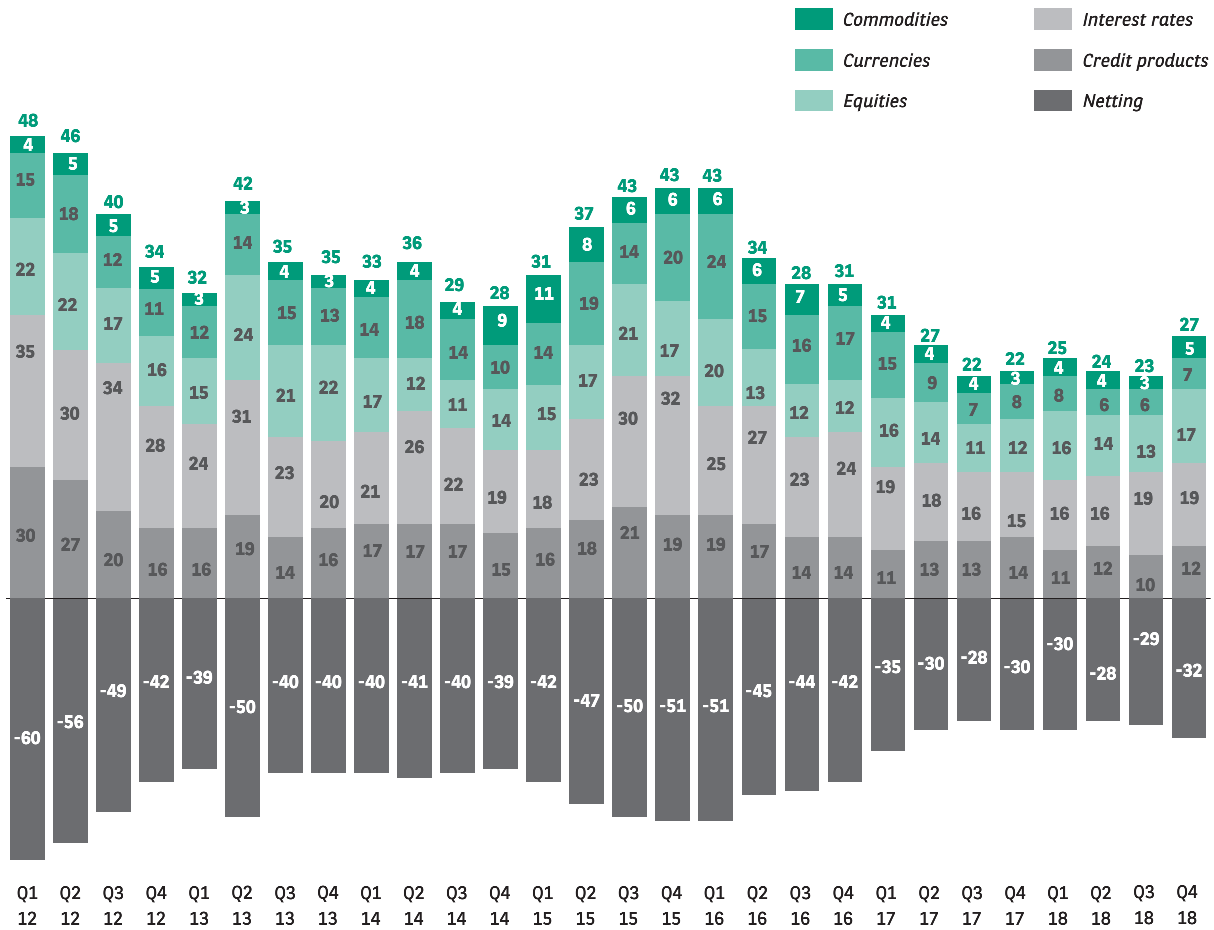
- 1 February 2018: this hypothetical loss was due to an increase in volatility in financial markets resulting from the combined effect of the disclosure of employment figures in the United States and the anticipation of the increase of United States Federal reserve's leading rates;
- 7 February 2018: this hypothetical loss in equity derivative portfolios in Europe and the United States, occurred in the context of a sudden fall of indices and a spike in volatility caused by the announcement by the United States Federal Reserve of its intention to accelerate its schedule of interest rate increases;
- 15 August 2018: this hypothetical loss occurred in the context of political tensions between the United States and Turkey as well as trade tensions between the United States and China, resulting in the sharp depreciation of the Turkish lira and the Chinese yuan;
- 19 November 2018: this hypothetical loss, primarily related to the commodity derivatives activities, occurred in the context of a drop in the price of oil and a sharp rise in volatility, due to fears of a slowdown in global growth;
- 10 December 2018: this hypothetical loss resulted from the combined effect of market movements which led to cumulative losses within different business lines of the Bank (without actually exceeding the authorised level of the businesses concerned).

➤ FIGURE 10: COMPARISON BETWEEN VAR (1-DAY, 99%) AND DAILY TRADING REVENUE (EU MR4) [Audited]



Quarterly change in VaR

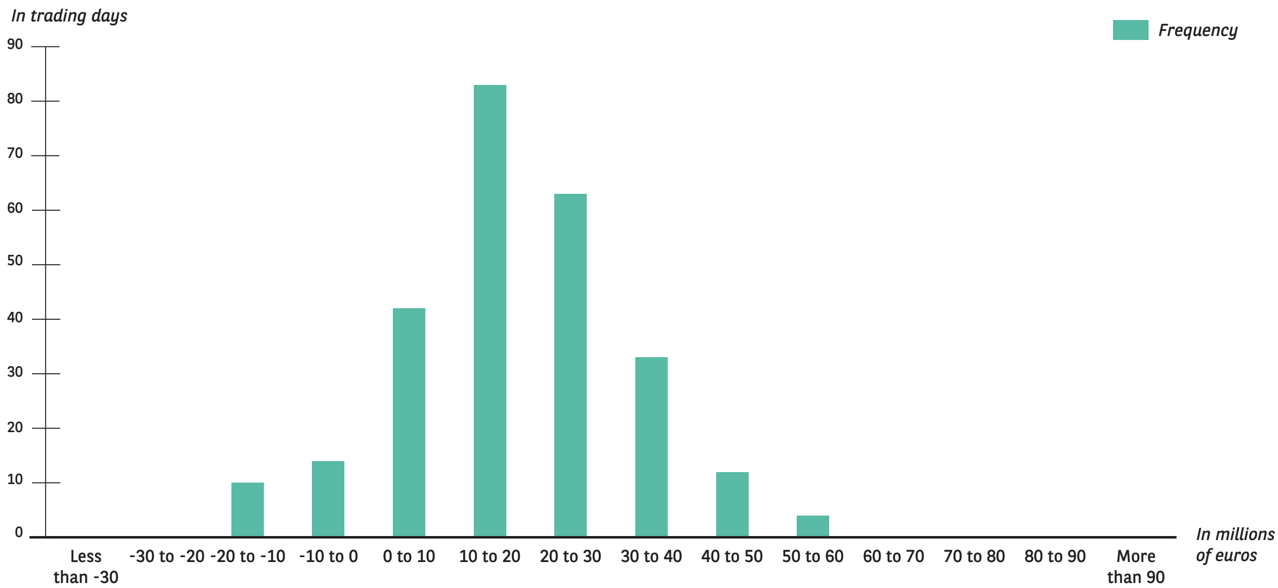
➤ FIGURE 11: QUARTERLY CHANGE IN VAR (1-DAY, 99%)



Distribution of daily income [Audited]

The following histogram presents the distribution of the actual daily trading revenue of BNP Paribas, including intra-day revenues, fees and commissions. It indicates the numbers of trading days during which the revenue reached each of the levels marked on the x axis, in millions of euro.

➤ FIGURE 12: DISTRIBUTION OF DAILY TRADING REVENUE [Audited]



Trading activities generated an actual positive result for 91% of the trading days in 2018 (versus 98% in 2017).

Evolution of the VaR (10-day, 99%) [Audited]

The VaR set out below are calculated from an internal model, which uses parameters that comply with the method recommended by the Basel Committee for determining estimated Value at Risk. They correspond to measurments taken into account within the framework of monitoring market limits. These are based on a ten-day time horizon and a 99% confidence interval, extrapolated from 1-day VaR amounts with the same confidence interval, by multiplying by a factor equal to the square root of ten.

In 2018, total average VaR (10-day, 99%) for BNP Paribas is EUR 79 million (with a minimum of EUR 56 million and a maximum of EUR 118 million), after taking into account the -EUR 94 million netting effect between the different types of risks. These amounts break down as follows:

➤ TABLE 77: VALUE AT RISK (10-DAY, 99%) [Audited]

	Year to 31 Dec. 2018				Year to 31 Dec. 2017	
In millions of euros	Minimum(**)	Average	Maximum(**)	Last measure	Average	Last measure
Interest rate risk	40	55	89	64	54	51
Credit risk	28	35	62	30	40	35
Foreign exchange risk	11	21	39	29	31	20
Equity price risk	29	48	98	54	42	38
Commodity price risk	7	12	28	18	12	9
Netting effect(*)		*(94)*		*(101)*	*(98)*	*(89)*
TOTAL VALUE AT RISK	**56**	**79**	**118**	**94**	**81**	**64**

(*) Note that the minimum and maximum figures shown above for the various risk types are computed on a standalone basis (i.e. independently from each other as well as the total VaR). While the minimum or maximum for each risk type may not necessarily be observed on the same date, minimum/ maximum Netting Effects are not considered relevant.
(**) For minima and maxima, total VaR cannot be read as the sum of VaR by risk type.

Stressed VaR

Stressed VaR is calibrated over a specified full twelve-month period, including a crisis period. This period applies across the Group, which must have comprehensive market data to calculate the risk measurements and remain relevant when applied to the current trading book. An expert committee reviews the period on a quarterly basis in accordance with a quantitatively informed approach among the three scenarios that generate the maximum stressed risk measures.

The current reference period for calibrating stressed VaR is from 2 July 2018 to 30 June 2009.

BNP Paribas uses the same calculation method as for calculating VaR, with market parameters determined based on this reference period.

The SVaRs presented below are based on a one-day time horizon and a 99% confidence interval and correspond to measurements taken into account within the framework of monitoring market limits.

In 2018, SVaR (1-day, 99%) followed a similar trend to VaR, also due to the increased volatility at year end.

➤ TABLE 78: STRESSED VALUE AT RISK (1-DAY, 99%)

	Year to 31 Dec. 2018				Year to 31 Dec. 2017	
In millions of euros	Minimum	Average	Maximum	Last measure	Average	Last measure
Stressed Value at Risk	30	48	78	63	42	38

Incremental Risk Charge (IRC)

The IRC approach measures losses due to default and ratings migration at the 99.9% confidence interval (i.e. the maximum loss incurred after eliminating the 0.1% worst events) over a capital and, liquidity or rebalancing frequency horizon of one year, assuming a constant level of risk on this horizon. The IRC scope mainly includes plain vanilla credit products (bonds and CDS, excluding securitised products) from the trading book.

This approach is used to capture the incremental default and migration risks on all non-securitised products.

The model is currently used in the risk management processes. This model was approved by the supervisor.

The calculation of IRC is based on the assumption of a constant level of risk over the one-year capital horizon, implying that the trading positions or sets of positions can be rebalanced during the one-year capital horizon in a manner that maintains the initial risk level, measured by the VaR or by the profile exposure by credit rating and concentration. This rebalancing frequency is called the liquidity horizon.

The model is built around a rating-based simulation for each obligor, which captures both the risk of the default as well as the risk of rating migration. The dependency between debtors is based on a multi-factor asset return model. The valuation of the portfolios is performed in each simulated scenario. The model uses a constant one-year liquidity horizon.

IRC fell in 2018 due to an increase in hedging instruments and a reduction of positions offsetting the increased effects of the model updates.

Comprehensive Risk Measure (CRM) for credit correlation portfolio

CRM is an additional capital charge to the IRC which applies to the credit correlation portfolio (excluding securitisation products) from the trading book. It measures potential losses from a variety of specific price change risks (spread, correlation, recovery, credit migration, etc.) at the 99.9% confidence interval (i.e. the maximum loss incurred after eliminating the 0.1% worst events) over a capital and liquidity horizon or rebalancing frequency of one year, assuming a constant level of risk over this horizon.

The corporate correlation activity is an activity that consists of trading and risk managing mainly bespoke corporate CDOs and their hedges using single name CDS, CDS indices and index tranches. This activity falls under the structured credit activity trading within the Credit business line of Global Markets.

The valuation framework uses both market observable prices (particularly used for CDS, index and index tranches) and data established based on models for the implicit correlations and recovery rates, using the models of dependency between debtors used for the IRC.

Summary of measures taken into account within the framework of monitoring market limits

TABLE 79: INTERNAL MODEL APPROACH VALUES FOR TRADING PORTFOLIOS (EU MR3)

	In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
	VaR (10-day, 99%)		
1	Maximum	118	121
2	Average	79	81
3	Minimum	56	58
4	Last measure	94	64
	SVaR (10-day, 99%)		
5	Maximum	247	221
6	Average	151	133
7	Minimum	94	81
8	Last measure	201	120
	IRC(*) (99.9%)		
9	Maximum	367	374
10	Average	190	226
11	Minimum	92	135
12	Last measure	135	188
	CRM(**) (99.9%)		
13	Maximum	63	104
14	Average	44	59
15	Minimum	27	37
16	Last measure	35	47

(*) Incremental Risk Charge.
(**) Comprehensive Risk Measure.

Securitisation positions in trading book outside correlation portfolio

For securitisation positions treated as financial assets at fair value for accounting purposes, changes in market value, except accrued interest on fixed income securities, are recognised in the profit and loss account under "Net gain/loss on financial instruments at fair value through profit or loss".

For ABS positions outside the correlation book, the standardised capital charge applies (as per the standard method for banking books). The capital requirements are therefore calculated by applying a weighting to the risk-weighted assets (RWA), which is determined on the basis of the asset's external rating. The capital calculation are based on the second worst rating of the three rating agencies.

Trading book securitisation positions deducted from CET1 capital since 31 December 2017 are excluded from the calculation of risk-weighted assets with respect to market risk. They are therefore not included in the following tables. At 31 December 2018, securitisation positions in the trading book deducted from CET1 capital amounted to EUR 38 million.

➤ TABLE 80: BREAKDOWN OF TRADING BOOK SECURITISATION POSITIONS OUTSIDE CORRELATION BOOK BY ASSET TYPE

In millions of euros	Securitisation positions			
	31 December 2018		31 December 2017	
Asset category	Short positions	Long positions	Short positions	Long positions
Residential mortgages		84		209
Consumer loans		116		21
Credit card receivables		92		53
Loans to corporates		12		4
Finance leases		267		214
Other assets		5		-
TOTAL BALANCE SHEET		**574**		**502**
Residential mortgages		-		0
Loans to corporates		379		500
TOTAL OFF-BALANCE SHEET		**379**		**501**
TOTAL	**-**	**953**	**-**	**1,002**

➤ TABLE 81: QUALITY OF TRADING BOOK SECURITISATION POSITIONS OUTSIDE CORRELATION BOOK

In millions of euros	Securitisation positions			
	31 December 2018		31 December 2017	
Tranche quality	Short positions	Long positions	Short positions	Long positions
Senior tranche		641		731
Mezzanine tranche		313		268
First-loss tranche		-		3
TOTAL	**-**	**953**	**-**	**1,002**

➤ TABLE 82: BREAKDOWN OF TRADING BOOK SECURITISATION POSITIONS AND CAPITAL REQUIREMENTS CORRELATION BOOK BY RISK WEIGHT

In millions of euros	31 December 2018								
	Securitisation positions						Capital requirements		
	Short positions			Long positions					
Risk weight	Securitisation	Re-securitisation	Total	Securitisation	Re-securitisation	Total	Short positions	Long positions	Total
7% - 10%				596		596		4	4
12% - 18%				168		168		2	2
20% - 35%				91		91		2	2
40% - 75%				31		31		2	2
100%				22		22		2	2
250%				1		1		0	0
425%				3		3		1	1
650%				42		42		23	23
External ratings based method				953		953		35	35
TOTAL	**-**	**-**	**-**	**953**	**-**	**953**	**-**	**35**	**35**

In millions of euros	31 December 2017								
	Securitisation positions						Capital requirements		
	Short positions			Long positions					
Risk weight	Securitisation	Re-securitisation	Total	Securitisation	Re-securitisation	Total	Short positions	Long positions	Total
7% - 10%				688		688		6	6
12% - 18%				80		80		1	1
20% - 35%				56		56		2	2
40% - 75%				90		90		7	7
100%				8		8		1	1
250%				-		-		-	-
425%				46		46		18	18
650%				33		33		18	18
External ratings based method				1,002		1,002		53	53
TOTAL	**-**	**-**	**-**	**1,002**	**-**	**1,002**		**53**	**53**

MARKET RISK STRESS TESTING FRAMEWORK

A range of stress tests are performed to simulate the impact of extreme market conditions on the value on the global trading books. Stress tests cover all market activities applying a range of stressed market conditions.

Scenarios

The fundamental approach of the current trading book stress testing framework combines "bottom up" and "top down" stress testing:

- Macro Level Scenarios (top down) comprise the evaluation of a set of global level stress tests. These scenarios assess the impact of severe market moves on BNP Paribas trading positions related to large global or major regional market shock events. They can be based on historical events or forward-looking hypothetical scenarios. Scenarios include events such as an emerging markets crisis, credit crunch and a stock market crash, and some are based on past crises.

  The official macro stress tests scenarios currently comprise a range of eight different stress tests. The results of these scenarios are reviewed at each Capital Markets Risk Committee (CMRC). The scenarios are:

  - Scenario 1: unexpected rate hike, driving short-term rates higher with a flattening of the interest rate curve,
  - Scenario 2: stock market crash, with a flight to quality assets leading to a drop and a steepening of the interest rate curve,
  - Scenario 3: generic emerging market crisis designed to test global risk of these markets,
  - Scenario 4: credit crunch, leading to a general risk aversion,
  - Scenario 5: euro crisis, low GDP expectations, potential threat of a country leaving the euro and a significant weakening of the currency,
  - Scenario 6: energy crisis driven by severe geopolitical turmoil with serious consequences on energy markets,
  - Scenario 7: US crisis, mostly based on a structural US crisis spreading round the globe,
  - Scenario 8: risk-on scenario: rally in equity and emerging markets, low realised volatility and drop in implied volatility in all markets (effectively a return to risky assets);

- Micro Level Scenarios (bottom up): instead of looking at the effect on the global portfolio, these types of scenarios aim to highlight risk exposures on specific trading desks, regions or risk concentrations. This bottom up approach enables the use of more complex stress scenarios and hence allows the detection of areas of potential losses which may not be easily achieved under the global macro scenarios (such as complex market dislocations or idiosyncratic risk). This bottom up process also facilitates the classification of risk areas into those where there may be less liquidity or where the risk may be more structural in nature.

Process

It is the analysis of the above scenarios which enables the adverse scenario for the trading books to be constructed. The official stress scenario is presented at each Capital Markets Risk Committee along with the adverse global stress scenarios and any bottom up stress test yielding significant results.

The results of all stress tests are reviewed regularly by Executive Management and sent to the Board of directors.

The scenarios take market liquidity into account by simulating the drying up of certain assets or product liquidity as the stress event unfolds. To understand this process, it can be simplified by considering an approach where the time horizon for the stress shock can vary between different instruments/assets (hence more advanced scenarios can take certain idiosyncratic factors into account). Moreover, it may sometimes be required to quantify the impact of a stress event occurring with re hedging assumptions factored into part of the exposure under stress.

Stress testing is governed by the Capital Markets Stress Testing Steering Committee (STSC). The committee meets monthly and sets the direction of all internal risk departmental stress scenario developments, infrastructure, analysis and reporting. The STSC governs all internal stress testing matters relating to both market and counterparty risk and decides upon the detailed definition of the CMRC Stress Tests.

Stress testing is the core element of the tail risk analysis, which is also captured through the stressed Value at Risk, the Incremental Risk Charge and the Comprehensive Risk Measure. Furthermore, the risk of a rare event used in the form of the "average loss in addition to VaR" (Expected Shortfall) in allocating capital in respect of market risk between business lines is an additional element allowing tail risk in the management and monitoring of market risk to be taken into account.

MARKET RISK RELATED TO BANKING ACTIVITIES

Interest rate and foreign exchange risks related to banking intermediation activities and investments are managed by the cross-functional ALM Treasury Department. At Group level, the ALM-Treasury Department is directly overseen by the Chief Operating Officer. BNP Paribas SA's ALM Treasury Department exercises functional authority over the ALM Treasury teams of each entity or group of entities covering the entire Group perimeter. Strategic decisions are made by the Asset and Liability Committee (ALCo), which oversees ALM Treasury's activities. These committees have been set up at Group, entity or group of entities level.

The foreign exchange risk gives rise to a weighted assets calculation under Pillar 1. The interest rate risk falls under Pillar 2.

FOREIGN EXCHANGE RISK

Calculation of risk-weighted assets

Foreign exchange risk relates to all transactions part of the banking book.

Group entities calculate their net position in each currency, including the euro. The net position is equal to the sum of all asset items less all liability items plus off-balance sheet items (including the net forward currency position and the net delta-based equivalent of the currency option book), less structural, non-current assets (long-term equity interests, property, plant and equipment, and intangible assets). These positions are converted into euros at the exchange rate prevailing on the reporting date and aggregated to give the Group's overall net open position in each currency. The net position in a given currency is long when assets exceed liabilities and short when liabilities exceed assets. For each Group entity, the net currency position is balanced in the relevant currency (i.e. its reporting currency) such that the sum of long positions equals the sum of short positions.

The rules for calculating the capital requirement for foreign exchange risk are as follows:

- matched positions in currencies of Member States participating in the European Monetary System are subject to a capital requirement of 1.6% of the value of the matched positions;
- CFA and CFP francs are matched with the euro, and are not subject to a capital requirement;
- positions in closely correlated currencies are subject to a capital requirement of 4% of the matched amount;
- other positions, including the balance of unmatched positions in the currencies mentioned above, are subject to a capital requirement of 8% of their amount.

The amounts involved are set out in Table 74: *Market risk under the standardised approach (EU MR1)*.

Foreign exchange risk and hedging of net income generated in foreign currencies [Audited]

So-called "operating" foreign exchange risk exposure relates to net earnings generated by activities conducted in currencies other than the functional currency of the entity concerned. The Group's policy is to hedge the variability of its net income due to currency movements. To this end, earnings generated in a currency other than the functional currency of a given entity of the Group are hedged locally. Net income generated by foreign subsidiaries and branches and positions relating to portfolio impairment are managed centrally.

Foreign exchange risk and hedging of net investments in foreign operations [Audited]

The so-called "structural" foreign exchange position of an entity relates to investments in currencies other than the functional currency. This position mainly results from the capital endowment of the branches and equity investments in foreign currencies financed by buying the investment currency. This structural foreign exchange position, adjusted for any intangibles, constitutes asset exposure.

The Group's policy is to hedge portfolio exposure to liquid currencies, while at the same time maintaining the solvency ratio's limited sensitivity to exchange rate fluctuations. For this, borrowings in the same currency as the investment are used as an alternative to financing by purchasing the currency in question. Borrowings are recognised as hedges of investments.

INTEREST RATE RISK [Audited]

> Interest rate risk in the banking book, or global interest rate risk, is the risk of variability in results as a result of mismatches in interest rates, maturities and nature between assets and liabilities in the banking book. This risk arises in non-trading portfolios.

Organisation of the Group interest risk management

The Board of directors assigns responsibility to the Chief Executive Officer for management of interest rate risk in the banking book. The Board of directors is informed quarterly on the principles governing interest rate policy and the Group's position through the Internal Control, Risk and Compliance Committee (CCIRC).

The Chief Executive Officer delegates management responsibility to the Group ALM Committee (Asset and Liability Management Committee). The permanent members of the Group ALM Committee are the Chief Operating Officer (Chairman), the Deputy COOs heading up core businesses, the Group Chief Risk Officer, the Group Chief Financial Officer, the Group ALM Treasury Head, and the Head of General Inspection. The Group ALM Committee is responsible for defining the Group's interest rate risk profile, defining and tracking interest rate risk monitoring indicators and assigning limits.

ALM Treasury is responsible for the analysis of the management proposals and operational implementation of decisions related to managing the interest rate risk of the banking book as part of its delegated management.

The RISK Function participates in the Group ALM Committee and the local ALM Treasury Committees (ALCo) and oversees implementation by ALM Treasury of the relevant decisions made by these committees. It also provides second-line control by reviewing the models and risk indicators, monitoring the level of risk indicators and ensuring compliance with the limits assigned.

The banking book consists of the Group's total bank balance sheet, excluding trading book transactions. This includes intermediation transactions (deposits, loans, etc.), non-commercial balance sheet items (equity, fixed assets, etc.) and banking book risk management activities, including derivatives used for the management of interest rate risk on the banking book (notably when they are ineligible for hedge accounting under IFRS/GAAP).

Banking book interest rate risk in each BNP Paribas entity is systematically transferred to ALM Treasury, through internal analytic contracts or lending/borrowing transactions. For the Group as a whole, ALM Treasury is responsible for managing the interest rate risk transferred in this way.

Decisions concerning the management of interest rate risk are made and monitored during monthly or quarterly committee meetings by entity or group of entities, attended by representatives of local ALM Treasury, Group ALM Treasury, Finance and RISK Functions and senior management of the entities and/or businesses. Management of interest rate risk is done locally within each entity or group of entities.

Measurement of interest rate risk

Rate positions are measured taking into account the specific features of the risks managed. Hence, the Group has defined the concepts of standard rate risks and structural rate risks. The standard rate risk corresponds to the general case, namely when it is possible to define the most appropriate hedging strategy for a given transaction. The structural rate risk is the interest rate risk for equity and non-interest-bearing current accounts: these balance sheet items generate regular revenues but are sensitive to interest rate levels. However it is not possible to define a single hedging strategy to fully neutralise this sensitivity. In this case, the Group included all the possible so-called "neutral" management strategies in terms of interest rate risk.

Interest rate risks are analysed in terms of interest rate gaps that measure for each future period the potential rate characteristic mismatches between assets and liabilities (fixed rate and indexation type). In the interest rate gaps, the optional effects, in particular linked to behavioural options, are embedded and translated into their delta equivalent.

The maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour. For Retail Banking products, behavioural models are based on historical or forward data and econometric studies. These possible management strategies notably relate to early redemption and savings accounts. Moreover, the maturities of non-interest-bearing current accounts and of equity are calculated according to a more conventional approach defining a range of investments taking into account the objective of stabilising results and stability of deposits.

Interest rate risk is also measured through indicators of the sensitivity of revenues to interest rate changes on a going concern basis, incorporating dynamic changes in balance sheet items. This enables the partial or zero correlation between customer interest rates and market interest rates to be taken into account on the one hand, and the volume sensitivities to interest rates on the other hand, which create a risk to future revenues.

The choice of indicators and risk modelling are reviewed by RISK. The results and the adjustments following these reviews are presented and monitored to the committees on a regular basis.

The interest rate risk measurement indicators are consistently presented to the ALCos and serve as the basis for operating risk management decisions.

As stated in the introduction to the section *Market risk related to banking activities*, the interest rate risk comes under Pillar 2.

Risk limits

Interest rate risk indicators span the entire banking book.

The interest rate gaps are subject to interest rate risk limits across all time horizons. These limits are calibrated based on the nature of the risks (standard or structural) at Group and entity level. They are reviewed annually.

The revenue sensitivity indicator is subject to limits and a warning threshold relative to the overall sensitivity level, which is broken down by divisions and in the main entities. Moreover, the Group regularly monitors the impact of stress scenarios on the revenues.

Transactions that do not qualify for hedge accounting under IFRS are subject to specific limits.

Sensitivity of revenues to global interest rate risk

These sensitivities are calculated on the total banking book. They factor in the direct impacts of market rates and business trends over a period of up to three years. In addition, indirect effects on commercial activity linked to changes in outstandings and customer rates, notably the effects of inertia on margins of changes in interest rates (tightening – or widening – of margins on loans with an upward – or downward – in interest rate moves and conversely on deposit) are taken into account in accordance with the recommendations of the Basel Committee published in 2016.

The consolidated indicator is presented in the table hereafter. Over one-, two- and three-year timeframes, the sensitivity of revenues to a parallel, instantaneous and definitive increase in market rates of 50 basis points (+0.5%) across all currencies has a positive impact of respectively EUR 185 million, EUR 510 million and EUR 698 million, or 0.4%, 1.2% and 1.6% of the Group's revenues.

In a very low or negative interest rate environment, the effects of a 0% floor on customer deposit rates lead to an increase in non-interest-bearing current accounts. These increases in non-interest-bearing current account balances, that are deemed temporary, are invested over conservative horizons. They thus contribute to the sensitivity of revenues through their forecast replacements. In addition, in rising interest rate scenarios, the rate of migration of these deposits towards interest-bearing accounts has been taken into account leading to a sensitivity assymetry.

5

➤ **TABLE 83: SENSITIVITY OF REVENUES TO GLOBAL INTEREST RATE RISK BASED ON A 50 BASIS POINT INCREASE OR DECREASE IN THE INTEREST RATES** [Audited]

Sensivity of 2018 revenues *In millions of euros*	For +50bp shock				For -50 bp shock			
	EUR	USD	Other currencies	Total	EUR	USD	Other currencies	Total
Year 1	125	41	19	185	(110)	(45)	(27)	(182)
Year 2	453	13	44	510	(433)	(17)	(48)	(498)
Year 3	604	38	56	698	(735)	(44)	(57)	(836)

Sensivity of 2017 revenues *In millions of euros*	For +50bp shock				For -50bp shock			
	EUR	USD	Other currencies	Total	EUR	USD	Other currencies	Total
Year 1	117	52	24	193	(67)	(53)	(28)	(148)
Year 2	437	44	33	515	(421)	(52)	(32)	(506)
Year 3	553	81	48	683	(787)	(96)	(47)	(930)

Sensitivity of the value of the net assets of the banking intermediation activity

As the assets and liabilities of the Group's banking intermediation business are not intended to be sold, they are not recognised or managed on the basis of their theoretical economic value measured by discounting future cash flows. Similarly, the theoretical economic value of the net assets does not affect the Group's capital.

However, pursuant to the regulatory requirements and calculation methods laid down by the European Banking Authority (EBA), the ratios of sensitivity to variations of +/-200 basis points (+/-2%) in interest rates, of the theoretical economic value of the net assets of the intermediation business in relation to Tier 1 and Tier 2 capital are regularly calculated. These ratios are compared to the 20% threshold used by the supervisor to identify situations where interest rate risk in the banking book may be material. At end-2018, the ratio was -2.7% for a 200-basis-point decrease and -4.6% for a 200-basis-point increase. These values are both well below the materiality threshold of 20%. The regulatory floors as defined in the EBA's "Guidelines on the management of interest rate risk arising from non-trading book activities" are applied to interest rate shocks.

HEDGING OF INTEREST RATE AND FOREIGN EXCHANGE RISKS [Audited]

Hedges initiated by the Group consist mainly of interest rate or currency hedges using derivative financial instruments (swaps, options and forwards).

Depending on the hedging objective, derivative financial instruments used for hedging purposes are qualified either as fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy, identifies the hedged item and the hedging instrument, and the nature of the hedged risk; and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

Global interest rate risk

The Bank's strategy for managing global interest rate risk is based on closely monitoring the sensitivity of the Bank's net income to changes in interest rates, factoring in all interest rate risks. The aim is to ensure the stability and regularity of the interest margin. This monitoring requires an extremely accurate assessment of the risks incurred so that the Bank can determine the hedging strategy, after taking into account the effects of netting the different types of risk. These hedging strategies are defined and implemented by entity and by currency.

The hedges can comprise swaps and options and are typically accounted for as fair value hedges or cash flow hedges. They may also take the form of government securities and are classified on an accounting basis as "Financial assets at amortised cost" or "Financial assets at fair value through equity".

The beginning of 2018 was marked by a sense of optimism in the American and European financial centres. In the euro zone, with an encouraging series of economic indicators and inflation outlook, the European Central Bank began reducing its asset purchase programme from EUR 60 billion to EUR 30 billion per month. The end of this purchase programme was announced in June 2018 and then put in place in December 2018.

Within the euro zone, interest rates remained low, the ECB indicating that an increase in its key interest rates would not occur before summer 2019 and could be delayed as long as necessary to ensure a change in inflation in line with the current expectations of a sustainable adjustment.

In the United States, the optimism, even stronger given a more favourable economic environment, prompted the Federal Reserve to raise its interest rates. In October, the yield of the ten-year Treasury note exceeded 3.20%, its highest level since 2011.

The end of 2018 was nevertheless marked by concerns about the economic outlook, growth and inflation in the euro zone, the United States or, indeed, globally. Furthermore, these concerns have been reinforced by geopolitical risks.

In this context of low but stable rates, early redemptions and rate renegotiations remained stable, close to the minimum levels (whether in France, Belgium or Italy). The savings structure remains distorted in favour of non-interest bearing current accounts. Consequently, the outlook for current account investments is regularly reviewed in order to anticipate the potential consequences of an increase in short-term rates.

Structural foreign exchange risk

Currency hedges are contracted by the ALM Treasury in relation to the Group's investments in foreign currencies and its future foreign currency revenues. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy, identifies the hedged item and the hedging instrument, and the nature of the hedged risk and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

A hedging relationship is applied and documented for investments in subsidiaries and branches financed by foreign currency loans so as to record movements in exchange rates symmetrically and avoid impacts on the profit and loss account. These instruments are designated as *net investment hedges*. The amount of these loans stood at EUR 22 billion at 31 December 2018. The changes in value related to exchange differences recognised directly in equity with respect to these hedges was -EUR 599 million in 2018.

During the 2018 financial year, no net investment hedging relationships were disqualified. The amount recorded in the profit and loss account for 2018 with respect to the ineffective portion of hedges of net investments is immaterial.

Hedging of financial instruments recognised in the balance sheet (Fair Value Hedge)

Fair value hedges of interest rate risks relate either to identified fixed-rate assets or liabilities, or to portfolios of fixed-rate assets or liabilities. Derivatives are contracted to reduce the exposure of the fair value of these instruments to changes in interest rates.

Individual assets hedging consists mainly of securities classified as as "Financial assets at amortised cost" or "Financial assets at fair value through equity"; individual liabilities hedging consists mainly of fixed income securities issued by the Group.

Hedges of portfolios of financial assets and liabilities, constructed by currency, relate to:

- fixed-rate loans (property loans, equipment loans, consumer credit and export loans);
- fixed-rate deposits (mainly demand deposits and funds deposited under home savings contracts).

To identify the hedged amount, the residual balance of the hedged item is split into maturity bands, and a separate amount is designated for each band. The maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour (early redemption assumptions and estimated default rates).

Demand deposits, which do not bear interest at contractual rates, are qualified as fixed-rate medium-term financial liabilities. Consequently, the value of these liabilities is sensitive to changes in interest rates. Estimates of future cash outflows are based on historical analyses.

For each hedging relationship, expected hedge effectiveness is measured by ensuring that for each maturity band, the fair value of the hedged items is greater than the fair value of the designated hedging instruments.

Actual effectiveness is assessed on an *ex-post* basis by ensuring that the monthly change in the fair value of hedged items since the start of the month does not indicate any over-hedging.

Cash Flow Hedge

In terms of interest rate risk, the Group uses derivative instruments to hedge fluctuations in income and expenses arising on floating-rate assets and liabilities. Highly probable forecast transactions are also hedged. Hedged items are split into maturity bands by currency and benchmark interest rate. After factoring in early redemption assumptions and estimated default rates, the Group uses derivatives to hedge some or all of the risk exposure generated by these floating-rate instruments.

In terms of foreign exchange risk, the Group hedges against variability in components of consolidated net income. In particular, the Group may hedge future revenue flows (especially interest income and fees) derived from operations carried out by its main subsidiaries and/or branches in a currency other than their functional currencies. As in the case of interest rate hedges, the effectiveness of these hedging relationships is documented and assessed on the basis of forecast maturity bands.

The table below concerns the scope of BNP Paribas SA's medium- and long-term transactions and shows the amount of hedged future cash flows (split by forecast date of realisation), which constitute the majority of the Group's transactions.

TABLE 84: HEDGED CASH FLOWS [Audited]

Period to realisation *In millions of euros*	31 December 2018				31 December 2017			
	Less than 1 year	1 to 5 years	More than 5 years	Total	Less than 1 year	1 to 5 years	More than 5 years	Total
Hedged cash flows	604	1,729	1,339	3,673	427	1,285	1,029	2,740

In 2018, no cash flow hedges were declassified on the grounds that achieving these future earnings was no longer be highly probable.

5.8 Liquidity risk

Liquidity risk is the risk that the Bank will not be able to honour its commitments or unwind or settle a position due to the market environment or idiosyncratic factors (i.e. specific to BNP Paribas), within a given timeframe and at a reasonable cost.

Liquidity risk reflects the risk of the Group being unable to fulfil current or future foreseen or unforeseen cash or collateral requirements, across all time horizons, from the short to the long term.

This risk may stem from the reduction in funding sources, draw down of funding commitments, a reduction in the liquidity of certain assets, or an increase in cash or collateral margin calls. It may be related to the bank itself (reputation risk) or to external factors (risks in some markets).

The Group's liquidity risk is managed under a global liquidity policy approved by the Group's ALM Committee. This policy is based on management principles designed to apply both in normal conditions and in a liquidity crisis. The Group's liquidity position is assessed on the basis of internal indicators and regulatory ratios.

LIQUIDITY RISK MANAGEMENT POLICY [Audited]

OBJECTIVES

The objectives of the Group's liquidity management policy are to secure a balanced financing structure for the development of BNP Paribas business activities, and to ensure it is sufficiently robust to cope with crisis situations.

The liquidity risk management framework relies on:

- management indicators:
  - by volume, to ensure that businesses or activities comply with their liquidity targets set in line with the Group's funding capacity,
  - by price, via internal liquidity pricing;
- the definition of monitoring indicators which enable assessment of the Group's liquidity position under normal conditions and in crisis situations, the efficiency of actions undertaken and compliance with regulatory ratios;
- the implementation of liquidity risk management strategies based on diversification of funding sources with maturities in line with needs, and the constitution of liquidity reserves.

The Group's liquidity policy defines the management principles that apply across all Group entities and businesses and across all time horizons.

GOVERNANCE

As for all risks, the Group Chief Executive Officer is granted authority by the Board of directors to manage the Group's liquidity risk. The Chief Executive Officer delegates this responsibility to the Group ALM Committee.

The Internal Control, Risk and Compliance Committee (CCIRC) reports quarterly to the Board of directors on liquidity policy principles and the Group's liquidity position.

The Group ALM Committee is responsible for:

- defining the Group's liquidity risk profile;
- monitoring compliance with regulatory liquidity ratios;
- defining and monitoring management indicators and calibrating the quantitative thresholds set for the Bank's businesses;
- defining and monitoring liquidity risk indicators and associating quantitative thresholds to them if necessary;
- defining and overseeing implementation of liquidity risk management strategies, including monitoring of business lines, under normal and stressed conditions.

In particular, the Group ALM Committee is informed about funding programmes and programmes to build up liquidity reserves, simulations in crisis conditions (stress tests), and about all events that may arise in crisis situations.

The Group ALM Committee is tasked with defining the management approach in periods of crisis (emergency plan). This framework is based on:

- supervision of the emergence of a crisis by monitoring the market position and complying with thresholds set for a series of indicators;
- governance of the activation of crisis management mode and the associated responsibilities;
- identification of possible actions for managing a crisis.

The Group ALM Committee meets every month under normal conditions and more often in stressed conditions. On a regular basis, specific meetings are dedicated to the business lines' monitoring indicators, notably to ensure that they comply with the set objectives. The Group ALM Committee may hold meetings to deal with specific issues whenever required.

The permanent members of the Group ALM Committee are the Chief Operating Officer (Chairman), the Deputy COOs heading up core businesses, the Chief Risk Officer, the Group Chief Financial Officer and the Group ALM Treasury Head. Other members represent the RISK Function, Finance Function and ALM Treasury.

Across the Group, ALM Treasury is responsible for the operational implementation of the Group ALM Committee's liquidity management decisions. The ALM Treasury Committees in entities or groups of entities are responsible for local implementation of the strategy decided by the Group ALM Committee to manage the bank's liquidity risk.

ALM Treasury is responsible for managing liquidity for the entire Group across all maturities. In particular, it is responsible for funding and short-term issuance (certificates of deposit, commercial paper, etc.), for senior and subordinated debt issuance (MTNs, bonds, medium/long-term deposits, covered bonds, etc.), preferred share issuance, and loan securitisation programmes for the Group. ALM Treasury is tasked with providing internal funding to the Group's divisions, operational entities and business lines, and investing their surplus cash. It is also responsible for building up and managing liquidity reserves, which comprise assets that can be easily sold in the event of a liquidity squeeze.

RISK participates in the Group ALM Committee and the local ALM Treasury Committees and oversees implementation by ALM Treasury of the relevant decisions made by these Committees. It provides second-line control by reviewing the models and risk indicators (including liquidity stress tests), monitoring risk indicators and ensuring compliance with the limits assigned.

Finance is responsible for producing the regulatory liquidity indicators, as well as the internal monitoring indicators. Finance oversees the consistency of the internal monitoring indicators with the objectives defined by the Group ALM Committee. Finance takes part in the Group ALM Committee and the local ALM Treasury Committees.

LIQUIDITY RISK MANAGEMENT AND SUPERVISION

Internal liquidity risk management and internal monitoring are based on a large range of indicators at various maturities. These indicators are measured on a regular basis by currency and maturity, both at Group level and entity level.

BUSINESS LINES' INTERNAL MONITORING INDICATORS

The monitoring indicators relate to the funding needs of the Group's businesses under both normal and stressed conditions. These monitoring indicators are part of the Group's budget planning exercise with set objectives that are routinely monitored (monthly).

Funding needs of the Group's businesses

The funding needs associated with the activity of the Group's businesses are managed in particular by measuring the difference between commercial funding needs (customer loans and overdrafts, trading assets) and commercial funding resources (customer deposits, sale of the Group's debt securities to customers, trading liabilities, etc.). This indicator makes it possible to measure the business lines' liquidity consumption under a normal business scenario.

It is supplemented by indicators to measure the funding needs of the business lines in one month and one year depending on the assumptions defined by European regulations in force (Liquidity Coverage Ratio) or anticipated in a one-year perspective (Net Stable Funding Ratio).

In addition to this commercial funding need indicators, the Group closely monitors the liquidity reserves and the refinancing provided by ALM Treasury, as well as the Group's structural resources (i.e. net own funds).

The overall management of the business funding needs, the Group's structural resources, funding and liquidity reserves made by the ALM – Treasury allows the Group to achieve a structurally robust liquidity situation able to resist severe market stress.

Business lines' consumption of liquidity is thus integrated in the Group's budget process, wherein each business line estimates its future liquidity needs, in keeping with its profitability targets and capital consumption objectives. During the iterative budget process, liquidity consumption objectives are allotted to the business lines, taking into account the funding provided by ALM Treasury and structural resources, in line with the Group's overall target. This process is regularly renewed, monitored and adjusted as appropriate throughout the year by the Group ALM Committee.

Internal liquidity pricing

All of the Group's assets and liabilities are subject to internal liquidity pricing, the principles of which are decided by the Group ALM Committee and aim to take account of trends in the cost of market liquidity and the balance between assets and liabilities within the Group's development strategy.

Change in recent years

In 2018, business lines' consumption of liquidity decreased slightly. The growth of credit products, particularly in domestic markets in France and Belgium as well in Personal Finance and Corporate Banking, was offset by the increase in deposits. The Group continues to have surplus liquidity and is seeking to limit the cost of these resources.

At end-2018, the net funding need of the businesses was low and largely covered by Group's net own funds, leading to excess liquidity before taking funding provided by the ALM Treasury into account.

In this context, all of the funding provided by ALM Treasury was used to finance the liquidity reserve, while also correcting the term structure differences between assets and liabilities and preparing for future TLAC requirements.

WHOLESALE FUNDING AND LIQUIDITY RESERVE MONITORING INDICATORS

Sources of wholesale funding [Audited]

Since 2016, the Group adopted a broad definition of wholesale funding, covering all funds excluding those provided by:

- retail customers, SMEs and corporates;
- institutional clients for their operating needs (e.g. portion needed for custody management);
- monetary policy and funding secured by market assets.

This definition is broader than market funding. For example, it includes medium- to long-term debt placed in funds for individuals and, in the short-term portion, non-operating deposits in the Securities Services business.

The Group has a conservative policy for the management of its wholesale funding by ensuring that it does not depend on very short-term funding and diversifying these funding sources.

Thus, wholesale funding with an original maturity of less than one month, so-called very short-term wholesale funding, is systematically "sterilised" by being placed in immediately-available deposits in central banks so that they are not used to fund the Group's business.

The Group ensures that short-term wholesale funding (with original maturity of between 1 month and one year) is diversified in terms of counterparty, industry and residual maturity. Any excess concentration on one of these criteria is systematically "sterilised" and placed in central bank deposits.

Medium-to long-term wholesale market funding (with original maturity over 1 year) is diversified in terms of investor type, distribution network, funding programme (secured or unsecured), and by geographical area to ensure diversification. Furthermore, the Group aims to optimise the term structure of its funding operations.

At end-2018, sterilised very short-term wholesale funding totalled EUR 75.2 billion (leading to the sterilisation of an equivalent amount in the Group's liquidity reserve), diversified short-term wholesale funding totalled EUR 124.7 billion and diversified medium-to long-term wholesale funding totalled EUR 158.7 billion.

➤ TABLE 85: BREAKDOWN OF THE WHOLESALE FUNDING BY CURRENCY [Audited]

The breakdown of funding by currency (after cross-currency swaps) corresponds to the Group's needs and to a diversification objective.

				31 December 2018
In billions of euros	EUR	USD	Other	All currencies
Sterilised very short-term wholesale funding	42.3	17.3	15.6	75.2
Short-term wholesale funding	42.0	48.1	34.6	124.7
Medium- to long-term wholesale funding	90.2	50.1	18.4	158.7
TOTAL WHOLESALE	**174.5**	**115.5**	**68.6**	**358.5**

				31 December 2017
In billions of euros	EUR	USD	Other	All currencies
Sterilised very short-term wholesale funding	32.9	22.3	13.7	68.9
Short-term wholesale funding	48.9	42.8	29.1	120.8
Medium- to long-term wholesale funding	89.0	39.4	21.3	149.7
TOTAL WHOLESALE	**170.7**	**104.6**	**64.1**	**339.4**

TABLE 86: BREAKDOWN OF THE GROUP'S MEDIUM- AND LONG-TERM (MLT) WHOLESALE FUNDING [Audited]

	31 December 2018						
			Unsecured senior debt				
In billions of euros	Tier 1 hybrid debt	Tier 2 subordinated debt	Non-preferred	Preferred	Secured MLT funding	Monetary policy funding	TOTAL
Total MLT funding	9.0	16.1	23.4	94.9	29.7	35.0	208.1
MLT debt placed with clients	-	-	-	(14.4)	-	-	(14.4)
Monetary policy	-	-	-	-	-	(35.0)	(35.0)
WHOLESALE MLT FUNDING	**9.0**	**16.1**	**23.4**	**80.5**	**29.7**	**-**	**158.7**

	31 December 2017						
			Unsecured senior debt				
In billions of euros	Tier 1 hybrid debt	Tier 2 subordinated debt	Non-preferred	Preferred	Secured MLT funding	Monetary policy funding	TOTAL
Total MLT funding	8.9	14.4	11.0	101.4	29.6	35.0	200.3
MLT debt placed with clients	-	-	-	(15.6)	-	-	(15.6)
Monetary policy	-	-	-	-	-	(35.0)	(35.0)
WHOLESALE MLT FUNDING	**8.9**	**14.4**	**11.0**	**85.8**	**29.6**	**-**	**149.7**

TABLE 87: TRENDS IN GROUP MLT WHOLESALE FUNDING [Audited]

In billions of euros	Stock at 31 December 2017	New origination	Redemptions	Buy-backs	Exercise of calls	Scope and other effects	Stock at 31 December 2018
Total MLT funding	200.3	43.4	(22.5)	(2.0)	(6.6)	(4.4)	208.1
MLT debt placed with clients	(15.6)	(0.6)	0.5	0.1	0.1	1.1	(14.4)
Monetary policy	(35.0)	-	-	-	-	-	(35.0)
WHOLESALE MLT FUNDING	**149.7**	**42.8**	**(22.0)**	**(1.9)**	**(6.5)**	**(3.4)**	**158.7**

Total medium- to long-term wholesale funding outstandings stood at EUR 158.7 billion at 31 December 2018 against EUR 149.7 billion at 31 December 2017. This increase is mainly related to new issues conducted within the framework of the new TLAC environment.

Wholesale funding raised by the Group in the markets with an initial maturity of over 1 year reached EUR 42.8 billion in 2018, up from EUR 36.1 billion in 2017.

Wholesale funding trends based on regulatory changes

In addition to the Group's liquidity management targets, use of wholesale funding also satisfies new regulatory requirements relating to Recovery and Resolution, providing for the implementation of the TLAC minimum ratio (see paragraph *Recovery and resolution* in *Capital adequacy and capital planning section* in section 5.2).

In order to comply with the regulatory TLAC ratio requirement of 20% at 1 January 2019, BNP Paribas issued EUR 23 billion of non preferred senior TLAC-eligible debt during 2017 and 2018, with different maturity dates and in various currencies.

To meet the TLAC requirement of 22% in 2022 and to prepare for future MREL requirements, in 2019 the Group plans to issue EUR 14 billion of non-preferred senior debt, subject to market conditions. The Group had completed half of its issue programme as at 31 January 2019.

As a reminder, the main characteristics of these debt instruments are:

- issuance under EMTN and US MTN programmes;
- non preferred senior notes (pursuant to article L.613-30-3-I-4 of the French Monetary and Financial Code);
- non-structured debt[1];
- initial maturity of more than one year;
- subject to conversion or depreciation before senior preferred debt but after subordinated debt;
- documentation mandatorily stating that this debt belongs to the new statutory category.

MLT secured wholesale funding [Audited]

MLT secured wholesale funding is measured by separating out assets representing securities and loans. Funding obtained from central banks is not included in the table below.

TABLE 88: MLT SECURED WHOLESALE FUNDING [Audited]

	31 December 2018		31 December 2017	
In billions of euros	Collateral used(*)	Funding raised(**)	Collateral used(*)	Funding raised(**)
Loans and receivables	35.4	28.9	35.6	28.2
Securities	0.9	0.8	1.5	1.3
TOTAL	**36.3**	**29.7**	**37.1**	**29.6**

(*) Amounts gross of haircuts.
(**) Amounts net of haircuts.

MLT secured wholesale funding (outside of monetary policy) represents 18.7% of total MLT wholesale funding in 2018 (19.7% in 2017). The Bank carefully manages its proportion of secured funding and the associated overcollateralisation in order to protect creditors holding unsecured debt.

Medium- to long-term liquidity position [Audited]

The medium-to long-term liquidity positions are measured regularly at Group level by entity and by currency to evaluate the medium-to long-term resources and uses. To this end, each balance sheet item is given a maturity in an economic approach using models and conventions offered by the ALM Treasury and reviewed by the RISK Function, or a regulatory approach by applying standardised weightings of the Net Stable Funding Ratio as anticipated for its application in Europe. For example, despite their immediate availability, the current accounts of retail customers and those linked with corporates' cash management activities have always remained highly stable, even through the most severe financial crises, thus constituting stable medium- to long-term funding sources in both an economic and a regulatory approach.

Stress tests and liquidity reserve [Audited]

Liquidity stress tests are performed regularly on various maturities (one day to twelve months) based on market factors and/or factors specific to the Group and using different scenarios: idiosyncratic (i.e. specific to BNP Paribas), systemic crisis (affecting financial institutions), and combined crisis scenarios.

For each crisis scenario considered, borrowings and liabilities are expected to only partially renew, while loan amortisations are expected to be replaced by new loans to protect the commercial franchise, off-balance sheet financing commitments are expected to be used, and market assets are expected to lose their market liquidity. Commitment renewal and utilisation are differentiated in intensity and in time, based on client type (individuals, small and medium enterprises, corporates, financial institutions, etc.) and/or the type of underlying for secured borrowings and loans (repos/reverse repos). Stress scenarios also cover calls for additional collateral (e.g. increased margin calls for collateralised derivatives, impact of "rating trigger" clauses).

The liquidity reserve consists of Group assets held by ALM Treasury and the capital market businesses. The liquidity reserve comprises:

- deposits with central banks;
- available assets that can be immediately sold on the market or through repurchase agreements (bonds or shares);
- available securities and receivables that can be refinanced with central banks (e.g. through securitisation, transforming less liquid assets into liquid or available assets) (see section 5.5 *Proprietary Securitisation (originator)*).

(1) Decree No. 2018-710 of 3 August 2018 specifies the conditions in which a security, a receivable, an instrument or a right is considered as non-structured under 613-30-3 I-4° of the French Monetary and Financial Code.

The global liquidity reserve (counterbalancing capacity) is calculated net of the payment systems' intraday needs and in keeping with prudential rules, in particular US rules, under which certain liquid assets are only recognised as available after a certain time period. Transferability restrictions are also taken into consideration in the calculation of the Group's liquidity reserve. These restrictions may stem from local regulations which limit transfers between entities of a group, non-convertible currencies or jurisdictions with foreign exchange control.

The table below shows its trends.

TABLE 89: BREAKDOWN OF GLOBAL LIQUIDITY RESERVE (COUNTERBALANCING CAPACITY) [Audited]

In billions of euros	Average 2018	31 December 2018	31 December 2017
Total eligible assets	414.8	412.3	384.6
Utilisations	(93.1)	(101.9)	(96.6)
Transferability	(2.8)	(2.3)	(3.1)
GLOBAL LIQUIDITY RESERVE	**318.9**	**308.1**	**284.9**
of which liquid assets meeting prudential regulation requirements (HQLA)	*298.2*	*288.2*	*268.2*
of which other liquid assets	*20.7*	*19.9*	*16.7*

The Group's liquidity reserve stood at EUR 308.1 billion at end-2018, of which EUR 75.2 billion sterilising very short-term wholesale funding.

The Group's liquidity reserve increased by EUR 23 billion compared with end-2017. This increase can be explained by an increase in liquid securities, mainly bonds issued or guaranteed by governments and central banks in the European Economic Area in the domestic currency.

Regulatory liquidity ratios

The thirty-day Liquidity Coverage Ratio (LCR) came into force on 1 October 2015 setting the minimum coverage ratio for net cash outflows at 100% since 1 January 2018. The Group measures its liquidity requirements in accordance with the requirements of the Delegated Act adopted by the European Commission in January 2015. It has adapted its management process in keeping with this regulation. The management indicators for the businesses' funding needs and the internal pricing terms therefore reflect the standardised assumptions set by the LCR and allow the Group to monitor compliance with the requirement.

The Group's LCR for the period ending 31 December 2018 stood at 132%, versus 121% at 31 December 2017.

The Group's LCR is detailed below in accordance with EBA Guidelines on LCR disclosure of LCR published on 8 March 2017. Accordingly, the Group's LCR is calculated as the rolling average of the twelve latest month-end measures.

TABLE 90: SHORT-TERM LIQUIDITY RATIO (LCR)(*) - ITEMISED

In billions of euros		Unweighted value				Weighted value			
		31 December 2018	30 September 2018	30 June 2018	31 March 2018	31 December 2018	30 September 2018	30 June 2018	31 March 2018
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
	HIGH QUALITY LIQUID ASSETS (HQLA)								
1	**TOTAL HIGH QUALITY LIQUID ASSETS**					**298**	**299**	**303**	**311**
	CASH OUTFLOWS								
2	Retail deposits (including small businesses)	330	327	324	321	25	25	24	24
3	*of which stable deposits*	*209*	*208*	*206*	*204*	*10*	*10*	*10*	*10*
4	*of which less stable deposits*	*121*	*119*	*118*	*117*	*14*	*14*	*14*	*14*
5	Unsecured non-retail funding	402	402	407	413	204	205	210	216
6	*of which operational deposits*	*123*	*123*	*125*	*125*	*30*	*30*	*31*	*31*
7	*of which non-operational deposits*	*266*	*264*	*266*	*270*	*160*	*160*	*163*	*167*
8	*of which unsecured debt*	*14*	*15*	*16*	*19*	*14*	*15*	*16*	*19*
9	Secured non-retail funding (of which repos)					52	54	54	54
10	Additional requirements	284	291	300	306	62	70	82	91
11	*of which outflows related to derivative exposures and other collateral requirements*	*27*	*36*	*48*	*57*	*27*	*36*	*47*	*57*
12	*of which outflows on secured debt*	-	-	-	-	-	-	-	-
13	*of which credit and liquidity facilities*	*257*	*255*	*252*	*248*	*35*	*35*	*34*	*34*
14	Other contractual funding obligations	50	46	43	38	50	46	43	38
15	Other contingent funding obligations	45	42	40	39	4	4	3	3
16	**TOTAL CASH OUTFLOWS**					**397**	**404**	**417**	**427**
	CASH INFLOWS								
17	Secured lending (of which reverse repos)					49	47	45	44
18	Inflows from fully performing exposures	82	81	79	76	56	55	53	51
19	Other cash inflows	42	49	64	74	35	43	56	65
20	**TOTAL CASH INFLOWS**					**140**	**145**	**154**	**160**
EU-20c	Inflows subject to 75% cap					140	145	154	160
21	**LIQUIDITY BUFFER**					**298**	**299**	**303**	**311**
22	**TOTAL NET CASH OUTFLOWS**					**256**	**258**	**262**	**267**
23	**LIQUIDITY COVERAGE RATIO *(%)***					**117%**	**116%**	**116%**	**116%**

(*) *The data presented in this table are calculated as the rolling average over the twelve latest month-end values.*

The Group's LCR stood at 117% on average monthly during 2018, which is a liquidity surplus of EUR 41 billion compared with the fully loaded regulatory requirements.

After the application of the regulatory haircuts (weighted value), the Group's liquid assets amounted to EUR 298 billion on average monthly in 2018, and mainly consisted of central bank deposits (63% of the buffer) and government and sovereign bonds (30%). Part of the securities which are eligible by central banks and provide access to liquidity are not recognised as liquid within the meaning of the European prudential regulation and are not included in the regulatory reserve. This is the main difference between the liquidity reserve (see Table 89) and the regulatory reserve. The liquid assets recognised by the prudential regulation must be immediately available to the Group.

Cash outflows under the thirty-day liquidity stress scenario amounted to EUR 256 billion on average during 2018, a large part of which corresponds to thirty-day deposit outflow assumptions of EUR 229 billion. Reciprocally, cash inflows on loans under the thirty-day liquidity regulatory stress scenario amounted to EUR 56 billion.

Cash flows on financing transactions and collateralised loans representing repurchase agreements and securities exchanges, recorded a net outflow of EUR 3 billion on average in 2018, given the regulatory haircuts applied to collateral. Flows linked to derivative instruments and regulatory stress tests recorded a net outflow of EUR 14 billion after netting of cash outflows (EUR 27 billion) and inflows (EUR 13 billion). Lastly, the drawdown assumptions on financing commitments amounted to EUR 35 billion.

On a moving average over the last twelve monthly measurements, the Group's LCR has remained stable. Stocks of liquid assets are managed to cover variations in net cash outflows while maintaining surplus liquidity at all times. This stood at between EUR 40 and 43 billion over the fully loaded coverage ratio for net cash outflows. Levels of liquid assets varied symmetrically in line with cash outflows on non-operating deposits. This phenomenon reflects the variation in very short-term wholesale funding which is immediately placed in very liquid assets according to the sterilisation principle explained in the paragraph *Sources of Wholesale Funding*, to immunise the LCR from the volatility intrinsic to this type of funding.

The Group's regulatory intelligence includes monitoring of all anticipated developments with respect to liquidity and long-term funding, and, specifically, participation in discussions with the regulators, in particular work to review the corpus of "CRD IV" texts initiated by the European Commission, providing for the introduction of a one-year structural liquidity ratio (Net Stable Funding Ratio – NSFR), the implementation being scheduled in 2021.

SCHEDULE OF THE BANK'S PRUDENTIAL BALANCE SHEET [Audited]

This schedule presents cash flows according to contractual payment dates within the prudential scope (in line with the rules defined for the liquidity ratio).

The securities in the trading book listed at fair value through profit or loss are presented with "not determined" maturities, as the securities' contractual maturity is not representative of the Group's planned holding period. Likewise, derivative financial instruments listed at fair value through profit or loss, derivatives used for hedging purposes and remeasurement adjustments on interest-rate risk hedged portfolios are presented with "not determined" maturities.

In the following table and in the event of an early repayment option, the rules applied are the most conservative:

- if the option is at the hands of both parties, the repayment date is the next contractual date for the exercise of the option;
- if the option is at the hands of the counterparty, the date for the repayment of assets is the date of final maturity while that used for liabilities is the next contractual date for the exercise of the option;
- if the option is at the hands of the Group, the repayment date is the next contractual date for the exercise of the option, for both assets and liabilities;
- in the case of subordinated debt, the redemption date used is the final maturity date.

TABLE 91: CONTRACTUAL MATURITIES OF THE PRUDENTIAL BALANCE SHEET [Audited]

	31 December 2018							
In millions of euros	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
ASSETS								
Cash and amounts due from central banks	-	185,351	-	-	-	-	-	185,351
Financial instruments at fair value through profit and loss								
Securities	121,986	-	-	-	-	-	-	121,986
Loans and repurchase agreements	-	39,275	89,897	34,508	16,681	3,294	2,211	185,867
Derivative financial instruments	233,148	-	-	-	-	-	-	233,148
Derivatives used for hedging purposes	9,763	-	-	-	-	-	-	9,763
Financial assets at fair value through equity								
Debt securities	110	54	988	1,038	8,857	20,448	25,752	57,246
Equity securities	2,151	-	-	-	-	-	-	2,151
Financial assets at amortised cost								
Loans and advances to credit institutions	-	6,395	4,779	2,822	2,635	3,030	115	19,776
Loans and advances to customers	-	20,927	58,280	62,043	109,839	289,935	234,586	775,611
Debt securities	-	79	3,187	3,575	8,804	30,749	29,773	76,167
Remeasurement adjustment on interest rate risk hedged portfolios	2,798	-	-	-	-	-	-	2,798
Financial assets	**369,956**	**252,080**	**157,131**	**103,986**	**146,817**	**347,457**	**292,437**	**1,669,864**
Other non financial assets	36,304	9,840	12,411	8,643	12,807	59,898	15,788	155,691
TOTAL ASSETS	**406,260**	**261,920**	**169,543**	**112,629**	**159,624**	**407,355**	**308,225**	**1,825,555**
LIABILITIES								
Deposit from central banks	-	1,354	-	-	-	-	-	1,354
Financial instruments at fair value through profit and loss								
Securities	75,189	-	-	-	-	-	-	75,189
Deposits and repurchase agreements	-	11,464	152,756	28,146	5,981	3,563	2,129	204,039
Issued debt securities	-	2	1,538	1,873	6,950	26,321	14,438	51,121
Derivative financial instruments	226,040	-	-	-	-	-	-	226,040
Derivatives used for hedging purposes	11,738	-	-	-	-	-	-	11,738
Financial liabilities at amortised cost								
Deposits from credit institutions	-	10,179	13,052	8,733	4,842	35,812	906	73,524
Deposits from customers	-	628,059	70,809	51,847	31,502	16,713	4,108	803,037
Debt securities	-	277	7,520	33,556	44,662	43,344	26,794	156,153
Subordinated debt	-	-	2	2	235	561	15,166	15,966
Remeasurement adjustment on interest rate risk hedged portfolios	2,470	-	-	-	-	-	-	2,470
Financial liabilities	**315,437**	**651,334**	**245,678**	**124,157**	**94,172**	**126,314**	**63,541**	**1,620,631**
Other non financial liabilities	99,591	10,235	18,406	10,460	7,516	38,867	19,848	204,924
TOTAL LIABILITIES AND EQUITY	**415,028**	**661,569**	**264,084**	**134,617**	**101,688**	**165,181**	**83,389**	**1,825,555**

In millions of euros	1 January 2018							
	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
ASSETS								
Cash and amounts due from central banks	-	178,562	-	-	-	-	-	178,562
Financial instruments at fair value through profit and loss								
Securities	130,297	-	-	-	-	-	-	130,297
Loans and repurchase agreements	-	26,592	63,525	33,898	20,378	4,447	677	149,517
Derivative financial instruments	229,889	-	-	-	-	-	-	229,889
Derivatives used for hedging purposes	13,717	-	-	-	-	-	-	13,717
Financial assets at fair value through equity								
Debt securities	-	-	1,073	1,464	4,668	20,272	30,328	57,805
Equity securities	2,330	-	-	-	-	-	-	2,330
Financial assets at amortised cost								
Loans and advances to credit institutions	-	5,875	4,686	2,690	3,320	3,871	70	20,512
Loans and advances to customers	-	17,532	65,189	60,367	98,800	264,378	231,866	738,133
Debt securities	209	-	2,838	3,884	6,321	28,104	29,214	70,571
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064	-	-	-	-	-	-	3,064
Financial assets	**379,506**	**228,561**	**137,312**	**102,303**	**133,488**	**321,073**	**292,155**	**1,594,397**
Other non financial assets	31,278	7,689	11,539	11,677	14,401	56,909	11,852	145,344
TOTAL ASSETS	**410,784**	**236,250**	**148,851**	**113,979**	**147,889**	**377,982**	**304,006**	**1,739,741**
LIABILITIES								
Deposit from central banks	-	1,471	-	-	-	-	-	1,471
Financial instruments at fair value through profit and loss								
Securities	67,087	-	-	-	-	-	-	67,087
Deposits and repurchase agreements	-	11,285	116,799	31,411	9,849	3,733	1,569	174,645
Issued debt securities	-	41	1,495	1,983	8,284	23,237	14,491	49,532
Derivative financial instruments	227,643	-	-	-	-	-	-	227,643
Derivatives used for hedging purposes	15,663	-	-	-	-	-	-	15,663
Financial liabilities at amortised cost								
Deposits from credit institutions	-	10,252	14,078	8,799	4,124	34,243	1,029	72,524
Deposits from customers	-	592,886	67,528	49,449	34,121	17,603	5,112	766,699
Debt securities	-	214	15,065	29,788	40,644	40,316	26,035	152,062
Subordinated debt	-	8	1	276	339	753	12,872	14,250
Remeasurement adjustment on interest rate risk hedged portfolios	2,373	-	-	-	-	-	-	2,373
Financial liabilities	**312,766**	**616,157**	**214,966**	**121,706**	**97,362**	**119,885**	**61,107**	**1,543,949**
Other non financial liabilities	96,217	8,473	12,812	8,215	7,684	39,493	22,898	195,792
TOTAL LIABILITIES AND EQUITY	**408,983**	**624,630**	**227,779**	**129,920**	**105,046**	**159,378**	**84,005**	**1,739,741**

For the management of liquidity risk, the above schedule is supplemented with economic analyses taking into consideration customer behaviour and the market liquidity of certain assets (such as securities), under normal conditions and stress situations.

To this effect, the Group uses a set of tools to anticipate and manage its financial liquidity, in particular as previously indicated:

- medium to long-term liquidity status;
- stress tests and liquidity reserve;
- monitoring compliance with regulatory liquidity ratios.

The following table shows details of table 91: *Contractual maturities of the prudential balance sheet* across the scope of the Group's debt and other medium and long-term liabilities, without taking into account early redemption options.

TABLE 92: CONTRACTUAL MATURITIES OF MEDIUM- AND LONG-TERM DEBT (PRUDENTIAL PERIMETER) [Audited]

In millions of euros	TOTAL 31 December 2018	2019	2020	2021	2022	2023	2024-2028	Beyond 2028	Perpetual
Amount(*) of liabilities eligible to Additionnal Tier 1	8,982								8,982
Subordinated debt	669								669
of which subordinated debt at amortised cost	*-*								*-*
of which subordinated debt at fair value through profit and loss	*669*								*669*
Preferred shares and Undated Super Subordinated Notes	8,313								8,313
Amount(*) of debt eligible to Tier 2	15,830	111	88	18	466	5	12,389	2,753	
Subordinated debt	15,830	111	88	18	466	5	12,389	2,753	
of which subordinated debt at amortised cost	*15,714*	*111*	*22*	*8*	*447*	*5*	*12,389*	*2,732*	
of which subordinated debt at fair value through profit and loss	*116*	*-*	*66*	*10*	*19*	*-*	*-*	*21*	
Amount(*) of debt not eligible to prudential own funds	254	128	28	14	18	20	46	-	
Unsecured Senior debt	111,967	18,740	16,314	11,985	13,528	17,518	28,714	5,168	
Non preferred senior debt (at amortised cost)	23,586	114	-	-	2,688	5,873	14,296	614	
Preferred senior debt	88,381	18,626	16,314	11,985	10,839	11,645	14,418	4,554	
of which preferred senior debt at fair value through profil and loss	*50,334*	*10,256*	*9,738*	*6,817*	*4,836*	*5,113*	*9,394*	*4,181*	
of which preferred senior debt at amortised cost	*38,047*	*8,370*	*6,576*	*5,169*	*6,004*	*6,532*	*5,024*	*373*	
Secured Senior debt (at amortised cost)	22,995	2,422	4,171	5,540	968	3,403	4,474	2,016	

(*) *Gross accounting value before any prudential adjustments.*

Some debt instruments shown above have an early redemption ("call") option exercisable by the Group (Issuer). The following table shows the maturity schedule for debt and other subordinated liabilities by considering, where appropriate, the next date on which the option may be exercised ("call date"). Calls may only be exercised subject to prior authorisation from the regulator. The maturity dates shown hereafter are purely conventional and do not prejudice the Group's call policy.

TABLE 93 : ECONOMIC(*) MATURITIES OF MEDIUM- AND LONG-TERM DEBT (PRUDENTIAL PERIMETER(**)) [Audited]

In millions of euros	TOTAL 31 December 2018	2019	2020	2021	2022	2023	2024-2028	Beyond 2028	Perpetual
Amount(***) of liabilities eligible to Additionnal Tier 1	**7,209**	**68**	**-**	**1,325**	**1,460**	**-**	**2,794**	**820**	**742**
Subordinated debt	**669**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**669**
of which subordinated debt at amortised cost	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
of which subordinated debt at fair value through profit and loss	*669*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*669*
Preferred shares and Undated Super Subordinated Notes(**)	**6,540**	**68**	**-**	**1,325**	**1,460**	**-**	**2,794**	**820**	**73**
Amount(***) of debt eligible to Tier 2	**15,830**	**168**	**492**	**1,787**	**1,236**	**513**	**10,717**	**918**	**-**
Subordinated debt	**15,830**	**168**	**492**	**1,787**	**1,236**	**513**	**10,717**	**918**	
of which subordinated debt at amortised cost	*15,714*	*168*	*426*	*1,777*	*1,217*	*513*	*10,717*	*897*	
of which subordinated debt at fair value through profit and loss	*116*	*-*	*66*	*10*	*19*	*-*	*-*	*21*	
Amount(***) of debt not eligible to prudential own funds	**254**	**128**	**28**	**14**	**18**	**20**	**46**	**-**	**-**

(*) The economic maturity is defined as either the contractual maturity or the next call date when the instrument contains an early redemption option.
(**) Excluding Undated Super Subordinated not placed with institutional investors for an amount of EUR 1.773 millions as at 31 December 2018.
(***) Gross accounting value before any prudential adjustments.

ENCUMBRANCE OF GROUP ASSETS AND ASSETS RECEIVED BY THE GROUP

Assets on the balance sheet and assets received in guarantee used as pledges, guarantees or enhancement of a Group transaction and which cannot be freely withdrawn are considered to be encumbered. The following are the main transactions with asset encumbrance:

- repos and securities exchange operations;
- guarantees given to CCPs;
- guarantees given to central banks as part of monetary policy;
- assets in portfolios hedging the issue of secured bonds.

Encumbered securities are given as collateral in repurchase agreements, derivatives instruments or securities exchanges. The other assets correspond to the following: firstly, loans used as collateral for monetary policy or for structured debt; secondly, cash given as collateral against derivatives.

Encumbered and unencumbered assets are shown in the following table according to the formats of the Delegated Regulation (EU) 2017/2295. Thus, all data shown in the table are calculated as the median of the four quarter ends of the year. Each total line is then calculated as the median of the total at the four quarters of the year, not as the sum of the median values for the year.

Accordingly, the median ratio of encumbered assets relative to Group balance sheet assets was 16% in 2018 compared to 13% in 2017.

TABLE 94: ENCUMBERED AND UNENCUMBERED ASSETS

Assets

In billions of euros		Quarterly median values in 2018			
		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
010	**ASSETS**	**315**		**1,655**	
030	Equity instruments	43		27	
040	Debt securities	123	123	116	116
050	*of which covered bonds*	*1*	*1*	*2*	*2*
060	*of which asset-backed securities*	*1*	*1*	*6*	*6*
070	*of which issued by general governments*	*100*	*100*	*83*	*83*
080	*of which issued by financial corporations*	*14*	*14*	*20*	*20*
090	*of which issued by non-financial corporations*	*6*	*6*	*10*	*10*
120	Other assets	145		1,506	

In billions of euros		Quarterly median values in 2017			
		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
010	**ASSETS**	**255**		**1,670**	
030	Equity instruments	25		38	
040	Debt securities	72	72	151	151
050	*of which covered bonds*	*1*	*1*	*2*	*2*
060	*of which asset-backed securities*	*1*	*1*	*4*	*4*
070	*of which issued by general governments*	*53*	*53*	*115*	*115*
080	*of which issued by financial corporations*	*14*	*14*	*17*	*17*
090	*of which issued by non-financial corporations*	*4*	*4*	*14*	*14*
120	Other assets	143		1,481	

Collateral

In billions of euros		Quarterly median values in 2018		Quarterly median values in 2017	
		Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
130	**COLLATERAL RECEIVED**	**364**	**63**	**330**	**27**
140	Loans on demand	-	-	-	-
150	Equity instruments	56	9	53	1
160	Debt securities	307	54	277	25
170	*of which covered bonds*	*-*	*1*	*1*	*1*
180	*of which asset-backed securities*	*4*	*-*	*4*	*2*
190	*of which issued by general governments*	*279*	*37*	*252*	*15*
200	*of which issued by financial corporations*	*16*	*14*	*16*	*6*
210	*of which issued by non-financial corporations*	*11*	*4*	*9*	*1*
220	Loans and advances other than loans on demand	-	-	-	-
230	Other collateral received	-	-	-	-
	OWN COVERED BONDS AND ASSET-BACKED SECURITIES ISSUED AND NOT YET PLEDGED		**35**		**34**
	TOTAL ASSETS AND COLLATERAL PLEDGED	**684**		**591**	

Encumbered assets/collateral received and associated liabilities

In billions of euros		Quarterly median values in 2018		Quarterly median values in 2017	
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued
010	**CARRYING AMOUNT OF SELECTED FINANCIAL LIABILITIES**	**614**	**684**	**524**	**591**

5.9 Operational risk

Operational risk is the risk of incurring a loss due to inadequate or failed internal processes, or due to external events, whether deliberate, accidental or natural occurrences. Management of operational risk is based on an analysis of the "cause – event – effect" chain.

Internal processes giving rise to operational risk may involve employees and/or IT systems. External events include, but are not limited to floods, fire, earthquakes and terrorist attacks. Credit or market events such as default or fluctuations in value do not fall within the scope of operational risk.

Operational risk encompasses fraud, human resources risks, legal risks, non-compliance risks, tax risks, information system risks, conduct risks (risks related to the provision of inappropriate financial services), risk related to failures in operating processes, including loan procedures or model risks, as well as any potential financial implications resulting from the management of reputation risk.

REGULATORY FRAMEWORK

Operational and compliance risks come under a specific regulatory framework:

- Directive 36/2013/UE (CRD 4) and Regulation (EU) No. 575/2013 (CRR) governing prudential supervision and the methods for calculating the amount of capital requirements to cover the operational risk;
- French Ministry of Finance Decree of 3 November 2014, which defines the roles and responsibilities of the RISK Function (covering all types of risks) and an internal control system which ensures the efficiency and quality of the Bank's internal operations, the reliability of internal and external information, the security of transactions, as well as compliance with applicable laws, regulations and internal policies.

Banking regulation divides operational loss events into seven categories: (i) internal fraud, (ii) external fraud, (iii) employment practices and workplace safety (such as an anomaly arising from recruitment management), (iv) clients, products and business practices (such as product defects, mis-selling, professional misconduct, etc.), (v) damage to physical assets, (vi) business disruption and system failures, (vii) execution, delivery and process management (data entry error, error in documentation, etc.).

Effective management of compliance risk aims to ensure compliance with applicable laws, regulations, rules of ethics and instructions, protect the Group's reputation, that of its investors and that of its customers, ensure ethical professional behaviour, prevent conflicts of interest, protect customers' interests and market integrity, fight against money laundering, corruption and the financing of terrorist activities, as well as ensure compliance with financial embargos.

ORGANISATION AND OVERSIGHT MECHANISM [Audited]

KEY PLAYERS AND GOVERNANCE

The general internal control system at BNP Paribas underpins management of operational, compliance and reputation risks as part of its dual-level system to ensure periodic and permanent control.

Compliance, LEGAL, RISK and General Inspection form the Group's four supervision and control functions, with direct reporting of all their teams worldwide, guaranteeing their independence and resource autonomy.

The governance of the Group's internal control system is described in the section *Internal control* in chapter 2 *Internal Control and Corporate Governance*.

A second-level control function is tasked with defining and supervising the operational risk management system. In 2016 RISK introduced a major project in order to identify the main changes required to the operational risk management system in the Group, to improve and optimise it by clarifying the responsibilities between the first and second lines of defence in the Group as well as the coordination between the various control functions. Accordingly, the Operational Risk and Control (RISK ORC) teams are now the second line of defence within RISK. In addition, a dedicated team (RISK ORC Information and Communication Technology), reporting to the Head of RISK, is now in charge of the second line of defence on technology risks and data protection (cyber security).

This new model is now finalised in all businesses and operational entities.

Consequently, the operational risk management and control system for the Group as a whole is structured around a two-level system with the following participants:

- on the first level of defence: operational staff, notably the Heads of operational entities, business lines and functions, who are on the front-line of risk management and implementation of systems to manage these risks;
- on the second line of defence: specialist deconcentrated teams (domains, divisions, operational entities, business lines, functions and regions) coordinated centrally by the RISK ORC Group team involved in managing the Group's risks.

These teams are, in particular, responsible for:

- coordinating, throughout the areas within their remit, the definition and implementation of the permanent control and operational risk identification and management system, its standards and methodologies, reporting and related tools;
- acting as a second pair of eyes, independently of the Heads of operational entities, to scrutinise operational risk factors and the functioning of the operational risk and permanent control system, and issuing warnings, where appropriate.

More than five hundred employees on a full-time equivalent basis are responsible for these supervisory activities.

Issues relating to operational risk, permanent operational control and the emergency plan to ensure business continuity in those situations specified in the regulatory standards are regularly submitted to the Group's Executive Committee. The Group's operational entities and subsidiaries implement this governance structure within their organisations, with the participation of Executive Management.

For its part, Compliance is in charge of supervising the compliance and reputation risk control system (see section 5.3).

OBJECTIVES AND PRINCIPLES

To meet this dual requirement of the management and control of operational risk, BNP Paribas has developed a permanent iterative risk management process based on the following elements:

- identifying and assessing operational risks;
- formalisation, implementing and monitoring the risk mitigation system, including procedures, checks and all organisational elements designed to help to control risk, such as segregation of tasks, management of access rights, etc.;
- producing measures of known and potential risks and calculating the capital requirement for operational risk;
- reporting and analysing oversight information relating to operational risk and the permanent control system;
- managing the system through a governance framework that involves members of management, preparing and monitoring action plans.

This system rests on two major pillars:

- the identification and assessment of risk and of the control system based on the libraries of risks and controls defined by the Group's business lines and functions, and which each entity must take into consideration and enhance, if necessary, for their own underlying and residual risk mapping and for the standardised impact assessment grid applicable across the Group;
- the risk management system is underpinned by procedures, standards and generic control plans consistent with the above-mentioned risk libraries, and which each entity must apply, unless an exception is authorised, and enhance according to their own characteristics.

SCOPE AND NATURE OF RISK REPORTING AND MEASUREMENT

Group Executive Committees, and those of operational entities (business lines, functions and subsidiaries) are tasked with monitoring the management of operational and non-compliance risk and permanent control in the areas falling within their remit, in accordance with the Group's operational risk framework. The committees validate the quality and consistency of reporting data, examine their risk profile in light of the tolerance levels they have set in keeping with the Group Risk Appetite Statement, and assess the quality of risk control procedures according to their objectives and the risks they incur. They monitor the implementation of risk mitigation techniques.

Operational risk management has developed a system of data collection of actual or potential incidents using an approach structured by organisational process and business unit (activities in a country and a single legal entity) focusing on the cause-and-effect chain behind events. This information is used as the basis for risk mitigation and prevention measures.

The most significant information is brought to the attention of staff at various levels of the organisation, up to and including executive managers and supervisory bodies, in line with a predefined information reporting process.

SPECIFIC COMPONENTS LINKED TO OPERATIONAL RISK [Audited]

By its nature, operational risk covers numerous areas related with the Group's usual business activity and is linked to specific risks such as compliance, reputation, legal, fiscal and cyber security risks which are monitored in specific ways.

COMPLIANCE AND REPUTATION RISK

Compliance risk is defined in French regulations as the risk of legal, administrative or disciplinary sanctions, of significant financial loss or reputational damage that a bank may suffer as a result of failure to comply with national or European laws and regulations, codes of conduct and standards of good practice applicable to banking and financial activities, or instructions given by an executive body, particularly in application of guidelines issued by a supervisory body.

By definition, this risk is a sub-category of operational risk. However, as certain implications of compliance risk involve more than a purely financial loss and may actually damage the institution's reputation, the Bank treats compliance risk separately.

Reputation risk is the risk of damaging the trust placed in a corporation by its customers, counterparties, suppliers, employees, shareholders, supervisors and any other stakeholder whose trust is an essential condition for the corporation to carry out its day-to-day operations.

Reputation risk is primarily contingent on all the other risks borne by the Bank, specifically the potential materialisation of a credit or market risk, or an operational risk, as well as a violation of the Group's code of conduct.

In accordance with international standards and French regulations, Compliance manages the system for monitoring compliance and reputation risks for all of the Group's businesses in France and abroad. Compliance reports to the Chief Executive Officer and has direct, independent access to the Board's Internal Control, Risk and Compliance Committee.

Integrated globally, Compliance brings together all Group employees reporting to the function. Compliance is organised based on its guiding principles (independence; integration and decentralisation of the function; dialogue with the business lines; accountability of each of the Group's stakeholders; a culture of excellence) through three operating areas, three regions, six fields of expertise and five cross-functional activities.

All Compliance Officers in the various operational areas, regions, business lines and territories, fields of expertise and Group functions report directly to the Compliance Function.

This management of compliance and reputation risks is based on a system of permanent controls built on four components:

- general and specific procedures;
- coordination of action taken within the Group to guarantee the consistency and effectiveness of monitoring systems and tools;
- deployment of tools for detecting and preventing money laundering, terrorist financing and corruption, detecting market abuses, etc.;
- training, both at Group level and in the divisions and business lines.

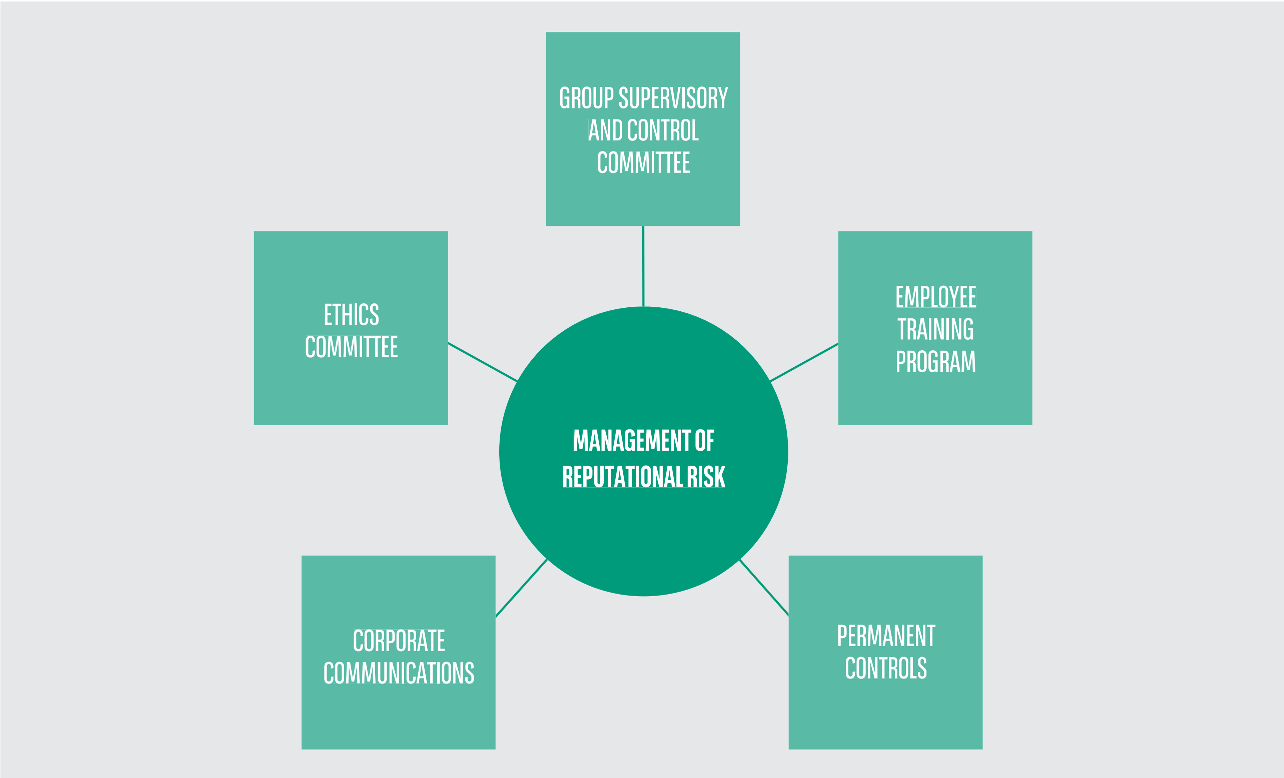
During 2018, the Group continued implementing this system, through the following initiatives:

- strengthening its Financial Security mechanism;
- continually increasing human and financial resources;
- launching a new program to industrialise its IT compliance processes by creating a dedicated organisation;
- strengthening its resources in banking law and customers' tax compliance;
- continuing remediation plans launched as part of its settlements with French and US authorities concerning international financial sanctions and foreign exchange.

(See chapter 2 *Corporate governance and internal control*, *Internal Control* section.)

More specifically, reputation risk control is based on the following items:

FIGURE 13: REPUTATION RISK MANAGEMENT FRAMEWORK



- the Group Supervisory and Control Committee is chaired by the Chief Executive Officer. Its other members are the Chief Operating Officer and the heads of the Compliance, RISK, LEGAL and General Inspection Functions. The Deputy Chief Operating Officers have standing invitations to attend. Its mission is to define rules of principle and policies, to contribute to the organisation of the control functions and the consistency between them and to ensure their overall consistency *vis-à-vis* the operating entities of the Group;
- the Ethics Committee is chaired by Jean-Marie Guéhenno, Chairman of the International Crisis Group. It is made up in equivalent proportion of members of the Group Executive Committee as well as independent outside individuals. The role of the Ethics Committee is to help formulate recommendations for the Group's code of conduct and business conducted in certain sensitive countries or business sectors;
- the employee training programme: the Group's employees have an essential role in managing the reputation risk. This awareness training includes identifying, controlling, and managing the reputation risk, the Group's Values, and its ethics standards;
- Corporate Communications: one of the major missions of Corporate Communication is to protect the reputation of the Group and its Entities, as well as being a source of information for employees and the public, whose trust is essential for the Group;
- permanent control: identifying and managing the reputation risk are one of the objectives of the permanent control system. Procedures and controls are closely monitored wherever the risk is highest. Whistleblowing procedures and periodic control recommendations are also taken into consideration. The reputation risk is also taken into account in the process for validating standard or non-standard transactions, new businesses, and new products. The Group has procedures for conflicts of interest; market integrity; adequacy and appropriateness of offers to clients; best execution of their orders; anti-money laundering, terrorist financing and corruption; compliance with international sanctions and embargoes; and social and environmental responsibility that, along with the code of conduct, are conducive to effective management of reputation risk.

LEGAL RISK

BNP Paribas is bound by specific local regulations applicable to the business sectors in which different Group entities operate, as in banking, insurance or financial services.

The LEGAL Function is organised as follows:

- a governance model based on:
  - the Executive Board, a bi-monthly Committee that provides a strategic orientation for LEGAL,
  - the Global Legal Executive Committee, a bi-monthly Committee that ensures the implementation of strategic orientations for LEGAL,
  - the Global Legal Risk Committee (a subcommittee of the Global Legal Executive Committee), which ensures that an appropriate system for risk management is in place in LEGAL;

- a legal coordination mechanism allowing the sharing of information and expertise, whose main components are:
  - the France and Europe Legislation Tracking Committees, which consists of monitoring of draft legislation and provide analysis and interpretation of the texts of new laws and regulations, as well as details of changes in French and European law,
  - Legal Practices, specialised teams by area of legal expertise tasked with managing issues relative to the Group's businesses and geographies within LEGAL, and with escalating major legal risks that fall within their scope,
  - LEGAL's information technology and intellectual property charter, signed by Executive Board legal officers, and which includes a plan to develop LEGAL teams' digital expertise;
- an oversight of legal risks via a number of actions:
  - management of a harmonised and robust system to manage global legal risks to provide overall supervision and proactive management of major legal risks, including namely defining a suitable system for *ex post facto* control by: (i) defining legal risk control plans, (ii) permanent control activities across all legal areas,
  - management of disputes, litigation and legal investigations,
  - provision of advice on the legal aspects of financial security,
  - constituting and managing panels of legal experts, i.e. selecting legal firms with which the Group works,
  - management and supervision of human resources litigation and disputes in various juridictions,
  - defining and ensuring the consistency of the Group's legal policy;

LEGAL is a global function made up of legal and paralegal teams located in around sixty countries, all reporting directly to the Group General Counsel.

The LEGAL Charter was updated in April 2018. The function is organised around the following principles:

- independence and integration:
  - full integration of the function,
  - a reporting link between the LEGAL teams in the divisions and business lines and the Group General Counsel,
  - a greater role for the Group General Counsel in overseeing highly sensitive cases,
  - unified and centralised budget management ensuring autonomous and consistent management of LEGAL;
- decentralisation:
  - close links with business lines to guarantee the function stays close to the Bank and to its customers,
  - a functional link between the LEGAL teams in the divisions and business lines and the Head of the Business Line;
- cross-functionality:
  - from centralised teams of experts to a more comprehensive and cross-functional role,
  - specialised Legal Practices (Group Dispute Resolution, Company Law, Mergers and Acquisitions, Information Technology and Intellectual Property, Legal and Regulatory Intelligence and Competition Law);
- responsibility:

  lawyers are responsible for managing legal risks in the Group:
  - there is a comprehensive and unified legal organisation at all levels of the Group to provide adequate cover of legal risks,
  - each lawyer is responsible for ensuring that all major risks encountered are escalated within the LEGAL Function,
  - the Practice Group Dispute, a global integrated channel to handle litigation, legal matters in the preliminary stages as well as large-scale investigations. The purpose of this channel is to enable LEGAL to oversee sensitive legal matters on a global scale, to become more proactive and provide a cohesive and consistent response.

TAX RISK

In each country where it operates, BNP Paribas is bound by specific local tax regulations applicable to companies engaged for example in banking, insurance or financial services.

The Tax Function ensures at a global level that the tax risk is managed throughout all of the transactions conducted by the Group. In view of the financial and reputational stakes, Finance and Compliance are involved in the tax risk monitoring process.

The Group Tax Department carries out the tax function and calls on the assistance of tax managers in certain businesses and in the main geographical areas where the Group operates (as well as tax correspondents in other geographical areas where the Group operates).

In ensuring the coherence of the Group's tax practices and the global tax risk monitoring, the Group Tax Department:

- has drawn up procedures covering all divisions, designed to ensure that tax risks are identified, addressed and controlled appropriately;
- has implemented a process of feedback aimed at contributing to the control of local tax risk;
- reports to Executive Management on tax risk developments;
- oversees the tax-related operational risks and the internal audit recommendations falling within the Tax Function's scope of responsibility.

A Tax Coordination Committee, involving Finance and Compliance and, on an as-needed basis, the businesses, is tasked with analysing the main tax issues with respect to the transactions the Group performs.

CYBER SECURITY AND TECHNOLOGY

The use and protection of data and technologies are determining factors for the Bank's activity and its transformation process.

While the Bank continues the roll-out of Digital Banking (for the Group's customers and partners) and Digital Working (for the Group's employees), it must incorporate new technology and innovative risk management practices, and establish new working methods. This introduces new technology risks in the cyber security arena.

Technology management and information systems security is part of the Group's cyber security strategy. This strategy is focused on the preservation of the most sensitive data, regularly adapting both its internal processes and procedures, and its employee training and awareness to contend with increasingly sophisticated and varied threats.

To best protect its technology and data, the Group has adopted a comprehensive approach in cyber security management:

- operational entities are the first line of defence. Since 2015, the Group has introduced across all of the entities a transformation programme based on the international standard NIST (National Institute of Standards and Technology). This programme is regularly updated taking into account the new threats and recent incidents identified around the world;
- as a second line of defence, the team dedicated to managing cyber security and technology risk (RISK ORC ICT), reporting to the Chief Cyber and Technology Risk Officer, is tasked with:
  - presenting the Group's cyber security and technology risk position to the Group Executive Committee, the Board of directors, and the supervisory authorities,
  - monitoring the transformation programme across the entire Group,
  - integrating the cyber security and technology risk aspects into all major projects within the Group,
  - ensuring that policies, principles and major projects take aspects of cyber security and technology risk into consideration,
  - monitoring existing risks and identifying new threats likely to have a negative impact on the Group's business,
  - overseeing third-party information systems risks within a strengthened framework,
  - conducting independent assessment campaigns on priority objectives,
  - taking measures to assess and improve the Group's ability to respond to failings and incidents.

The applicable risk framework has also been revised to respond to the new technology and cyber security risks. These latter include:

- availability and continuity risks:

  The availability of data and information systems is vital for the bank's business continuity in a crisis or emergency. The Group regularly manages, improves, and checks the crisis management and recovery plan, by testing its capacities to back up data, and the robustness of its information systems, using stress scenarios;
- security risks:

  Information systems security risks are constantly on the rise. They come from both the bank's external environment (hackers, systems managed on a network external to the Bank, or by a third party, etc.) and its internal environment (malicious act, lack of awareness, etc.). The Group assesses the threats and corrects the risks it detects;
- change-related risks:

  The Group's information systems are changing rapidly due to the transformation process engendering new risks associated with such changes. These risks, identified during the systems' design or modification phases, are regularly assessed to ensure that the proposed solutions are consistent with the needs of the Group's business lines;
- data integrity risks:

  Confidentiality of customer data and transaction integrity are also areas covered by the Bank's continuous quality approach, not only to counter the threats described earlier but also to provide the Group's customers with a service that meets their expectations. The Group has also launched internal projects to comply with the European Directive No. 2016/679 of 27 April 2016, the (GDPR - General Data Protection Regulation) in 2018;
- third-party information systems risks:

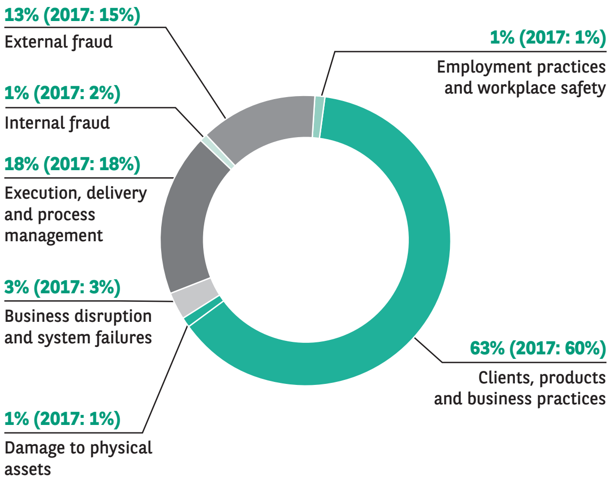
  With certain activities outsourced, the Bank may interact with information systems other than its own. However, it remains liable to its clients and regulators for the technology and cyber security risks inherent in these third-party systems. The Group's two lines of defence manage these risks at every step of third-party information system integration until the end of the relationship.

The Group addresses both the technological and cyber security risks as well as the requirements of the laws, regulations, and standards in force.

OPERATIONAL RISK EXPOSURE

The chart below shows the losses linked to operational risk, according to the event classification defined in the current regulation.

FIGURE 14: OPERATIONAL LOSSES – BREAKDOWN BY EVENT TYPE (AVERAGE 2010-2018)(*)



(*) *Percentages in brackets correspond to average loss by type of event for the 2009-2017 period.*

In the period 2010-2018, the main type of operational risk falls within the category of "Clients, products and business practices", representing on average more than half of the Group's financial impacts. The magnitude of this category is related to the financial terms of the comprehensive settlement concluded in June 2014 with the US authorities with respect to the review of certain US dollar transactions. Process failures, mainly including execution or transaction processing errors, and external fraud are the types of Group incidents with the second and third highest financial impact, respectively.

BNP Paribas Group pays the utmost attention to analysing its operational risk incidents in order to continuously improve its control system.

CAPITAL REQUIREMENT CALCULATION

Operational risk-weighted assets are calculated by multiplying the capital requirement by 12.5.

APPROACH ADOPTED

BNP Paribas uses a hybrid approach combining the Advanced Measurement Approach (AMA), standardised approach, and basic indicator approach.

In terms of net banking income, most legal entities within the Group's prudential scope of consolidation use the Advanced Measurement Approach (AMA). This includes most Retail Banking activities in the domestic networks and Private Banking, as well as Corporate and Institutional Banking.

Advanced Measurement Approach (AMA)

Under the AMA for calculating capital requirements, the Bank uses an internal operational risk model based on the four components required by the regulations, namely:

- internal historical loss data from operational risk;
- external loss data from operational risk;
- environmental and internal control factors;
- analysis of forward-looking scenarios, known as potential incidents in the BNP Paribas Group.

BNP Paribas' internal model in place since 2008 includes the following features:

- an aggregate annual loss distribution, meaning that the frequency and severity of losses from operational risks are modelled using an actuarial approach and according to distributions calibrated with available data;
- it uses historical data as well as prospective scenarios to calculate capital requirements, with a predominance for scenarios because they can be shaped to reflect severe and less frequent operational risks;

- the model is faithful to its operational risk input data, so that its results can be used easily by each of the Group's business lines. Most of the assumptions are therefore included in the data themselves;
- it is prudent in its capital requirement calculations: the input data are thoroughly reviewed, and any supplemental risk data are added if needed to cover all relevant operational risks within the Group.

Regulatory AMA capital requirements are calculated as VaR (Value at Risk), or the maximum potential loss over one year, at a 99.9% confidence level to calculate regulatory capital requirements. Capital requirements are calculated on an aggregate level using risk data from all Group entities in the AMA perimeter, then allocated to business lines and individual legal entities.

Fixed-parameter approaches

BNP Paribas uses fixed-parameter approaches (basic or standard) to calculate the capital requirements for entities in the Group's prudential consolidation scope that are not covered by the internal model:

- Basic approach: the capital requirement is calculated as the average over the past three years of a financial aggregate based on net banking income (the exposure indicator) multiplied by a unique alpha parameter set by the regulator (15% weighting);
- Standardised approach: the capital requirement is calculated as the average over the past three years of a financial aggregate based on net banking income multiplied by factors set by the regulator and corresponding to each business category. For the purposes of this calculation, all the Group's business lines are broken down into eight regulatory business categories.

RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENT

➤ TABLE 95: OPERATIONAL RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

	31 December 2018		31 December 2017		Variation	
In millions of euros	RWAs	Capital requirements	RWAs	Capital requirements	RWAs	Capital requirements
Advanced Measurement Approach (AMA)	56,935	4,555	49,961	3,997	6,974	558
Standardised approach	10,393	831	11,214	897	(821)	(66)
Basic indicator approach	5,619	450	5,340	427	279	23
TOTAL OPERATIONAL RISK	**72,947**	**5,836**	**66,515**	**5,321**	**6,432**	**515**

The net increase in risk-weighted assets of EUR 6.4 billion in 2018 is largely due to:

- risk-weighted assets have been brought to the level of the standardised approach within the AMA scope;
- consolidation of entities into the prudential scope using the basic approach.

This increase is partially offset by a fall in risk-weighted assets using the standardised approach, due in particular to the deconsolidation of First Hawaiian Bank from the scope of the operational risk capital requirement calculation.

RISK MITIGATION TECHNIQUES AND INSURANCE POLICIES

BNP Paribas Group deals with its insurable risks with the triple aim of protecting its balance sheet, its profit and loss account and its staff. Its insurance set-up is based on risk identification and assessment, underpinned by risk mapping and by analysis of operational loss profile, both historical and forward-looking.

The Group purchases insurance from leaders of the insurance market, covering computer crime, fraud, theft, business disruption, liability and other risks for which it may be held responsible. In order to optimise costs whilst effectively managing its exposure, the Group retains some well identified risks whose impact in terms of frequency and cost is known or can be adequately estimated.

In selecting insurers, the Group pays close attention to the credit rating and claims paying ability of the companies concerned. Detailed information on risks incurred by BNP Paribas as well as risk assessment visits, enable insurers to assess the quality risk prevention within the Group, as well as the safeguard measures put in place and upgraded on a regular basis in light of new standards and regulations.

5.10 Insurance risks

BNP PARIBAS CARDIF GROUP RISK MANAGEMENT SYSTEM

Risk management is a process that allows to identify, measure, monitor, manage, and report both the risks arising from the external environment as well as intrinsic risks inherent to the BNP Paribas Cardif group. The objective is to guarantee the solvency, business continuity, and development of the BNP Paribas Cardif group, under satisfactory conditions of risk and profitability.

Within the framework of the provisions of article L.354-2 of the French Insurance Code, the BNP Paribas Cardif group conducts a forward looking assessment of its solvency and risks every year under the Solvency II framework, in particular:

- the definition and evaluation of a capital requirement specific to the risk profile;
- the level of capital that the BNP Paribas Cardif group wishes to hold to cover this specific requirement, in excess of the regulatory capital requirement;
- the forward-looking solvency ratios under the medium-term plan;
- the resilience of these ratios in stress test cases.

Depending on the observed solvency ratio levels and the forecasts made under ORSA (Own Risk and Solvency Assessment), remedial actions may be undertaken to adjust own capital.

The risk typology adopted by the BNP Paribas Cardif group is changing in pace with methodological work and regulatory requirements. It is presented according to the main categories as follows:

- underwriting risk: underwriting risk is the risk of a loss in value caused by a sudden, unexpected increase in insurance claims. Depending on the type of insurance business (life, non-life), this risk may be statistical, macroeconomic or behavioural, or may be related to public health issues or disasters;
- market risk: market risk is the risk of a loss in value arising from adverse movements of financial markets. These adverse movements are notably reflected in price fluctuations (foreign exchange rates, bonds, equities and commodities, derivatives, real estate, etc.) and derived from fluctuations in interest rates, credit spreads, volatilities and correlations;
- credit risk: credit risk is the risk of loss or adverse change in the financial situation resulting from fluctuations in the credit standing of issuers of securities, counterparties, and any debtors to which the BNP Paribas Cardif group is exposed. Among the debtors, risks related to financial instruments (including the banks in which the BNP Paribas Cardif group holds deposits) and risks related to receivables generated by the underwriting activities (premium collection, reinsurance recovering, etc.) are divided into two categories: assets credit risk and liabilities credit risk;
- liquidity risk: liquidity risk is the risk of being unable to fulfil current or future foreseen or unforeseen cash requirements coming from insurance commitments to policyholders, because of an inability to sell assets in a timely manner, for an acceptable amount without having a significant impact on market prices; and/or an inability to get access to alternative financing instruments in a timely manner;
- operational risk: operational risk is the risk of loss resulting from the inadequacy or failure of internal processes, IT failures or external events, whether accidental or natural. These external events include those of human or natural origin.

The BNP Paribas Cardif group is exposed mainly to credit, underwriting, and market risks. The BNP Paribas Cardif group closely monitors its exposures and profitability, taking into account these various risks and the adequacy of its capital with regard to regulatory solvency requirements. It endeavours to contain potential losses in adverse scenarios at acceptable levels.

The risk strategy is implemented and monitored through an organisation tailored to the broad risk classes and supported by *ad hoc* governance structures. The governance and risk management systems are presented in sections B. *System of Governance* and C. *Risk profile* of the BNP Paribas Cardif group's Solvency and Financial Condition Report (SFCR), available on the institutional website at https://www.bnpparibascardif.com.

The solvency requirements for the BNP Paribas Cardif Group under Solvency II are shown in section 5.2 *Capital management and capital adequacy*.

MARKET RISK [Audited]

Market risk arises mainly in the Savings business, where technical reserves represent most of the BNP Paribas Cardif group subsidiaries' liabilities.

Interest rate risk management for the general insurance funds and the asset diversification policy have driven investment in real estate assets, equities and fixed-income securities, including government bonds particularly in the euro zone countries.

Market risk falls into four categories:

- Interest rate risk:

  Underwritten life insurance policies are measured based on either a contractual fixed rate or a variable rate, with or without a minimum guaranteed return. All of these policies give rise to an interest rate and asset value risk, corresponding to the risk that the return on admissible assets (i.e. assets acquired by investing premiums) is less than the contractual return payable to policyholders. In France, the average rate guaranteed by Cardif Assurance Vie in 2018 remained stable, below 0.1%.

  Besides, 83% of BNP Paribas Cardif group's mathematical reserves have guaranteed minimum return commitments with a term of less than or equal to two years.

  In France, to cover for future potential financial losses, estimated over the lifetime of the policies, a provision for future adverse deviation *(provision pour aléas financiers)* is booked when total amount of technical interest plus the guaranteed return payable to policyholders through technical reserves is not covered by 80% of the return on the admissible assets. No provision for future adverse deviation was booked at 31 December 2018, 2017, or 2016, as the returns guaranteed by the insurance subsidiaries were low and the guarantees were for short periods, resulting in only limited exposure.

- Liquidity risk:

  Liquidity risk is managed centrally by the Asset/Liability Management unit. Asset-liability matching reviews are performed regularly to measure and manage the financial risks incurred. They are based on medium and/or long-term profit and loss account and balance sheet projections prepared using a range of economic scenarios. The results of these reviews are analysed in order to determine any adjustments to assets (through strategic allocation, diversification, use of derivatives, etc.) required to reduce the risks arising from changes in interest rates and asset values.

- Spread risk:

  Limits by issuer and rating type (investment grade, non investment grade) are monitored regularly. Issuer credit quality is also reviewed frequently. There is little exposure to sovereign risk in the peripheral euro zone countries.

- Change in the value of assets:

  The exposure to the risk of a fall in asset values (interest rate, spread, equities, real estate) is mitigated by the mechanism of the deferred participating benefit, attached to the insurance contracts containing a participation feature.

GROUP BNP PARIBAS CARDIF INVESTMENTS

The BNP Paribas Cardif Group manages EUR 161.5 billion at net book value i.e. EUR 162.9 billion at market value, through its subsidiaries in France, mainly Cardif Assurance Vie, representing EUR 128.1 billion, through its subsidiaries in Italy, mainly Cardif Vita, representing EUR 20.8 billion and its subsidiary in Luxembourg, Cardif Lux Vie (EUR 8.4 billion). Cardif Lux Vie is now fully consolidated within the BNP Paribas Cardif scope at 31 December 2018.

BNP Paribas Cardif Group investments break down as follows:

➤ TABLE 96: BREAKDOWN OF BNP PARIBAS CARDIF GROUP INVESTMENTS (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS) [Audited]

	31 December 2018		31 December 2017	
In millions of euros	Net book value	Market value	Net book value	Market value
Equities and variable-income securities	34,869	34,869	30,153	30,153
Real estate	4,838	5,842	6,947	7,943
of which buildings	*3,138*	*4,142*	*3,106*	*4,102*
of which shares in real estate companies	*1,700*	*1,700*	*3,841*	*3,841*
Government bonds and similar	53,960	54,368	52,890	53,515
Other bonds	65,707	65,723	61,275	61,279
Derivative instruments and other	2,140	2,140	1,990	1,990
TOTAL	**161,513**	**162,942**	**153,254**	**154,879**

TABLE 97: BOND EXPOSURE BY ISSUER (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS AND EUROCROISSANCE CONTRACTS) [Audited]

	31 December 2018			31 December 2017		
Exposure by rating	Govies	Corporate	Total	Govies	Corporate	Total
AAA	2.2%	5.0%	7.1%	2.0%	4.8%	6.7%
AA	24.1%	8.9%	33.0%	24.5%	7.7%	32.2%
A	6.3%	23.1%	29.5%	1.6%	20.7%	22.3%
BBB	13.1%	14.5%	27.6%	18.5%	16.0%	34.6%
< BBB(*)	0.2%	2.6%	2.8%	0.3%	3.9%	4.2%
TOTAL	**45.9%**	**54.1%**	**100.0%**	**46.8%**	**53.2%**	**100.0%**

(*) *Including non-rated bonds.*

TABLE 98: EXPOSURE TO GOVERNMENT BOND AND SIMILAR BY COUNTRY (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS AND EUROCROISSANCE CONTRACTS) [Audited]

In millions of euros		31 December 2018	31 December 2017
Exposure by country	Rating	Net book value	Net book value
France	AA	22,331	21,128
Italy	BBB	14,683	15,998
Spain	A-	4,468	3,644
Belgium	AA-	3,289	3,572
Austria	AA+	1,350	1,787
Germany	AAA	1,303	902
Netherlands	AAA	1,125	1,138
Ireland	A+	990	889
Portugal	BBB-	92	92
Other		3,841	3,192
TOTAL		**53,473**	**52,342**

Within the context of the amendment to IFRS 4 (see note 1.a *Accounting Standards*) the table below presents the gross book value of the BNP Paribas Cardif group's financial assets meeting the SPPI (Solely Payments of Principal and Interest) criterion, with the exception of the financial assets held for transaction purposes in accordance with IFRS 9 or whose management and performance assessment are based on fair value.

TABLE 99: INVESTMENT GRADE FINANCIAL ASSETS MEETING THE SPPI CRITERION [Audited]

Rating *In millions of euros*	31 December 2018	1 January 2018
AAA	7,842	7,195
AA	37,593	35,191
A	29,783	20,419
BBB	30,427	36,490
< BBB(*)	2,679	3,588
TOTAL	**108,324**	**102,883**

(*) *Including non-rated bonds.*

For the non-Investment Grade or unrated financial assets which meet the cash flow criterion, the table below shows the fair value and gross book value in accordance with IAS 39 (in the case of the financial assets valued at amortised cost, not taking into account any value adjustments for impairment).

➤ **TABLE 100: NON-INVESTMENT GRADE FINANCIAL ASSETS MEETING THE SPPI CRITERION** [Audited]

Rating *In millions of euros*	31 December 2018		1 January 2018	
	Gross book value	Market value	Gross book value	Market value
BB+	408	408	612	624
BB	179	179	323	323
BB-	2	2	4	4
B	-	-	-	-
Unrated	2,091	2,091	2,649	2,649
TOTAL	**2,679**	**2,679**	**3,588**	**3,600**

INSURANCE UNDERWRITING RISK [Audited]

Underwriting risk arises mainly from the surrender risk in the savings business line, and in creditor insurance contracts for the protection business.

There are three types of underwriting risk:

SAVINGS – SURRENDER RISK

Savings contracts include a surrender clause allowing policyholders to request reimbursement of all or part of their accumulated savings. The insurer is thus exposed to the risk of surrender volumes being higher than the forecasts used for ALM purposes, leading to potential capital losses on asset disposals needed to finance excess surrenders.

The surrender risk is limited, however, as:

- policyholder behaviour is monitored on an ongoing basis, in order to regularly align the duration of assets with that of the corresponding liabilities and reduce the risk of abrupt, large-scale asset sales. Changes in assets and liabilities are projected over periods of up to forty years, in order to identify treasury mismatches and over or under covered maturities giving rise to a liquidity risk. These analyses are then used to determine the choice of maturities for new investments and the assets to be sold;
- the guaranteed revaluation of policies is completed by a participating benefit feature partly discretionary, that raises the total return to a level in line with market benchmarks and reduces the risk of an increase in surrenders. The policyholders' surplus reserve is the mechanism in France that enables the surplus actually paid out to be pooled and spread between generations of policyholders;
- the return on financial assets may be protected through the use of hedging instruments.

➤ **TABLE 101: AVERAGE REDEMPTION RATES FOR BNP PARIBAS CARDIF GROUP GENERAL FUNDS(*)** [Audited]

	Annual redemption rate	
	2018	2017
France	5.2%	6.4%
Italy	8.9%	8.9%
Luxembourg	5.8%	6.5%

(*) Individual savings.

SAVINGS – UNIT-LINKED CONTRACTS WITH A GUARANTEED MINIMUM BENEFIT

The insurer's liabilities are covered by the assets held, that are used as a valuation reference. The consistency of this coverage is controlled at monthly intervals.

Certain unit-linked commitments provide for the payment of a death benefit at least equal to the cumulative premiums invested in the contract, whatever the conditions on the financial markets at the time of the insured's death. The risk on these contracts is both statistical (probability of a claim) and financial (market value of the units).

The capital guarantee is generally subject to certain limits. In France, for example, most contracts limit the guarantee to one year (renewable annually), an age limit of eighty to benefit from the guarantee and a maximum of EUR 765,000 per insured.

The minimum guaranteed benefit reserve is (re)assessed every quarter and takes into account the probability of death, based on a deterministic scenario, and stochastic analyses of changing financial market prices. The reserve amounted to EUR 10.6 million at 31 December 2018 (versus EUR 6.5 million at 31 December 2017).

PROTECTION

These risks result mainly from the sale of creditor insurance, as well as personal risk insurance (individual death and disability, extended warranty, theft, accidental damage, third party liability, annuity policies in France), with geographic coverage in many countries.

Creditor insurance mainly covers death, disability, critical illness, work disability, loss of employment and financial loss risks for revolving credit, personal loans and mortgage loans. The insurance book comprises a very large number of policies representing low risks and low premiums. Margins depend on the size of the insurance book, effective pooling of risks and tight control of administrative costs. The term of these contracts is usually equal to the term of the underlying loan and the premium is either deducted once upon issuance of the policy (single premium) or deducted regularly throughout the term of the policy (regular or periodic premiums).

Other contracts (individual death and disability, extended warranty, theft, accidental damage, and annuity policies in France) are either for personal risk (death, accidental death, hospitalisation, critical illness, healthcare expenses) or property & casualty risk (accidental damage, breakdown or theft of consumer goods or vehicles). The individual sums insured under these contracts are generally low, whether they are indemnities or lump-sum payment.

Lastly, principally through its expanding entities in France and Italy, Cardif IARD, and CARGEAS respectively, motor vehicle coverage (material damage, civil liability) and comprehensive household coverage are also underwritten. This type of insurance coverage is also developing in the international market, namely in Latin America.

The actuarial oversight system set up to prevent and control actuarial risks in France and internationally is based on guidelines and tools that describe the principles, rules, methods and best practices to be followed by each actuary throughout the policies' life cycle, the tasks to be performed by the actuaries and their reporting obligations. It also sets out the practices that are excluded or that are allowed only if certain conditions are met.

Risks underwritten must comply with delegation limits set at various local and central levels depending on the estimated maximum acceptable losses, the estimated Solvency II capital requirements and the estimated margins on the policies concerned. The experience acquired in managing geographically diversified portfolios is used to regularly update risk pricing databases comprising a wide range of criteria (loan type for creditor insurance, guarantee and insured population, etc.). Each contract is priced by reference to the profitability and return-on-equity targets set by the Executive Management of the BNP Paribas Cardif group.

Reinsurance is a complementary element of the underwriting risk management system. Its objective is to protect the BNP Paribas Cardif group against three main risks:

- so-called "peak" risk from exposure to an individual risk exceeding a certain threshold, called "full retention". In personal insurance, this threshold is currently set at EUR 2 million per life. The reinsurance of peak risk may take the form of surplus or excess of loss treaties;
- the catastrophe risk associated with exposure to a single low occurrence event, but very strong financial impact (concentration risk). This risk can be reinsured in the form of a catastrophe excess of loss treaty;
- risk on new products, linked to insufficient pooling, lack of mastery of the technical databases or uncertainty on beneficiaries' data. This risk can be reinsured in the form of quota share, stop loss or excess of loss treaties, depending on the level of risk identified.

Risk exposures are monitored periodically by the Executive Committee of the BNP Paribas Cardif group through the Commitment Monitoring Committees and the Risk Committees that are based on a two-pronged approach:

- quarterly monitoring of loss ratios at each accounting quarter end;
- supplemented by monitoring of the portfolio characteristics according to a schedule based on the type of product (monthly, quarterly and annually).

Contract pricing for annuity contracts are based on mortality tables applicable under insurance regulations, adjusted in some cases by portfolio specific data which is certified by independent actuaries. The result is a low annuity risk.

Underwriting risks are covered by various technical reserves:

- the mathematical reserves in Life insurance;
- the unearned premiums reserves for non-Life underwriting, generally calculated on an accruals basis, possibly supplemented by reserves for current risks;
- the reserves for increasing risk in certain cases (long-term policies with constant periodic premiums and increasing risk);
- the outstanding claims reserves, determined by reference to reported claims;
- the IBNR (claims incurred but not reported) reserves, determined on the basis of either observed settlements or the expected number of claims and the average cost per claim;
- the reserves for claims management, generally calculated *pro rata* to the claims reserves.

The level of prudence adopted for the overall assessment of claims incurred but not reported corresponds to the 90% quantile.

Appendix 1: Sovereign exposures [Audited]

The BNP Paribas Group is exposed to sovereign risk, which is the risk of a State defaulting on its debt, i.e. a temporary or prolonged interruption of debt servicing (interest and/or principal). The Group is thus exposed to credit, counterparty or market risk according to the accounting category of the financial asset issued by the sovereign State.

Exposure to sovereign debt mainly consists of securities. The Group holds sovereign bonds as part of its liquidity management process. Liquidity management is based in particular on holding securities eligible as collateral for refinancing by central banks and includes a substantial share of highly rated debt securities issued by governments, representing a low level of risk. Moreover, as part of its assets and liability management and structural interest rate risk management policy, the Group also holds a portfolio of assets including sovereign debt instruments, with interest-rate characteristics that contribute to its hedging strategies. In addition, the Group is a primary dealer in sovereign debt securities in a number of countries, which leads it to take temporary long and short trading positions, some of which are hedged by derivatives.

Sovereign exposures held by the Group are presented in the table hereafter in accordance with the method defined by the EBA for the 2014 stress tests covering a scope which includes sovereigns as well as local and regional authorities.

BANKING AND TRADING BOOKS SOVEREIGN EXPOSURES BY GEOGRAPHICAL BREAKDOWN

Exposures *In millions of euros*	31 December 2018						
		Banking book[1]			Trading book		
						Derivatives[2]	
	Total	of which financial assets at amortised cost	of which financial instruments at fair value through equity	of which financial instruments at fair value through profit or loss	Financial instruments at fair value through profit or loss held for trading (excl. derivatives)	Direct exposures[3]	Indirect exposures[4]
Euro zone							
Austria	1,021	299	722	-	(45)	21	0
Belgium	9,803	4,876	4,804	123	205	274	66
France	9,364	4,208	5,156	-	(1,250)	(17)	(12)
Germany	6,547	4,185	2,103	259	1,962	255	(4)
Ireland	966	591	374	-	(2)	2	2
Italy	11,537	9,512	1,779	246	(128)	7,274	(26)
Netherlands	905	126	779	-	60	(551)	0
Portugal	1,008	838	169	-	(168)	(21)	1
Spain	4,200	2,820	1,279	101	(374)	-	(3)
Other euro zone countries	705	389	316	-	(18)	158	0
TOTAL EURO ZONE	**46,055**	**27,844**	**17,482**	**729**	**244**	**7,393**	**24**
Other European Economic Area countries							
Poland	6,887	3,066	3,819	3	336	(224)	1
United Kingdom	4,441	3,147	1,294	-	2,232	-	(66)
Other EEA countries	377	337	39	1	174	(24)	(3)
TOTAL OTHER EEA COUNTRIES	**11,705**	**6,550**	**5,151**	**4**	**2,742**	**(248)**	**(69)**
TOTAL EEA	**57,760**	**34,394**	**22,633**	**732**	**2,986**	**7,146**	**(45)**
United States	11,591	2,864	8,727	-	15,371	82	9
Japan	4	-	4	-	4,198	374	54
Turkey	1,066	524	542	-	571	1	12
Other	10,844	6,502	4,342	-	4,166	155	(43)
TOTAL	**81,265**	**44,284**	**36,248**	**732**	**27,292**	**7,758**	**(13)**

(1) Book value after revaluation and before any impairment provision.

(2) Market value.

(3) Sovereign counterparty risk: direct exposure to a sovereign counterparty. This excludes exposure to a non-sovereign counterparty fully or partly covered by a central government (sovereign) guarantee.

(4) Positions held with a non-sovereign counterparty, exposing BNP Paribas to a credit risk on a sovereign third party. For example, sale of a CDS to a non-sovereign third party as a hedge against a sovereign's default. This excludes exposures to non-sovereign counterparties fully or partly covered by guarantees from local authorities, regional or central (sovereign) governments.

Exposures *In millions of euros*	Total	of which financial assets at amortised cost	of which financial instruments at fair value through equity	of which financial instruments at fair value through profit or loss	Financial instruments at fair value through profit or loss held for trading (excl. derivatives)	Direct exposures[3]	Indirect exposures[4]
	1 January 2018						
		Banking book[1]			Trading book		
						Derivatives[2]	
Euro zone							
Austria	2,275	611	1,663	-	(124)	21	1
Belgium	13,339	5,500	7,668	172	363	303	4
France	10,321	4,084	6,237	-	(1,292)	(9)	112
Germany	5,635	3,941	1,418	276	3,427	244	-
Ireland	945	574	371	-	(30)	2	-
Italy	9,966	8,785	972	210	(156)	7,172	11
Netherlands	1,068	280	788	-	(160)	(1,024)	-
Portugal	539	368	171	-	248	(8)	2
Spain	3,559	2,390	1,067	102	(536)	32	(1)
Other euro zone countries	1,091	346	745	-	125	249	-
Programme countries							
Greece	-	-	-	-	7	77	-
TOTAL EURO ZONE	**48,738**	**26,880**	**21,100**	**759**	**1,872**	**7,059**	**129**
Other European Economic Area countries							
Poland	3,459	1,992	1,468	-	578	(132)	2
United Kingdom	3,220	2,354	866	-	202	(4)	(71)
Other EEA countries	361	361	-	-	253	(37)	(2)
TOTAL OTHER EEA COUNTRIES	**7,041**	**4,707**	**2,334**	**-**	**1,033**	**(173)**	**(71)**
TOTAL EEA	**55,779**	**31,587**	**23,433**	**759**	**2,905**	**6,886**	**58**
United States	6,731	2,725	4,005	-	8,752	11	2
Japan	296	-	296	-	1,473	486	29
Turkey	1,181	596	585	-	1,366	1	16
Other	9,956	6,415	3,541	-	3,445	90	62
TOTAL	**73,942**	**41,323**	**31,860**	**759**	**17,941**	**7,474**	**167**

(1) *Book value after revaluation and before any impairment provision.*
(2) *Market value.*
(3) *Sovereign counterparty risk: direct exposure to a sovereign counterparty. This excludes exposure to a non-sovereign counterparty fully or partly covered by a central government (sovereign) guarantee.*
(4) *Positions held with a non-sovereign counterparty, exposing BNP Paribas to a credit risk on a sovereign third party. For example, sale of a CDS to a non-sovereign third party as a hedge against a sovereign's default. This excludes exposures to non-sovereign counterparties fully or partly covered by guarantees from local authorities, regional or central (sovereign) governments.*

Appendix 2: Regulatory capital – Detail

The table below is presented in the format required under Annex VI of Implementing Regulation (EU) No. 1423/2013 of 20 December 2013.

➤ REGULATORY CAPITAL ACCORDING TO ANNEX VI OF IMPLEMENTING REGULATION (EU) NO. 1423/2013

		31 December 2018		1 January 2018			
In millions of euros		Phased-in	Transitional arrangements(*)	Phased-in	Transitional arrangements(*)	Reference to table 9	Notes
Common Equity Tier 1 (CET1) capital: instruments and reserves							
1	Capital instruments and the related share premium accounts	27,133	-	27,084	-	6	-
	of which ordinary shares	27,133	-	27,084	-	-	-
2	Retained earnings	58,968	-	55,271	-	-	-
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	503	-	1,842	-	8	-
3a	Funds for general banking risk	-	-	-	-	-	-
4	Amounts of qualifying items referred to in article 484 (3) and the related share premium accounts subject to phase out from CET1	-	-	-	-	-	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-	-	-
5	Minority interests (amount allowed in consolidated CET1)	1,781	-	2,782	482	10	(1)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	3,387	-	3,705		9	(2)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**91,772**	**-**	**90,684**	**482**	**-**	-
Common Equity Tier 1 (CET1) capital: regulatory adjustments							
7	Additional value adjustments (negative amount)	(892)	-	(715)	-	-	-
8	Intangible assets (net of related tax liability) (negative amount)	(12,162)	-	(12,817)	-	3	(3)
9	Empty set in the EU	-	-	-	-	-	-
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in article 38 (3) are met) (negative amount)	(527)	98	(529)	309	-	-
11	Fair value reserves related to gains or losses on cash flow hedges	(825)	-	(1,140)	-	-	-
12	Negative amounts resulting from the calculation of expected loss amounts	(242)	-	(247)	9	-	-

	In millions of euros	31 December 2018 Phased-in	31 December 2018 Transitional arrangements(*)	1 January 2018 Phased-in	1 January 2018 Transitional arrangements(*)	Reference to table 9	Notes
13	Any increase in equity that results from securitised assets (negative amount)	-	-	-	-	-	-
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	126	-	316	1	-	-
15	Defined-benefit pension fund assets (negative amount)	(224)	-	(190)		-	-
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(140)	-	(126)	32	-	-
17	Holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-	-	-
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-	-
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-	-
20	Empty set in the EU	-	-	-	-	-	-
20a	Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative	(192)	-	(190)	-	-	-
20b	*of which: qualifying holdings outside the financial sector (negative amount)*	-	-	-	-	-	-
20c	*of which: securitisation positions (negative amount)*	*(192)*	-	*(190)*	-	-	-
20d	*of which: free deliveries (negative amount)*	-	-	-	-	-	-
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in article 38 (3) are met) (negative amount)	-	-	-	-	-	-
22	Amount exceeding the 15% threshold (negative amount)	-	-	-	-	-	-
23	*of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities*	-	-	-	-	-	-
24	Empty set in the EU	-	-	-	-	-	-
25	*of which: deferred tax assets arising from temporary differences*	-	-	-	-	-	-

	In millions of euros	31 December 2018		1 January 2018		Reference to table 9	Notes
		Phased-in	Transitional arrangements(*)	Phased-in	Transitional arrangements(*)		
25a	Losses for the current financial year (negative amount)	-	-	-	-	-	-
25b	Foreseeable tax charges relating to CET1 items (negative amount)	-	-	-	-	-	-
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	(465)	-	(356)	-	-	-
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to articles 467 and 468	-	-	(223)	(223)	-	-
	of which: unrealised gains (phase out)	-	-	*(138)*	*(138)*	-	-
	of which: unrealised losses (phase out)	-	-	-	-	-	-
	of which: unrealised gains linked to exposures to central administrations (phase out)	-	-	*(85)*	*(85)*	-	-
	of which: unrealised losses linked to exposures to central administrations (phase out)	-	-	-	-	-	-
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	-	-	-	-	-	-
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	-	-	-	-	-	-
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(15,542)**	**98**	**(16,217)**	**128**	**-**	**-**
29	Common Equity Tier 1 (CET1) capital	76,230	98	74,467	610	-	-
Additional Tier 1 (AT1) capital: instruments							
30	Capital instruments and the related share premium accounts	5,429	-	4,766	-	-	-
31	*of which: classified as equity under applicable accounting standards*	*5,429*	-	*4,766*	-	*7*	-
32	*of which: classified as liabilities under applicable accounting standards*	-	-	-	-	-	-
33	Amount of qualifying items referred to in article 484 (4) and the related share premium accounts subject to phase out from AT1	2,801	41	3,406	601	7	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-	-	-
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	500	4	494	(5)	-	-
35	*of which: instruments issued by subsidiaries subject to phase out*	*278*	*4*	*278*	*49*	*4*	(4)
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**8,731**	**45**	**8,666**	**596**	**-**	**-**

In millions of euros		31 December 2018		1 January 2018			
		Phased-in	Transitional arrangements(*)	Phased-in	Transitional arrangements(*)	Reference to table 9	Notes
Additional Tier 1 (AT1) capital: regulatory adjustments							
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	(44)	-	(36)	9	-	-
38	Holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-	-	-
39	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-	-
40	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	-	-	-	-	-
41	Regulatory adjustments applied to Additional Tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-	-	-
41a	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-	-	(9)	(9)	-	-
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No. 575/2013	-	-	(340)	(340)	1	(5)
41c	Amount to be deducted from or added to Additional Tier 1 capital with regard to additional filters and deductions required pre-CRR	-	-	-	-	-	-
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	-	-	-	-	-	-
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(44)**	**-**	**(385)**	**(340)**	**-**	**-**
44	**Additional Tier 1 (AT1) capital**	**8,687**	**45**	**8,282**	**256**	**-**	**-**
45	**Tier 1 capital (T1 = CET1+AT1)**	**84,916**	**143**	**82,748**	**866**	**-**	**-**

In millions of euros		31 December 2018 Phased-in	31 December 2018 Transitional arrangements(*)	1 January 2018 Phased-in	1 January 2018 Transitional arrangements(*)	Reference to table 9	Notes
Tier 2 (T2) capital: instruments and provisions							
46	Capital instruments and the related share premium accounts	14,857	-	12,770	-	5	(6)
47	Amount of qualifying items referred to in article 484 (5) and the related share premium accounts subject to phase out from T2	50	(41)	50	(375)	5	(6)
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-	-	-
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 and 34) issued by subsidiaries and held by third parties	604	(4)	600	(26)	5	(6)
49	*of which: instruments issued by subsidiaries subject to phase out*	*81*	*(4)*	*151*	*20*	-	-
50	Credit risk adjustments	-	-	-	-	-	-
51	**Tier 2 (T2) capital before regulatory adjustments**	**15,511**	**(45)**	**13,420**	**(402)**	**-**	**-**
Tier 2 (T2) capital: regulatory adjustments							
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(138)	-	(117)	29	-	-
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	(57)	7	-	-
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-	-
54a	*of which new holdings not subject to transitional arrangements*	-	-	-	-	-	-
54b	*of which holdings existing before 1 January 2013 and subject to transitional arrangements*	-	-	-	-	-	-
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(3,317)	-	(3,004)	334	1	-
56	Regulatory adjustments applied to Tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-	-	-

In millions of euros		31 December 2018 Phased-in	31 December 2018 Transitional arrangements(*)	1 January 2018 Phased-in	1 January 2018 Transitional arrangements(*)	Reference to table 9	Notes
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	222	-	315	-	-	-
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to article 475 of Regulation (EU) No. 575/2013	-	-	-	-	-	-
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre-CRR	-	-	-	-	-	-
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(3,233)**	**-**	**(2,863)**	**370**	**-**	**-**
58	**Tier 2 (T2) capital**	**12,278**	**(45)**	**10,556**	**(31)**	**-**	**-**
59	**Total capital (TC = T1+T2)**	**97,194**	**98**	**93,305**	**835**	**-**	**-**
59a	Risk-weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-	-	-
	of which: CET1 instruments of financial sector entities not deducted from CET1 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-	-
	of which: Deferred tax assets that rely on future profitability and arising from temporary differences not deducted from CET1 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-	-
	of which: AT1 instrument of financial sector entities not deducted from AT1 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-	-
	of which: Tier 2 instrument of financial sector entities not deducted from Tier 2 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-	-
60	**Total risk-weighted assets**	**-**	**-**			**-**	**-**
Capital ratios and buffers							
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	11.8%	0.0%	11.7%	0.1%		
62	Tier 1 (as a percentage of risk exposure amount)	13.1%	0.0%	13.0%	0.1%		
63	Total capital (as a percentage of risk exposure amount)	15.0%	0.0%	14.7%	0.1%		

In millions of euros		31 December 2018		1 January 2018		Reference to table 9	Notes
		Phased-in	Transitional arrangements(*)	Phased-in	Transitional arrangements(*)		
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	3.445%	0.625%	2.25%	1.75%		
65	*of which: capital conservation buffer requirement*	1.875%	0.625%	1.25%	1.25%		
66	*of which: countercyclical buffer requirement*	0.07%	0.0%	0.0%	0.0%		
67	*of which: systemic risk buffer requirement*	0.0%	0.0%	0.0%	0.0%		
67a	*of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	1.5%	0.0%	1.0%	0.5%		
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	7.3%	0.0%	7.2%	0.1%		
69	[non relevant in EU regulation]						
70	[non relevant in EU regulation]						
71	[non relevant in EU regulation]						
Amounts below the thresholds for deduction (before risk weighting)							
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	2,564	-	2,886	(132)	2	(7)
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,353	-	3,421	-	1	(7)
74	Empty set in the EU	-	-			-	-
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in article 38 (3) are met)	3,265	-	3,350		-	-
Applicable caps on the inclusion of provisions in Tier 2							
76	Credit risk adjustments included in Tier 2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-	-	-	-	-	-
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	2,983	-	2,945	-	-	-

In millions of euros		31 December 2018		1 January 2018		Reference to table 9	Notes
		Phased-in	Transitional arrangements(*)	Phased-in	Transitional arrangements(*)		
78	Credit risk adjustments included in Tier 2 in respect of exposures subject to internal ratings based approach (prior to the application of the cap)	222	-	315	-	-	-
79	Cap on inclusion of credit risk adjustments in T2 under internal ratings based approach	1,546	-	1,576	-	-	-
Capital instruments subject to phase out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			-				
80	Current cap on CET1 instruments subject to phase out arrangements	-	-			-	-
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	-			-	-
82	Current cap on AT1 instruments subject to phase out arrangements	4,046	1,012	5,058	2,023	-	-
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	-			-	-
84	Current cap on T2 instruments subject to phase out arrangements	742	185	927	371	-	-
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-			-	-

(*) Amounts subject to pre-regulation treatment or prescribed residual amount of Regulation (EU) No. 575/2013, in accordance with grandfathered Additional Tier 1 and Tier 2 eligibility rules applicable as of 2019.

(1) Minority interests are adjusted for their capitalisation surplus for regulated entities. For the other entities, minority interests are not recognised in fully loaded Basel 3.

(2) Deductions from net income for the period relate mainly to the proposed dividend distribution.

(3) The deduction of intangible assets is calculated net of deferred tax liabilities.

(4) Tier 1 capital instruments issued by subsidiaries include subordinated debt, as well as preferred shares recognised in equity.

(5) The residual amount of deductions from Tier 2 capital relates to Tier 2 capital instruments in financial sector entities in which the Bank holds a significant investment, or with which the Bank has a cross holding.

(6) A prudential discount is applied to Tier 2 capital instruments with less than five years of residual maturity.

(7) Holdings of equity instruments in financial institutions are recorded in the banking book, as detailed in the consolidated accounting balance sheet to the prudential balance sheet reconciliation, as well as in the trading book.

Appendix 3: Countercyclical capital buffer

The calculation and the amount of the BNP Paribas' countercyclical capital buffer are given in the tables below, according to the instructions of the Commission Delegated Regulation (EU) No. 2015/1555 of 28 May 2015.

➤ AMOUNT OF INSTITUTION-SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER

In millions of euros		31 December 2018
010	Total risk-weighted assets	647,001
020	BNP Paribas countercyclical capital buffer rate	0.07%
030	Countercyclical capital buffer requirement	461

At 31 December 2018, the BNP Paribas' countercyclical capital buffer rate is 0.07%.

The countercyclical capital buffer is calculated as the weighted average of the countercyclical buffer rates that apply in the countries where the relevant credit exposures of the Group are located. The weight applied to the countercyclical buffer rate in each country is the share of own funds requirements in total own funds requirements relating to relevant credit exposures in the territory in question.

At 31 December 2018, the following countries had a non-zero rate: Iceland (1.25%), Lithuania (0.5%), Norway (2%), Czech Republic (1%), Slovakia (1.25%), Sweden (2%), and Hong Kong (1.875%).

The following countries have announced a change in their countercyclical buffer rate, which will become effective during 2019: France (0.25%), Bulgaria (0.5%), Denmark (0.5% then 1%), Iceland (1.75%), Lithuania (1%), Norway (2.5%), Czech Republic (1.25% then 1.5), Ireland (1%), Slovakia (1.5%), Sweden (2.5%), and Hong Kong (2.5%). The impact of the activation of the countercyclical buffer rate in France (1 July 2019) corresponds to a 7 basis point rise in the BNP Paribas countercyclical capital buffer rate.

Furthermore, Czech Republic (1.75%) and Luxembourg (0.25%) announced an increase in their countercyclical capital buffers effective at 1 January 2020.

As at 1 January 2019, the Group's countercyclical capital buffer rate is 0.08%. It will gradually increase through 2019 and is expected to reach 0.16% at 31 December 2019 and 0.17% at 1 January 2020, based on the requirements announced to date.

➤ GEOGRAPHICAL DISTRIBUTION OF CREDIT EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL CAPITAL BUFFER

	31 December 2018										31 December 2019
	General credit exposures		Securitisation exposure		Own funds requirements						
	Exposure value for standardised approach	Exposure value for IRB	Exposure value for standardised approach	Exposure value for IRB	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total	Own funds requirement weights	Countercyclical capital buffer rate	Announced countercyclical capital buffer rate(**)
In millions of euros	010	020	050	060	070	080	090	100	110	120	
010 Breakdown by country											
Europe(*)	191,944	561,818	2,056	29,500	29,636	1,404	367	31,407	0.74		
of which Bulgaria	344	414	-	-	40	-	-	40	0.00		0.50%
of which Denmark	1,476	1,384	-	-	158	-	-	158	0.00		1.00%
of which France	52,687	221,182	123	19,782	10,516	1,390	184	12,091	0.28		0.25%
of which Ireland	237	7,201	380	83	243	-	13	256	0.01		1.00%
of which Iceland	1	1	-	-	0	-	-	0	0.00	1.25%	1.75%
of which Lithuania	5	7	-	-	1	-	-	1	0.00		1.00%
of which Luxembourg	1,622	28,317	-	-	1,121	0	-	1,121	0.03		
of which Norway	482	1,667	-	-	87	-	-	87	0.00	2.00%	2.50%
of which Czech Republic	555	879	-	-	68	-	-	68	0.00	1.00%	1.50%
of which United Kingdom	13,664	32,437	555	3,492	1,693	-	52	1,745	0.04	1.00%	1.00%
of which Slovakia	305	90	-	-	22	-	-	22	0.00	1.25%	1.50%
of which Sweden	2,086	1752	99	26	211	-	3	214	0.01	2.00%	2.50%
North America	**62,729**	**71,615**	**21**	**11,366**	**5,693**	**25**	**188**	**5,907**	**0.14**		
Asia Pacific	**5,584**	**39,061**	**-**	**810**	**2,183**	**-**	**8**	**2,191**	**0.05**		
of which Hong Kong	1,675	5,875	-	-	313	-	-	313	0.01	1.875%	2.50%
Rest of the World	**30,463**	**32,443**	**-**	**9**	**3,022**	**7**	**0**	**3,029**	**0.07**		
020 TOTAL	**290,720**	**704,937**	**2,077**	**41,686**	**40,534**	**1,436**	**563**	**42,533**	**1,00**	**0.070%**	**0.16%**

(*) Within the European Union and the European Free Trade Association (EFTA).
(**) According to the rates published on the ESRB website as at 31 December 2018.

Appendix 4: Capital requirements of significant subsidiaries

The following tables give the capital requirements of significant subsidiaries (see paragraph Significant subsidiaries in section 5.2 *Scope of application*) by type of risk, as contribution to the Group's total capital requirement.

BNP PARIBAS FORTIS GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2018	1 January 2018	31 December 2018
1	**Credit risk**	**134,105**	**127,527**	**10,728**
2	Of which standardised approach	66,769	62,538	5,342
4	Of which advanced IRB approach	57,604	54,436	4,608
5	Of which equity positions under the simple risk-weighted approach	9,732	10,552	779
6	**Counterparty credit risk**	**1,877**	**1,757**	**150**
7	Of which mark-to-market	345	285	28
10	Of which internal model method (IMM)	1,317	1,308	105
11	Of which CCP - default fund contributions	58	64	5
12	Of which CVA	157	99	13
14	**Securitisation exposures in the banking book**	**823**	**295**	**66**
15	Of which IRB approach (IRB)	402	229	32
16	Of which IRB supervisory formula approach (SFA)	0	0	0
17	Of which internal assessment approach (IAA)	0	66	0
18	Of which standardised approach	421	0	34
19	**Market risk**	**404**	**329**	**32**
20	Of which standardised approach	404	329	32
23	**Operational risk**	**15,260**	**13,883**	**1,221**
24	Of which basic indicator approach	2,768	2,727	221
25	Of which standardised approach	2,632	2,507	211
26	Of which Advanced Measurement Approach (AMA)	9,860	8,649	789
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**4,355**	**4,543**	**348**
29	**TOTAL**	**156,825**	**148,335**	**12,546**

BNL GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2018	1 January 2018	31 December 2018
1	**Credit risk**	**35,861**	**36,810**	**2,869**
2	Of which standardised approach	6,504	6,183	520
4	Of which advanced IRB approach	27,776	29,061	2,222
5	Of which equity positions under the simple risk-weighted approach	1,581	1,566	126
6	**Counterparty credit risk**	**386**	**318**	**31**
7	Of which mark-to-market	275	269	22
12	Of which CVA	111	49	9
14	**Securitisation exposures in the banking book**	**210**	**81**	**17**
15	Of which IRB approach (IRB)	0	0	0
16	Of which IRB supervisory formula approach (SFA)	155	0	12
18	Of which standardised approach	55	81	4
19	**Market risk**	**12**	**0**	**1**
20	Of which standardised approach	12	0	1
23	**Operational risk**	**5,419**	**4,558**	**434**
24	Of which basic indicator approach	79	58	6
25	Of which standardised approach	101	113	8
26	Of which Advanced Measurement Approach (AMA)	5,239	4,387	419
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**26**	**9**	**2**
29	**TOTAL**	**41,915**	**41,776**	**3,353**

BNP PARIBAS USA INC. GROUP

		RWAs		Capital requirements
	In millions of euros	31 December 2018	1 January 2018	31 December 2018
1	**Credit risk**	**45,315**	**50,435**	**3,625**
2	Of which standardised approach	44,620	49,838	3,570
4	Of which advanced IRB approach	276	160	22
5	Of which equity positions under the simple risk-weighted approach	418	437	33
6	**Counterparty credit risk**	**886**	**682**	**71**
7	Of which mark-to-market	543	319	43
10	Of which internal model method (IMM)	248	349	20
11	Of which CCP - default fund contributions	87	4	7
12	Of which CVA	9	10	1
14	**Securitisation exposures in the banking book**	**5**	**6**	**-**
18	Of which standardised approach	5	6	-
19	**Market risk**	**19**	**10**	**2**
20	Of which standardised approach	19	10	2
23	**Operational risk**	**4,601**	**5,470**	**368**
24	Of which basic indicator approach	39	33	3
25	Of which standardised approach	3,512	4,484	281
26	Of which Advanced Measurement Approach (AMA)	1,050	953	84
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**1,920**	**1,245**	**154**
29	**TOTAL**	**52,745**	**57,847**	**4,220**

BANCWEST GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2018	1 January 2018	31 December 2018
1	Credit risk	44,489	49,767	3,559
2	Of which standardised approach	44,457	49,732	3,557
4	Of which advanced IRB approach	0	0	0
5	Of which equity positions under the simple risk-weighted approach	32	35	3
6	Counterparty credit risk	179	179	14
7	Of which mark-to-market	170	169	14
12	Of which CVA	9	10	1
14	Securitisation exposures in the banking book	5	6	0
18	Of which standardised approach	5	6	0
19	Market risk	1	9	0
20	Of which standardised approach	1	9	0
23	Operational risk	3,396	4,376	272
24	Of which basic indicator approach	2	11	0
25	Of which standardised approach	3,394	4,365	272
27	Amounts below the thresholds for deduction (subject to 250% risk weight)	1,311	448	105
29	TOTAL	49,382	54,786	3,951

BNP PARIBAS PERSONAL FINANCE GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2018	1 January 2018	31 December 2018
1	**Credit risk**	**58,533**	**55,775**	**4,683**
2	Of which standardised approach	45,567	43,101	3,645
4	Of which advanced IRB approach	12,904	12,533	1,032
5	Of which equity positions under the simple risk-weighted approach	62	142	5
6	**Counterparty credit risk**	**16**	**12**	**1**
7	Of which mark-to-market	2	3	0
12	Of which CVA	14	8	1
14	**Securitisation exposures in the banking book**	**150**	**62**	**12**
15	Of which IRB approach (IRB)	110	0	9
16	Of which IRB supervisory formula approach (SFA)	0	0	0
18	Of which standardised approach	41	62	3
19	**Market risk**	**8**	**103**	**1**
20	Of which standardised approach	8	103	1
23	**Operational risk**	**6,397**	**5,217**	**512**
24	Of which basic indicator approach	1,302	1,015	104
25	Of which standardised approach	869	868	70
26	Of which Advanced Measurement Approach (AMA)	4,226	3,334	338
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**1,846**	**1,941**	**148**
29	**TOTAL**	**66,950**	**63,110**	**5,356**

BGL BNP PARIBAS GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2018	1 January 2018	31 December 2018
1	**Credit risk**	**22,588**	**21,556**	**1,807**
2	Of which standardised approach	16,183	14,930	1,295
4	Of which advanced IRB approach	5,956	5,783	476
5	Of which equity positions under the simple risk-weighted approach	449	843	36
6	**Counterparty credit risk**	**37**	**42**	**3**
7	Of which mark-to-market	35	39	3
12	Of which CVA	2	3	0
14	**Securitisation exposures in the banking book**	**28**	**9**	**2**
15	Of which IRB approach (IRB)	28	9	2
18	Of which standardised approach	0	0	0
19	**Market risk**	**9**	**33**	**1**
20	Of which standardised approach	9	33	1
23	**Operational risk**	**1,943**	**1,625**	**155**
24	Of which basic indicator approach	112	64	9
25	Of which standardised approach	240	193	19
26	Of which Advanced Measurement Approach (AMA)	1,591	1,368	127
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**178**	**199**	**14**
29	**TOTAL**	**24,784**	**23,465**	**1,983**

Appendix 5: List of tables and figures

Appendix 6: Acronyms

Acronyms	
ABCP	Asset-Backed Commercial Paper
ABS	Asset-Backed Securities
ACPR	Autorité de contrôle prudentiel et de résolution
ALCo	Asset and Liability Committee
ALM	Asset and Liability Management
AMA	Advanced Measurement Approach
bp	Basis points
BNB	Banque Nationale de Belgique
BRRD	Bank Recovery and Resolution Directive
CCP	Central Counterparty
CCF	Credit Conversion Factor
CDO	Collaterised Debt Obligations
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CLO	Collaterised Loan Obligations
CMBS	Commercial Mortgage Backed Securities
CMG	Crisis Management Group
CRD	Capital Requirement Directive
CRM	Comprehensive Risk Measure
CRR	Capital Requirement Regulation
CVA	Credit Valuation Adjustment
D-SIBs	Domestic Systemically Important Banks
EAD	Exposure at Default
EBA	European Banking Authority
ECB	European Central Bank
EDTF	Enhanced Disclosure Task Force
EEA	European Economic Area
EEPE	Effective Expected Positive Exposure
EL	Expected Loss
FBF	Fédération Bancaire Française
FED	Federal Reserve System of the United States
FICC	Fixed Income Currency and Commodities
FSB	Financial Stability Board

Acronyms	
G-SIBs	Global Systemically Important Banks
GDP	Gross Domestic Product
GRR	Global Recovery Rate
HCSF	Haut Conseil de Stabilité Financière
HQLA	High Quality Liquid Assets
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IRBA	Internal Ratings Based Approach
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
KYC	Know Your Customer
LGD	Loss Given Default
LTV	Loan-to-Value
MTN	Medium Term Note
MREL	Minimum Requirement for own funds and Eligible Liabilities
NBI	Net Banking Income
NPV	Net Present Value
P&C	Property & Casualty
PD	Probability of Default
PVA	Prudent Valuation Adjustment
RMBS	Residential Mortgage-Backed Securities
RW	Risk Weight
SFT	Securities Financing Transactions
SME	Small and Medium Enterprises
SREP	Supervisory REview Process
TLAC	Total Loss Absorbing Capacity
TLTRO	Targeted Long Term Refinancing Operation
VaR	Value at Risk

6 INFORMATION ON THE PARENT COMPANY FINANCIAL STATEMENTS 31 DECEMBER 2018

6.1 BNP Paribas SA financial statements

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2018

In millions of euros	Notes	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Interest income	2.a	19,702	16,375
Interest expense	2.a	(15,338)	(11,468)
Income on equities and other variable instruments	2.b	4,520	1,751
Commission income	2.c	5,541	5,333
Commission expense	2.c	(1,059)	(991)
Net gains on trading account securities	2.d	3,282	3,438
Net gains on securities available for sale	2.e	169	717
Other banking income		152	94
Other banking expenses		(159)	(259)
REVENUES		**16,810**	**14,990**
Salaries and employee benefit expenses	5.a	(6,116)	(6,341)
Other administrative expenses		(4,872)	(4,651)
Depreciation, amortisation and impairment on tangible, and intangible assets		(608)	(729)
GROSS OPERATING INCOME		**5,214**	**3,269**
Cost of risk	2.f	(332)	(325)
OPERATING INCOME		**4,882**	**2,944**
Net losses on disposals of long-term investments	2.g	(408)	(128)
Net additions to regulated provisions		(4)	(4)
INCOME BEFORE TAX		**4,470**	**2,812**
Income tax	2.h	557	345
NET INCOME		**5,027**	**3,157**

BALANCE SHEET AT 31 DECEMBER 2018

In millions of euros, at	Notes	31 December 2018	31 December 2017
Assets			
Cash and amounts due from central banks		165,621	155,690
Treasury bills and money-market instruments	3.c	152,521	123,154
Due from credit institutions	3.a	228,514	222,066
Customer items	3.b	450,162	434,014
Bonds and other fixed-income securities	3.c	91,306	87,413
Equities and other variable-income securities	3.c	1,614	1,344
Investments in subsidiaries and equity securities held for long-term investment	3.c	3,501	3,719
Investments in affiliates	3.c	63,284	62,738
Intangible assets	3.j	2,665	2,548
Tangible assets	3.j	2,504	2,508
Treasury shares	3.d	38	43
Other assets	3.h	134,416	146,781
Accrued income	3.i	71,232	71,253
TOTAL ASSETS		**1,367,378**	**1,313,271**
Liabilities			
Due to central banks		1,207	1,086
Due to credit institutions	3.a	249,147	230,687
Customer items	3.b	567,227	547,097
Debt securities	3.f	133,959	125,829
Other liabilities	3.h	252,866	246,517
Accrued income	3.i	68,304	70,618
Provisions	3.k	1,681	2,191
Subordinated debt	3.l	23,864	21,431
TOTAL LIABILITIES		**1,298,255**	**1,245,456**
SHAREHOLDERS' EQUITY	6.b		
Share capital		2,500	2,498
Additional paid-in capital		23,222	23,175
Reserves and Retained earnings		38,374	38,985
Net income		5,027	3,157
TOTAL SHAREHOLDERS' EQUITY		**69,123**	**67,815**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**1,367,378**	**1,313,271**

OFF-BALANCE SHEET	Notes	31 December 2018	31 December 2017
COMMITMENTS GIVEN			
Loan commitment	4.a	305,735	257,400
Guarantee commitments	4.b	116,498	125,134
Commitments given on securities	4.b	15,774	14,666
COMMITMENTS RECEIVED			
Loan commitment	4.a	146,152	115,683
Guarantee commitments	4.b	212,576	207,416
Commitments received on securities	4.b	27,677	19,366

Notes to the parent company financial statements

Note 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLIED BY BNP PARIBAS SA

BNP Paribas SA's financial statements have been prepared in accordance with generally accepted accounting principles applied to credit institutions in France, set out in ANC (French Accounting Standards Authority) regulation 2014-07 of 26 November 2014 and its amending regulations since that date.

AMOUNTS DUE FROM CREDIT INSTITUTIONS AND CUSTOMERS

Amounts due from credit institutions include all subordinated and unsubordinated loans made in connection with banking transactions with credit institutions, with the exception of debt securities. They also include assets purchased under resale agreements, whatever the type of assets concerned, and receivables corresponding to securities sold under collateralised repurchase agreements. They are broken down between demand loans and deposits, and term loans and time deposits.

Amounts due from customers include loans to customers other than credit institutions, with the exception of loans represented by debt securities issued by customers, assets purchased under resale agreements, whatever the type of assets concerned, and receivables corresponding to securities sold under collateralised repurchase agreements. They are broken down between commercial loans, customer debit accounts, and other loans.

Amounts due from credit institutions and customers are recorded in the balance sheet at nominal value plus accrued interest not yet due.

Outstanding loans and confirmed credit facilities are broken down into sound loans, including sound restructured loans, and doubtful loans. The same analysis is performed for credit risks attached to forward financial instruments whose present value represents an asset for the Group.

Credit risks are monitored using BNP Paribas SA's internal credit risk rating system. This system is based on two key parameters: the probability of default by the counterparty, expressed as a rating, and the overall recovery rate determined by reference to the type of transaction. There are twelve counterparty ratings: ten covering sound loans and two covering doubtful loans and loans classified as irrecoverable.

Doubtful loans are defined as loans where the Bank considers that there is a risk that the borrowers will be unable to honour all or part of their commitments. Loans on which one or more instalments are more than three months overdue as well as loans for which legal procedures have been initiated are considered doubtful. When a loan is classified as doubtful, all other loans and commitments to the debtor are automatically assigned the same classification.

The Bank recognises an impairment for doubtful accounts on these loans, in an amount corresponding to the difference between the total loan value and current value of the future cash flows (from principal, interest, and any realised guarantees) that are deemed recoverable, using a discount rate equal to the original effective interest rate (for fixed-rate loans), or the most recent contractual interest rate (for floating-rate loans). The guarantees considered here include mortgages and pledges on assets, as well as credit derivatives acquired by the Bank as a protection against credit losses in the loan book.

If a loan is restructured because the borrower is facing financial difficulties, the Bank calculates a discount equal to the difference in present value between the old and new repayment terms. These discounts are recognised as a deduction to assets and reversed through income on an actuarial basis over the remaining term of the loan. If any instalments on a restructured loan are not paid, the loan is reclassified as irrecoverable regardless of the terms of the restructuring.

In the case of doubtful loans where the borrower has resumed making regular payments in accordance with the original repayment schedule, the loan is reclassified as sound. Similarly, doubtful loans that have been restructured are also reclassified as sound, provided that the restructuring terms are satisfied.

Irrecoverable loans include loans to borrowers whose credit standing is such that after a reasonable time classified as doubtful loans, no reclassification as a sound loan is foreseeable, loans where an event of default has occurred, almost all restructured loans where the borrower has once again defaulted, and loans classified as doubtful for more than one year that are in default and are not secured by guarantees covering a substantial portion of the amount due.

Impairments for credit risks on assets are deducted from the carrying amount of the assets. Provisions recorded under liabilities include provisions related to off-balance sheet commitments, loss provisions relating to interests in real-estate development programmes, provisions for claims and litigation, and provisions for unforeseeable industry risks.

Additions to and recoveries of provisions and impairment, losses on irrecoverable loans, recoveries on loans covered by provisions and discounts calculated on restructured loans are recorded in the profit and loss account under "Cost of risk".

The interest received from the repayment of the carrying amount of loans that have been written-down, as well as the reversals of discounting effects and the discount on restructured loans, are recognised under "Interest income".

REGULATED SAVINGS AND LOAN CONTRACTS

Home savings accounts (*Comptes Épargne Logement*, or CELs) and home savings plans (*Plans d'Épargne Logement*, or PELs) are government regulated retail products sold in France. They combine an inseparable savings phase and a loan phase with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas SA: an obligation to pay interest on the savings for an indefinite period at a rate set by the government on inception of the contract (in the case of PEL products) or at a rate reset every semester using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer's option) an amount contingent upon the rights acquired during the savings phase at a rate set on inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

BNP Paribas SA's future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and equate to statistically probable outstanding loans and the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk outstanding loans for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed rate home loans in the case of the loan phase and on products offered to retail clients in the case of the savings phase.

In order to reflect the uncertainty of future interest-rate trends, and the impact of such trends on customer behaviour models and on at risk outstandings, the obligations are estimated using the Monte-Carlo method.

When the sum of BNP Paribas SA's estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for BNP Paribas SA, a provision is recognised, with no offset between generations, in the balance sheet under "Provisions". Movements in this provision are recognised as interest income in the profit and loss account.

SECURITIES

The term "Securities" covers interbank market securities, Treasury bills and negotiable certificates of deposit, bonds and other "fixed-income" securities (whether fixed- or floating-rate) and equities and other variable-income securities.

Securities are classified as: "Trading account securities", "Securities available for sale", "Equity securities available for sale in the medium term", "Debt securities held to maturity", "Equity securities held for long-term investment", or "Investments in subsidiaries and affiliates".

As of 1 January 2018, trading securities acquired or disposed of under agreements whose terms require delivery of the securities within a period defined by regulation or by an agreement on the relevant market are recorded in the balance sheet on the settlement date. This change has no impact on the profit and loss account and on capital at the start of the year. Other categories of securities acquired or disposed of under the same conditions are still recorded on the transaction date. The method has been changed to provide better information on transactions.

When a credit risk has occurred, fixed-income securities held in the "Available for sale" or "Held to maturity" portfolio are classified as doubtful, based on the same criteria as those applied to doubtful loans and commitments.

When securities exposed to counterparty risk are classified as doubtful and the related provision can be separately identified, the corresponding charge is included in "Cost of risk".

Trading account securities

"Trading account securities" are securities bought or sold with the intention of selling them or repurchasing them in the near future, as well as those held as a result of market-making activities. These securities are valued individually at market value if they meet the following criteria:

- they can be traded on an active market (i.e. a market where third parties have continuous access to market prices through a securities exchange, brokers, traders, or market-makers);
- the market prices reflect actual, regularly-occurring transactions taking place under normal competition conditions.

"Trading account securities" also include securities bought or sold for specific asset-management objectives (especially in terms of sensitivity) for trading books comprised of forward financial instruments, securities, or other financial instruments taken globally.

Changes in the market value of these securities are recognised in income. "Trading account securities" cannot be reclassified into another category and must follow the valuation rules for this category until they are sold, fully redeemed, or recognised as a loss and consequently removed from the balance sheet.

In the case of exceptional circumstances necessitating a change in investment strategy, "Trading account securities" can be reclassified as "Securities available for sale" or "Debt securities held to maturity" depending on the new strategy.

If fixed-income securities classified as "Trading account securities" can no longer be traded on an active market, and if the Bank has the intention and ability to hold these securities for the foreseeable future or until maturity, they can be reclassified as "Securities available for sale" or "Debt securities held to maturity".

The accounting rules for the new category would apply to reclassified securities as of the reclassification date.

If the market in which securities classified as "Trading account securities" were purchased can no longer be considered active, the securities will be valued using methods that take into account the new market conditions.

Securities available for sale

The "Securities available for sale" category includes securities not classified into one of the other categories.

Bonds and other fixed-income securities are valued at the lower of cost (excluding accrued interest) or probable market prices. This is generally determined on the basis of stock market prices. Accrued interest is posted to the profit and loss account under "Interest income on bonds and other fixed-income securities".

For fixed-income securities available for sale that have been purchased on the secondary market, any difference between cost and redemption price is recognised in income using the actuarial method over the remaining life of the securities. On the balance sheet, their carrying amount is amortised to their redemption value over their remaining life.

Equities are valued at the lower of cost or probable market prices. This is generally determined on the basis of stock market prices for listed equities, or BNP Paribas SA's share in net equity, calculated on the basis of the most recent financial statements available, for unlisted equities. Dividends received are recognised in income under "Income on equities and other variable income instruments" on a cash basis.

The cost of securities available for sale that have been sold is determined on a first in, first out (FIFO) basis. Disposal gains or losses, and additions to and reversals of lower of cost and market provisions are reflected in the profit and loss account under "Gains (losses) on securities available for sale".

In the case of exceptional circumstances necessitating a change in investment strategy, or if the securities can no longer be traded on an active market, securities classified as "Securities available for sale" may be reclassified as "Debt securities held to maturity" and must be identified within this portfolio. These securities would then be recognised according to the method used for "Debt securities held to maturity".

Equity securities available for sale in the medium term

Equity securities available for sale in the medium term comprise investments made for portfolio management purposes, with the aim of realising a profit in the medium term without investing on a long-term basis in the development of the issuer's business. This category includes venture capital investments.

Equity securities available for sale in the medium term are recorded individually at the lower of cost and fair value. Fair value takes into account the issuer's general business outlook and the planned holding period. The fair value of listed shares is determined by reference to the average stock market price determined over a one-month period.

Debt securities held to maturity

Fixed-income securities with a specified maturity (mainly bonds, interbank market securities, Treasury bills, and other negotiable debt securities) are recorded under "Debt securities held to maturity" to reflect BNP Paribas SA's intention of holding them to maturity.

Bonds classified under this heading are financed by matching funds or hedged against interest-rate exposure for their remaining lives.

The difference between cost and the redemption price of these securities is recognised in income using the actuarial method. On the balance sheet, their carrying amount is amortised to their redemption value over their remaining life.

Interest on debt securities held to maturity is recorded in the profit and loss account under "Interest income on bonds and other fixed-income securities".

An impairment is recognised when a decline in the credit standing of an issuer jeopardises redemption at maturity.

If a significant portion of the "Debt securities held to maturity" is sold or reclassified into a different category, the sold or reclassified securities cannot be returned to the "Debt securities held to maturity" category at any time during the current financial period or the following two financial years. All the securities classified as "Debt securities held to maturity" would then be reclassified as "Securities available for sale in the medium term".

If exceptional market circumstances necessitate a change in investment strategy, and "Trading account securities" and "Securities available for sale" are reclassified as "Debt securities held to maturity", the sale of any "Debt securities held to maturity" prior to the maturity date would not invoke the reclassification clauses in the above paragraph if the sale occurred because the securities had once again become tradable on an active market.

Equity securities held for long-term investment, investments in subsidiaries and affiliates

Equity interests include investments in subsidiaries and affiliates in which BNP Paribas SA exercises significant influence over management and investments considered strategic to BNP Paribas SA's business development. This influence is deemed to exist when BNP Paribas SA holds an ownership interest of at least 10%.

Equity securities held for long-term investment are shares and related instruments that BNP Paribas SA intends to hold on a long-term basis in order to earn a satisfactory long-term rate of return without taking an active part in the management of the issuing company, but with the intention of promoting the development of lasting business relationships by creating special ties with the issuer.

Other investments in affiliates consist of shares and other variable income investments in companies over which BNP Paribas SA has exclusive control (i.e. companies likely to be fully consolidated into the Group).

These types of securities are recorded individually at the lower of cost and fair value. Fair value is determined on the basis of available information using a multi-criteria valuation approach, including discounted future cash flows, sum-of-the-digits and net asset value methods as well as an analysis of ratios commonly used to assess future yields and exit opportunities for each line of securities. The fair value of listed securities is considered to be at least equal to cost if the stock market price at period-end is no more than 20% below cost and the stock market price has not been below cost for the preceding 12 consecutive months. If these conditions are not met, and if a multi-criteria valuation shows that impairment should be recognised on the carrying amount, the fair value is considered to be equal to the stock market price. The same holds true if the stock market price is less than cost for 24 consecutive months, the closing stock market price is less than 50% of cost, or the average price over a 12 months period is more than 30% lower than cost.

For simplicity, listed securities acquired for less than EUR 10 million may be valued on the basis of the average closing stock market price in the month prior to closing.

Disposals, gains and losses and provision movements are recorded in the profit and loss account under "Net gain (loss) on disposals of fixed assets".

Dividends are recognised when they have been declared by the issuers' shareholders or if the shareholders' decision is unknown, when they are received. They are recorded under "Income on equities and other variable instruments."

Treasury shares

Treasury shares held by BNP Paribas SA are classified and valued as follows:

- treasury shares held, purchased under a market-making agreement or acquired in connection with index arbitrage transactions are recorded under "Trading account securities" at market price;
- treasury shares held for allocation to employees are recorded under "Securities available for sale". Shares granted to employees of BNP Paribas SA subsidiaries are charged to the subsidiaries according to the provisions of local law;
- treasury shares held to be granted to employees are not impaired, but a provision is recognised for these shares based on the services provided by the employees who will receive the shares;
- treasury shares that are intended to be cancelled or that are not being held for either of the above reasons are included in long-term investments. Treasury shares intended to be cancelled are stated at cost. All others are stated at the lower of cost and fair value.

FIXED ASSETS

Buildings and equipment are stated at acquisition cost or at the adjusted value determined in accordance with France's finance laws of 1977 and 1978. Revaluation differences on non-depreciable assets, recorded at the time of these statutory revaluations, are included in share capital.

Fixed assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed internally by BNP Paribas SA that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and staff costs directly attributable to the project.

Subsequent to initial recognition, fixed assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

Fixed assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense is recognised in the profit and loss account under "Depreciation, amortisation, and provisions on property, plant and equipment and intangible assets".

The portion of recognised depreciation or amortisation that exceeds the economic amount, mainly calculated on a straight-line basis, is recorded in the balance sheet as a liability under "Regulatory provisions: accelerated depreciation and amortisation". BNP Paribas SA does not calculate the deferred tax effects of accelerated depreciation and amortisation.

When an asset consists of a number of components that may require replacement at regular intervals or that have different uses or different patterns of consumption of economic benefits, each component is recognised separately and depreciated using a method appropriate to that component. BNP Paribas SA has adopted the component-based approach for property used in operations.

The depreciation periods used for office property are as follows: eighty years or sixty years for the shell (for prime and other property respectively); thirty years for facades; twenty years for general and technical installations; and ten years for fixtures and fittings.

Depending on its type, software is amortised over a period of no more than eight years in relation to infrastructure developments and three years or five years in the case of software developed primarily for the purpose of providing services to customers.

Depreciable fixed assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment annually.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be materially impaired, an impairment loss is recognised in the profit and loss account. This impairment loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment, with the exception of goodwill and residual merger premium (see below) allocated to goodwill. Impairment losses are taken into account in the profit and loss account under "Depreciation, amortisation, and provisions on property, plant and equipment and intangible assets".

- Goodwill in the business is now presumed to have an unlimited period of use. It is therefore non-amortisable, without any required justification. However, this is a refutable presumption, meaning that if there is a limited period for use, the goodwill must be amortised over its actual or fixed period of use (ten years) if it is not possible to reliably assess this period. In addition, if goodwill is not amortised, it must now be tested for impairment annually regardless of whether there is any indication of impairment.
- The merger premium is allocated to the various assets contributed as a result of mergers and similar transactions up to the limit of identified unrealised gains. The amount is allocated in the dedicated sub-accounts of the assets concerned, according to the amortisation, depreciation and provisioning rules for these assets.
- After allocation to the different underlying assets (see above), the net balance of the residual merger premium is carried to goodwill.

Gains and losses on disposals of property, plant and equipment, and intangible assets used in operations are recognised in the profit and loss account under "Net gain (loss) on disposals of fixed assets".

DUE TO CREDIT INSTITUTIONS AND DUE TO CUSTOMERS

Amounts due to credit institutions and customers are classified by their initial term or their type: demand accounts and time deposits for credit institutions, and regulated savings accounts and other deposits for customers. These sections include securities and other assets sold under repurchase agreements depending on the type of counterparty. Accrued interest is recorded on a separate line.

DEBT SECURITIES

Debt securities are broken down between certificates of deposit, interbank market securities, negotiable debt securities, bonds and other debt instruments. This section does not include subordinated notes which are recorded under subordinated debt.

Accrued interest on debt securities is recorded on a separate line of the balance sheet and is debited to the profit and loss account.

Bond issue and redemption premiums are amortised using the yield-to-maturity method over the life of the bonds. Bond issuance costs are amortised using the straight-line method over the life of the bonds.

PROVISIONS FOR INTERNATIONAL COMMITMENTS

Provisions for international commitments are based on the evaluation of non-transfer risk related to the future solvency of each of the countries at risk and on the systemic credit risk incurred by debtors in the event of a constant and durable deterioration in the overall situation and economies of these countries. Additions and reversals of these provisions are reflected in the profit and loss account under "Cost of risk".

PROVISIONS FOR NON-BANKING TRANSACTIONS

BNP Paribas SA records provisions for clearly identified contingencies and charges whose timing or amount is uncertain. In accordance with current regulations, these provisions for non-banking transactions may be recorded only if the Bank has an obligation to a third party at year-end, there is a high probability of an outflow of resources to the third party, and no equivalent economic benefits are expected in return from the third party.

COST OF RISK

The "Cost of risk" line item includes expenses arising from the identification of counterparty and credit risks, litigation, and fraud inherent to banking transactions conducted with third parties. Net movements in provisions that do not fall under the category of such risks are classified in the profit and loss account according to their type.

FORWARD FINANCIAL INSTRUMENTS

Forward financial instruments are purchased on various markets for use as specific or general hedges of assets and liabilities, or for transaction purposes.

The Bank's commitments related to these instruments are recognised off-balance sheet at nominal value. The accounting treatment of these instruments depends on the corresponding investment strategy.

Derivatives held for hedging purposes

Income and expenses related to forward financial instruments held for hedging purposes and designated to one instrument or a group of homogeneous instruments are recognised in income symmetrically with the income and expenses on the underlying instrument, and under the same accounting heading.

Income and expenses related to forward financial instruments used to hedge overall interest rate risk are recognised in income on a *prorata* basis.

Derivatives held for trading purposes

Derivatives held for trading purposes can be traded on organised markets or over-the-counter.

Derivatives held within a trading book are valued at market value on the balance sheet date. The corresponding gains and losses (realised and unrealised) are recognised in income. They are recognised in income under "Gains (losses) on trading account securities".

The market value is determined from either:

- the listed price, if one is available;
- a valuation method using recognised financial models and theories with parameters calculated from transaction prices observed on active markets, or from statistical or other quantitative methods.

In both cases, BNP Paribas SA makes conservative value adjustments to account for modelling, counterparty, and liquidity risks.

Some complex derivatives, which are typically custom-made from combined instruments and highly illiquid, are valued using models where certain parameters are not observable on an active market.

Until 31 December 2004, the Bank recognised gains from trading these complex derivatives immediately in income.

However, on 1 January 2005, the Bank began recognising these gains in income over the period during which the valuation parameters are expected to be unobservable. When parameters that were originally non-observable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the profit is recognised in income.

Other derivatives transactions

Depending on the nature of the instruments, gains and losses on over-the-counter contracts representing isolated open positions are recognised in income when the contracts are settled or on a *prorata* basis. A provision for unrealised losses is recognised for each group of homogeneous contracts.

CORPORATE INCOME TAX

A charge for corporate income tax is taken in the period in which the related taxable income and expenses are booked, regardless of the period in which the tax is actually paid. When the period in which the income and expenses are booked differs from that in which the income is taxed and expenses deducted, BNP Paribas SA recognises a deferred tax, whose amount is calculated according to the liability method, with the basis taken to be all temporary differences between the book value and tax basis of balance sheet items, and applying applicable future tax rates once these have been approved. Deferred tax assets are recognised in accordance with the likelihood of their being recovered.

EMPLOYEE PROFIT-SHARING

As required by French law, BNP Paribas SA recognises employee profit-sharing in the year in which the employee entitlement arises. The amount is reported under "Salaries and employee benefit expenses" in the profit and loss account.

EMPLOYEE BENEFITS

BNP Paribas SA employees receive each of the following four types of benefits:

- termination benefits, payable primarily in the case of early termination of an employment contract;
- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated leaves of absence, long-service awards, and other types of cash-based deferred remuneration;
- post-employment benefits, including top-up banking industry pensions in France and pension plans in other countries, some of which are operated through pension funds.

Termination benefits

Termination benefits are employee benefits payable as a result of a decision by BNP Paribas SA to terminate a contract of employment before the legal retirement age or by an employee to accept voluntary redundancy in exchange for a benefit. Termination benefits due more than 12 months after the closing date are discounted.

Short-term benefits

BNP Paribas SA recognises an expense when it has used services rendered by employees in exchange for employee benefits.

Long-term benefits

Long-term benefits are benefits (other than post-employment benefits and termination benefits) which do not fall wholly due within 12 months after the end of the period in which the employee renders the associated services. The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that actuarial gains and losses are recognised immediately, as are the effects of any plan amendments.

This relates in particular to cash remuneration deferred for more than 12 months, which is accrued in the financial statements for the period during which the employee provides the corresponding services. If the payment of deferred share-based variable remuneration is explicitly subject to the employee's continued employment at the vesting date, the services are presumed to have been rendered during the vesting period and the corresponding compensation expense is recognised on a *prorata* basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take account of any non-fulfilment of the continued presence or performance conditions, and changes in the BNP Paribas share price, for deferred remuneration indexed to the share.

If there is no continued presence condition, the expense is not deferred but recognised immediately with a corresponding liability in the balance sheet, which is then revised on each reporting date until settlement, to account for any performance conditions and changes in the BNP Paribas share price.

Post-employment benefits

The post-employment benefits provided to BNP Paribas SA employees in France include both defined-contribution plans and defined-benefit plans.

Defined-contribution plans, such as *Caisse Nationale d'Assurance Vieillesse* and supplemental national and trade union plans that pay pensions to former BNP Paribas SA employees in France, do not give rise to an obligation for BNP Paribas SA and consequently do not require a provision. The amount of employer's contributions payable during the period is recognised as an expense.

Only defined-benefit plans, such as the retirement packages paid for by BNP Paribas SA's retirement fund, give rise to an obligation for BNP Paribas SA. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether BNP Paribas SA has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take into account demographic and financial assumptions. The amount of the obligation recognised as a liability is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, tailored to the country in question, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate. The value of any plan assets is deducted from the amount of the obligation. When the value of the plan assets exceeds the amount of the obligation, an asset is only recognised if it represents a future economic benefit in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The amount of the obligation under a plan, and the value of the plan assets, may show significant fluctuations from one period to the next due to changes in actuarial assumptions, thereby giving rise to actuarial gains and losses. Actuarial gains and losses and the effect of limits on assets are recognised entirely in profit or loss. Expected gains from investments are calculated at the discount rate of the corresponding commitments.

RECOGNITION OF REVENUE AND EXPENSES

Interest and fees and commissions qualified as interest are recognised on an accrual basis. These include the commissions charged by the Bank as part of an overall loan package (i.e., application fees, commitment fees, participation fees, etc.). The marginal transaction costs that the Bank must pay when granting or acquiring loans are also spread out over the effective life of the corresponding loan.

Fees and commissions not qualified as interest that relate to the provision of services are recognised when the service is performed or, for ongoing services, on a *prorata* basis over the length of the service agreement.

FOREIGN CURRENCY TRANSACTIONS

Foreign exchange positions are generally valued at the official year-end exchange rate. Exchange gains and losses on transactions in foreign currency carried out in the normal course of business are recognised in the profit and loss account.

Exchange differences arising from the conversion of assets held on a long-term basis, including equity securities held for long-term investment, the capital made available to branches, and other foreign equity investments denominated in foreign currencies and financed in euros, are recognised as translation adjustments for the balance sheet line items recording the assets.

Exchange differences arising from the conversion of assets held on a long-term basis, including equity securities held for long-term investment, the capital made available to branches, and other foreign equity investments, denominated and financed in foreign currencies, are recognised symmetrically as translation differences for the corresponding financing.

TRANSLATION OF FINANCIAL STATEMENTS EXPRESSED IN FOREIGN CURRENCIES

Monetary and non-monetary foreign currency-denominated assets and liabilities of foreign branches are translated into euros at the year-end exchange rate. Translation adjustments regarding the capital made available to BNP Paribas SA branches outside of France are included in "Accrued income" and "Accrued expenses".

Note 2 NOTES TO THE 2018 PROFIT AND LOSS ACCOUNT

2.a NET INTEREST INCOME

BNP Paribas SA includes in "Interest income" and "Interest expense" all income and expenses from financial instruments measured at amortised cost according to the effective interest rate method (interest, commission and expenses) and from financial instruments measured at fair value that do not meet the definition of a derivative instrument. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under "Gains (losses) on trading account securities".

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item.

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Income	Expenses	Income	Expenses
Credit institutions	**5,763**	**(4,159)**	**3,860**	**(3,069)**
Demand accounts, loans and borrowings	4,026	(2,863)	2,723	(2,153)
Securities given/received under repurchase agreements	1,571	(1,296)	1,003	(916)
Subordinated loans	166		134	
Customers	**10,759**	**(7,331)**	**8,905**	**(4,653)**
Demand accounts, loans, and term accounts	7,321	(3,308)	6,867	(2,556)
Securities given/received under repurchase agreements	3,428	(4,023)	2,027	(2,097)
Subordinated loans	10		11	
Debt securities	**42**	**(3,848)**	**34**	**(3,746)**
Bonds and other fixed-income securities	**2,950**		**3,397**	
Trading account securities	75		75	
Securities available for sale	2,856		3,275	
Debt securities held to maturity	19		47	
Macro-hedging instruments	**188**		**179**	
INTEREST INCOME AND EXPENSES	**19,702**	**(15,338)**	**16,375**	**(11,468)**

2.b INCOME ON EQUITIES AND OTHER VARIABLE INSTRUMENTS

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Securities available for sale	78	53
Investments in subsidiaries and equity securities held for long-term investment	348	186
Investments in affiliates	4,094	1,512
INCOME ON EQUITIES AND OTHER VARIABLE INSTRUMENTS	**4,520**	**1,751**

2.c COMMISSIONS

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Income	Expenses	Income	Expenses
Commissions on banking and financing transactions	**2,089**	**(514)**	**2,043**	**(478)**
Customer items	1,411	(93)	1,312	(86)
Other	678	(421)	731	(392)
Commissions on financial services	**3,452**	**(545)**	**3,290**	**(513)**
COMMISSION INCOME AND EXPENSES	**5,541**	**(1,059)**	**5,333**	**(991)**

2.d GAINS OR LOSSES ON TRADING ACCOUNT SECURITIES

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Fixed-income instruments and transactions in trading account securities	3,701	3,511
Currency instruments	1,299	760
Credit instruments	1,082	(966)
Other variable income financial instruments and transactions in trading account securities	(2,800)	133
NET GAINS ON TRADING ACCOUNT SECURITIES	**3,282**	**3,438**

2.e GAINS OR LOSSES ON SECURITIES AVAILABLE FOR SALE

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Income	Expenses	Income	Expenses
Divestments	244	(113)	780	(121)
Provisions	106	(68)	112	(54)
TOTAL	**350**	**(181)**	**892**	**(175)**
NET GAINS ON SECURITIES AVAILABLE FOR SALE	**169**		**717**	

2.f COST OF RISK AND PROVISION FOR CREDIT RISKS

Cost of risk represents the net amount of impairment losses recognised with respect to credit risks inherent to BNP Paribas SA's banking intermediation activities, plus any impairment losses in the case of known counterparty risk on over-the-counter instruments.

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Net additions to or write-backs from provisions	**(176)**	**(203)**
Customer items and credit institutions	(374)	(302)
Off-balance sheet commitment	252	107
Securities	(41)	6
Doubtful loans	11	(19)
Financial instruments for market activities	(24)	5
Irrecoverable loans not covered by provisions	**(226)**	**(258)**
Recoveries of loans written-off	**70**	**136**
COST OF RISK	**(332)**	**(325)**

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Balance at 1 January	**6,689**	**7,780**
Net additions to or write-backs from provisions	176	203
Write-offs during the period covered by provisions	(1,183)	(1,061)
Effect of movements in exchange rates and other	688	(233)
PROVISIONS FOR CREDIT RISKS	**6,370**	**6,689**

The provisions break down as follows:

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Provisions deducted from assets	**6,089**	**6,141**
For amounts due from credit institutions (note 3.a)	157	118
For amounts due from customers (note 3.b)	5,644	5,736
For amounts due from finance leases		
For securities	228	251
For financial instruments for market activities	60	36
Provisions recognised as liabilities (note 3.k)	281	548
For off-balance sheet commitments	248	486
For doubtful loans	33	62
PROVISIONS FOR CREDIT RISKS	**6,370**	**6,689**

2.g GAINS OR LOSSES ON DISPOSALS OF LONG-TERM INVESTMENTS

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Income	Expenses	Income	Expenses
Investments in subsidiaries and equity securities held for long-term investment	**295**	**(121)**	**224**	**(166)**
Divestments	287	(1)	180	(43)
Provisions	8	(120)	44	(123)
Investments in affiliates	**170**	**(751)**	**438**	**(664)**
Divestments	79	(53)	41	(153)
Provisions	91	(698)	397	(511)
Operating assets	**2**	**(3)**	**41**	**(1)**
TOTAL	**467**	**(875)**	**703**	**(831)**
NET LOSSES ON DISPOSALS OF LONG-TERM INVESTMENTS		**(408)**		**(128)**

2.h CORPORATE INCOME TAX

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Current tax expense	506	238
Deferred tax expense	51	107
INCOME TAX	**557**	**345**

The basic tax consolidation agreements between BNP Paribas SA and the subsidiaries belonging to its tax group are designed to be tax neutral for every party. Each Group subsidiary recognises in its own books, over the full term of its consolidation, corporate income tax income or expense, additional contributions and all current or future taxes covered by the scope of tax consolidation just as they would if they were not part of a tax group. BNP Paribas SA, as the parent company, records the impact of Group tax savings from tax consolidation in France in current tax expense.

Note 3 NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2018

3.a AMOUNTS DUE FROM AND DUE TO CREDIT INSTITUTIONS

In millions of euros, at	31 December 2018	31 December 2017
Loans and advances	**154,592**	**148,895**
Demand accounts	7,444	7,196
Term accounts and loans	140,787	135,632
Subordinated loans	6,361	6,067
Securities received under repurchase agreements	**74,079**	**73,289**
LOANS AND RECEIVABLES DUE FROM CREDIT INSTITUTIONS BEFORE IMPAIRMENT	**228,671**	**222,184**
of which accrued interest	*868*	*534*
of which irrecoverable loans	*14*	*16*
of which potentially recoverable doubtful loans	*13*	*25*
Impairment on receivables due from credit institutions *(note 2.f)*	**(157)**	**(118)**
LOANS AND RECEIVABLES DUE FROM CREDIT INSTITUTIONS NET OF IMPAIRMENT	**228,514**	**222,066**

In millions of euros, at	31 December 2018	31 December 2017
Deposits and borrowings	**174,099**	**169,017**
Demand deposits	11,444	11,266
Term accounts and borrowings	162,655	157,751
Securities given under repurchase agreements	**75,048**	**61,670**
DUE TO CREDIT INSTITUTIONS	**249,147**	**230,687**
of which accrued interest	*579*	*433*

3.b CUSTOMER ITEMS

In millions of euros, at	31 December 2018	31 December 2017
Loans and advances	**334,178**	**323,367**
Commercial and industrial loans	7,873	2,430
Demand accounts	17,476	19,282
Short-term loans	78,561	73,019
Mortgages	80,243	75,055
Equipment loans	49,328	47,382
Export loans	8,170	9,307
Other customer loans	90,991	95,527
Subordinated loans	1,536	1,365
Securities received under repurchase agreements	**121,628**	**116,383**
CUSTOMER ITEMS BEFORE IMPAIRMENT - ASSETS	**455,806**	**439,750**
of which accrued interest	*1,350*	*918*
of which loans eligible for refinancing by the Banque de France	*35*	*78*
of which potentially recoverable doubtful loans and receivables	*3,468*	*3,647*
of which irrecoverable loans and receivables	*5,339*	*5,083*
Impairment on receivables due from customers *(note 2.f)*	**(5,644)**	**(5,736)**
CUSTOMER ITEMS NET OF IMPAIRMENT - ASSETS	**450,162**	**434,014**

The following table gives the loans and receivables net of impairment due from customers by counterparty:

	31 December 2018				31 December 2017			
		Doubtful loans				Doubtful loans		
In millions of euros, at	Sound loans	Potentially recoverable	Irrecoverable	Total	Sound loans	Potentially recoverable	Irrecoverable	Total
Financial institutions	68,121	61	95	68,277	64,235	324	44	64,603
Corporate	171,269	1,451	1,667	174,387	164,253	1,401	1,465	167,119
Entrepreneurs	8,678	57	152	8,887	8,679	54	159	8,892
Individuals	68,940	239	627	69,806	70,107	201	582	70,890
Other non-financial customers	7,085	91	1	7,177	6,080	21	26	6,127
TOTAL LOANS AND RECEIVABLES, NET OF IMPAIRMENT	**324,093**	**1,899**	**2,542**	**328,534**	**313,354**	**2,001**	**2,276**	**317,631**

In millions of euros, at	31 December 2018	31 December 2017
Deposits	**418,241**	**401,173**
Demand deposits	190,910	178,054
Term deposits	157,768	153,561
Regulated savings accounts	69,563	69,558
of which demand regulated savings accounts	*52,116*	*52,102*
Securities given under repurchase agreements	**148,986**	**145,924**
CUSTOMER ITEMS - LIABILITIES	**567,227**	**547,097**
of which accrued interest	*1,053*	*874*

3.c SECURITIES HELD BY BNP PARIBAS SA

In millions of euros, at	31 December 2018		31 December 2017	
	Net Carrying amount	Market value	Net Carrying amount	Market value
Transaction[(1)]	104,972	104,972	83,902	83,902
Securities available for sale	47,188	51,703	38,898	43,511
of which provisions	*(30)*		*(4)*	
Investments	361	363	354	354
TREASURY BILLS AND MONEY-MARKET INSTRUMENTS	**152,521**	**157,038**	**123,154**	**127,767**
of which receivables corresponding to loaned securities	*28,179*		*27,291*	
of which goodwill	*2,850*		*2,687*	
Transaction[(1)]	42,775	42,775	38,665	38,665
Securities available for sale	48,346	49,671	48,295	50,980
of which provisions	*(206)*		*(174)*	
Investments	185	186	453	473
of which provisions			*(12)*	
BONDS AND OTHER FIXED-INCOME SECURITIES	**91,306**	**92,632**	**87,413**	**90,118**
of which unlisted securities	*13,117*	*13,386*	*13,247*	*13,885*
of which accrued interest	*938*		*890*	
of which receivables corresponding to loaned securities	*7,070*		*6,144*	
of which goodwill	*174*		*260*	
Transaction	735	735	687	687
Securities available for sale and equity securities available for sale in the medium term	879	1,122	657	930
of which provisions	*(241)*		*(332)*	
EQUITIES AND OTHER VARIABLE-INCOME SECURITIES	**1,614**	**1,857**	**1,344**	**1,617**
of which unlisted securities	*832*	*1,073*	*615*	*902*
of which receivables corresponding to loaned securities	*428*		*483*	
Associated companies	2,978	4,628	3,175	4,956
of which provisions	*(163)*		*(161)*	
Equity securities held for long-term investment	523	620	544	562
of which provisions	*(240)*		*(193)*	
INVESTMENTS IN SUBSIDIARIES AND EQUITY SECURITIES HELD FOR LONG-TERM INVESTMENT	**3,501**	**5,248**	**3,719**	**5,518**
of which unlisted securities	*1,990*	*3,197*	*2,133*	*2,825*
Investments in affiliates	63,284	99,013	62,738	96,671
of which provisions	*(7,863)*		*(7,249)*	
INVESTMENTS IN AFFILIATES	**63,284**	**99,013**	**62,738**	**96,671**

(1) Transactions on trading securities are recognised on the settlement date, whereas they were previously recorded on the transaction date. The comparable net balances at 31 December 2017 would have been EUR 82,744 million for "Treasury bills and money-market instruments", instead of €83,902 million, and EUR 38,649 million for "Bonds and other fixed income securities" instead of EUR 38,665 million, respectively.

Equity investments in credit institutions and investments in affiliates held by BNP Paribas totalled EUR 1,529 million and EUR 31,371 million, respectively at 31 December 2018, compared with EUR 1,562 million and EUR 30,651 million, respectively, at 31 December 2017.

3.d TREASURY SHARES

In millions of euros, at	31 December 2018		31 December 2017
	Gross value amount	Net Carrying amount	Net Carrying amount
Transaction	-	-	5
Securities available for sale	6	6	6
Investment in subsidiaries	32	32	32
TREASURY SHARES	**38**	**38**	**43**

The fifth resolution of the Shareholders' Combined General Meeting of 24 May 2018, which replaced the fifth resolution of the Shareholders' Combined General Meeting of 23 May 2017, authorised BNP Paribas SA to buy back shares representing up to 10% of the Bank's issued capital at a maximum purchase price of EUR 73 per share (unchanged from 31 December 2017). The shares could be acquired for the following purposes: for subsequent cancellation in accordance with conditions set by the Shareholders' Combined General Meeting of 24 May 2018, to fulfil the Bank's obligations relative to the issue of shares or share equivalents, for stock option plans, for share awards, or for granting or selling shares to employees under an employee profit-sharing plan, employee share ownership plan or Corporate Savings Plan and to cover any type of share award to the employees of BNP Paribas SA and companies controlled exclusively by BNP Paribas SA within the meaning of article L.233-16 of the French Commercial Code; to be held in treasury for subsequent remittance in exchange or payment for acquisitions, mergers, spin-offs or asset transfers; within the scope of a market-making agreement compliant with the Code of Ethics recognised by the AMF; or for asset and financial management purposes.

This authorisation was granted for a period of 18 months.

At 31 December 2018, BNP Paribas SA held 603,827 treasury shares classified as "Equity securities held for long-term investment" and intended to be cancelled.

BNP Paribas SA also held 122,624 treasury shares classified as "Securities available for sale" and intended to be used for free share awards to Group employees, granted or sold as part of an employee profit-sharing plan, employee share ownership plan, or Company Savings Plan.

Moreover, under the Bank's market-making agreement relating to the BNP Paribas share on the Italian market made with Exane BNP Paribas, and in accordance with the Code of Ethics recognised by the AMF, the Bank bought back 513,568 shares in 2018 at an average share price of EUR 60.74, and sold 594,068 shares, representing the entire portfolio, at an average share price of EUR 59.33, which closed the portfolio.

3.e LONG-TERM INVESTMENTS

In millions of euros	Gross values					Provisions					Carrying amount	
	1 Jan. 2018	Purchases	Disposals and redemptions	Transfers and other movements	31 Dec. 2018	1 Jan. 2018	Additions	Write-backs	Other movements	31 Dec. 2018	31 Dec. 2018	31 Dec. 2017
Debt securities held to maturity *(note 3.c)*	819		(301)	28	546	12			(12)	0	546	807
Investments in subsidiaries and equity securities held for long-term investment *(notes 3.c)*	4,073	89	(250)	(8)	3,904	354	56	(7)		403	3,501	3,719
Investments in affiliates *(note 3.c)*	69,987	1,222	(569)	507	71,147	7,249	696	(90)	8	7,863	63,284	62,738
of which merger premium on investments in affiliates	*4,258*				*4,258*	*3,268*	*376*			*3,644*	*614*	*990*
Treasury shares *(note 3.d)*	32				32						32	32
LONG-TERM INVESTMENTS	**74,911**	**1,311**	**(1,120)**	**527**	**75,629**	**7,615**	**752**	**(97)**	**(4)**	**8,266**	**67,363**	**67,296**

Under CRC Regulation 2008-17 dated 10 December 2008, financial instruments initially held for trading or available for sale can be reclassified as securities held to maturity.

These reclassifications are summarised in the table below:

In millions of euros, at	Reclassification date	Amount on the reclassification date	31 December 2018		31 December 2017	
			Carrying value	Market or model value	Carrying value	Market or model value
Financial assets reclassified out of the trading portfolio		**4,404**	**0**	**0**	**236**	**286**
To debt securities held to maturity	1 October 2008	4,404	0	0	236	286

Without the reclassifications, BNP Paribas SA's 2017 net income would have included a gain of EUR 19 million.

3.f DEBT SECURITIES

In millions of euros, at	31 December 2018	31 December 2017
Negotiable debt securities	106,196	109,817
Bond issues *(note 3.g)*	2,278	3,059
Other debt securities	25,485	12,953
DEBT SECURITIES	**133,959**	**125,829**
of which unamortised issuance premiums	*653*	*647*

3.g BOND ISSUES

Maturities of bonds issued by BNP Paribas SA, according to contractual maturity:

In millions of euros	Outstanding at 31/12/2018	2019	2020	2021	2022	2023	2024 to 2028	After 2028
Bond issues	2,278	327	558	378	285	177	351	202

In millions of euros	Outstanding at 31/12/2017	2018	2019	2020	2021	2022	2023 to 2027	After 2027
Bond issues	3,059	942	358	564	368	48	587	192

3.h OTHER ASSETS AND LIABILITIES

In millions of euros, at	31 December 2018	31 December 2017
Options purchased	77,561	92,139
Settlement accounts related to securities transactions	786	3,598
Deferred tax-assets	888	978
Miscellaneous assets	55,181	50,066
OTHER ASSETS	**134,416**	**146,781**
Options sold	71,928	87,761
Settlement accounts related to securities transactions	884	2,916
Liabilities related to securities transactions	136,966	114,661
Deferred tax-liabilities	103	25
Miscellaneous liabilities	42,985	41,154
OTHER LIABILITIES	**252,866**	**246,517**

Under "Miscellaneous liabilities", BNP Paribas SA's trade payables of BNP Paribas amount to EUR 97.4 million at 31 December 2018 and break down as follows, pursuant to article D441-4 of the French Commercial Code.

Invoices *received*, due and outstanding at the year-end						
	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	90 days and over	Total (1 day and more)
Total invoices concerned, including taxes *(in millions of euros)*	14.8	26.0	16.5	6.1	34.0	82.6
Percent of total purchases for the year, including taxes	0.27%	0.48%	0.31%	0.11%	0.63%	1.53%
Number of invoices concerned	2,023					5,490

Information related to invoices received and presented in the table above does not include banking and related transactions. The payment terms used are the statutory terms. Customer advances outside the scope of banking and related transations are mainly loans to BNP Paribas Group entities. For amounts due to and from customers of BNP Paribas SA for banking and related transactions which are not shown in the table above, the remaining term of the sources and uses of funds is presented in Note 6.e.

3.i ACCRUED INCOME

In millions of euros, at	31 December 2018	31 December 2017
Remeasurement of currency instruments and derivatives	53,462	49,901
Accrued income	10,539	9,927
Collection accounts	271	362
Other accrued income(1)	6,960	11,063
ACCRUED INCOME	**71,232**	**71,253**
Remeasurement of currency instruments and derivatives	46,499	42,854
Accrued expenses	12,233	14,783
Collection accounts	2,331	425
Other accrued expenses(1)	7,241	12,556
ACCRUED EXPENSES	**68,304**	**70,618**

(1) Transactions on trading securities are recognised on the settlement date, whereas they were previously recorded on the transaction date. The comparable net balances at 31 December 2017 would have been EUR 7,518 million for "other accrued income" and EUR 9,943 million for "other accrued expenses", respectively.

3.j OPERATING ASSETS

In millions of euros, at	31 December 2018			31 December 2017
	Gross value	Depreciation, amortisation and impairment	Net amount	Net amount
Software	2,717	(2,077)	640	647
Other intangible assets	2,346	(321)	2,025	1,901
INTANGIBLE ASSETS	**5,063**	**(2,398)**	**2,665**	**2,548**
Land and buildings	2,906	(1,040)	1,866	1,899
Equipment, furniture and fixtures	1,939	(1,552)	387	363
Other fixed assets	143	-	143	132
Tangible assets - Merger premium	134	(26)	108	114
TANGIBLE ASSETS	**5,122**	**(2,618)**	**2,504**	**2,508**

3.k PROVISIONS

In millions of euros, at	31 December 2017	Additions	Reversals	Other movements	31 December 2018
Provision for employee benefit obligations	**332**	**103**	**(159)**	**187**	**463**
Provisions for credit risks *(note 2.f)*	**62**	**8**	**(24)**	**(13)**	**33**
Provisions for commitments given *(note 2.f)*	**486**	**53**	**(310)**	**19**	**248**
Other provisions					
■ for banking transactions	339	189	(108)	96	516
■ for non-banking transactions	972	66	(595)	(22)	421
PROVISIONS	**2,191**	**419**	**(1,196)**	**267**	**1,681**

➤ PROVISIONS FOR RISKS ON REGULATED SAVINGS PRODUCTS

In millions of euros, at	31 December 2018	31 December 2017
Deposits collected under home savings accounts and plans	**17,937**	**17,957**
of which for home savings plans	15,834	15,800
■ *Aged more than 10 years*	*3,796*	*3,883*
■ *Aged between 4 and 10 years*	*8,406*	*6,181*
■ *Aged less than 4 years*	*3,632*	*5,736*
Outstanding loans granted under home savings accounts and plans	**51**	**74**
of which for home savings plans	9	13
Provisions for home savings accounts and plans	**135**	**156**
of which discount on home savings accounts and plans	0	1
of which provisions for home savings accounts and plans	135	155
■ *of which provisions for plans aged more than 10 years*	*75*	*88*
■ *of which provisions for plans aged between* ■ *4 and 10 years*	*37*	*24*
■ *of which provisions for plans aged less than 4 years*	*20*	*41*
■ *of which provisions for home savings accounts*	*3*	*2*

➤ CHANGE IN PROVISIONS FOR REGULATED SAVINGS PRODUCTS

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Provisions for home savings plans	Provisions for home savings accounts	Provisions for home savings plans	Provisions for home savings accounts
Provisions at start of period	153	3	171	3
Additions to provisions during the period	-	-	-	-
Provision write-backs during the period	(21)	-	(18)	-
Provisions at end of period	132	3	153	3

3.l SUBORDINATED DEBT

In millions of euros, at	31 December 2018	31 December 2017
Redeemable subordinated debt	**14,405**	**12,331**
Undated subordinated debt	**9,115**	**8,781**
Undated Super Subordinated notes	8,397	8,074
Undated Floating-Rate Subordinated notes	493	482
Undated Participating Subordinated notes	225	225
Related debt	**344**	**319**
SUBORDINATED DEBT	**23,864**	**21,431**

Redeemable subordinated debt

The redeemable subordinated debt issued by BNP Paribas SA is in the form of medium and long-term debt securities equivalent to ordinary subordinated debt; these issues are redeemable prior to the contractual maturity date in the event of liquidation of the issuer, and rank after the other creditors but before holders of participating loans and participating subordinated notes.

These debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, via a public tender or exchange offers, or (in the case of private placements) over the counter, subject to regulatory approval.

Debt issued by BNP Paribas SA via placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days and is subject to approval by the banking supervisory authorities.

In 2017, four subordinated notes were redeemed early under a call option, in accordance with the date specified in the issue notice. These transactions resulted in the reduction in outstanding redeemable subordinated debt of EUR 1,963 million. In addition, four subordinated notes were issued in 2017 totalling EUR 1,268 million.

In 2018 a subordinated note was redeemed at maturity resulting in a EUR 85 million reduction in outstanding redeemable subordinated debt. In addition, five subordinated notes were issued in 2018 totalling EUR 1,832 million.

The following table gives the maturity schedule for redeemable subordinated debt at 31 December 2018:

In millions of euros	Outstanding at 31/12/2018	2019	2020	2021	2022	2023	2024 to 2028	After 2028
Redeemable subordinated debt	14,405	-	5	-	335	-	12,154	1,911

The following table gives the maturity schedule for redeemable subordinated debt at 31 December 2017:

In millions of euros	Outstanding at 31/12/2017	2018	2019	2020	2021	2022	2023 to 2027	After 2027
Redeemable subordinated debt	12,331	85	-	5	-	339	11,227	675

Undated subordinated debt

Undated Super Subordinated notes

BNP Paribas SA has issued Undated Super Subordinated notes for a total equivalent in euro of EUR 8,397 million at 31 December 2018. The notes pay a fixed- or floating-rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap or fixed rate.

On 13 April 2017, BNP Paribas SA redeemed the April 2007 issue for a total amount of EUR 638 million at the first call date. This issue paid a fixed-rate coupon of 5.019%.

On 23 October 2017, BNP Paribas redeemed the October 2007 issue, for a total of GBP 200 million on its first call date. This issue paid a fixed-rate coupon of 7.436%.

On 15 November 2017, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 750 million. This issue pays a fixed-rate coupon of 5.125%. The notes are redeemable after five years. If the notes are note redeemed in 2022, a five years dollar swap rate coupon will be paid half-yearly.

On 2 July 2018, BNP Paribas SA redeemed the June 2008 issue for a total amount of EUR 500 million at its first call date. This issue paid a fixed-rate coupon of 7.781%.

On 16 August 2018, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 750 million. This issue pays a fixed-rate coupon of 7%. The notes are redeemable after five years. If the notes are not redeemed in 2028, a coupon indexed to the five-year dollar swap rate will be paid half-yearly.

On 18 September 2018, BNP Paribas SA redeemed the September 2008 issue for a total amount of EUR 100 million at its first call date. This issue paid a fixed-rate coupon of 7.57%.

The table below summarises the characteristics of these various issues:

Issue date	Currency	Amount in original currency *(in millions)*	Coupon frequency	Rate and term before first call date		Rate after first call date	31 Dec. 2018	31 Dec. 2017
October 2005	EUR	1,000	Yearly	4.875%	6 years	4.875%	1,000	1,000
October 2005	USD	400	Yearly	6.25%	6 years	6.250%	349	333
July 2006	EUR	150	Yearly	5.45%	20 years	3-month Euribor +1.920%	150	150
June 2007	USD	600	quarterly	6.5%	5 years	6.5%	524	500
June 2007	USD	1,100	half-yearly	7.195%	30 years	USD 3-month Libor +1.290%	960	916
June 2008	EUR	500	Yearly	7.781%	10 years	3-month Euribor +3.750%	0	500
September 2008	EUR	100	Yearly	7.57%	10 years	3-month Euribor +3.925%	0	100
December 2009	EUR	2	quarterly	3-month Euribor +3.750%	10 years	3-month Euribor +4.750%	2	2
December 2009	EUR	17	Yearly	7.028%	10 years	3-month Euribor +4.750%	17	17
December 2009	USD	70	quarterly	USD 3-month Libor +3.750%	10 years	USD 3-month Libor +4.750%	61	59
December 2009	USD	0.5	Yearly	7.384%	10 years	USD 3-month Libor +4.750%	1	1
June 2015	EUR	750	half-yearly	6,125%	7 years	EUR 5-year swap +5.230%	750	750
August 2015	USD	1,500	half-yearly	7.375%	10 years	USD 5-year swap +5.150%	1,309	1,249
March 2016	USD	1,500	half-yearly	7.625%	5 years	USD 5-year swap +6.314%	1,309	1,249
December 2016	USD	750	half-yearly	6.750%	5.25 years	USD 5-year swap +4.916%	655	624
November 2017	USD	750	half-yearly	5.125%	5 years	USD 5-year swap +2.838%	655	624
August 2018	USD	750	half-yearly	7.000%	10 years	USD 5-year swap +3.980%	655	
UNDATED SUPER SUBORDINATED NOTES							**8,397**	**8,074**

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated notes. Unpaid interest is not carried forward.

For notes issued before 2015, this non-payment is subject to the absence of any payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated note equivalents in the previous year. This interest must be paid when dividends are paid on BNP Paribas SA's ordinary shares.

The contracts relating to these Undated Super Subordinated notes include a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up, and the nominal value of the notes is restored to its original amount.

Undated Floating-Rate Subordinated notes

The Undated Floating-Rate Subordinated notes (TSDIs) and other Undated Subordinated notes issued by BNP Paribas SA are redeemable on liquidation of the Bank after repayment of all other debts but ahead of Undated Participating Subordinated notes. They confer no rights over residual assets.

Characteristics of Undated Floating-Rate Subordinated notes:

Issue date	Currency	Amount in original currency *(in millions)*	Interest rate	31 December 2018	31 December 2017
October 1985	EUR	305	TMO -0.25%	254	254
September 1986	USD	500	6-month Libor +0.075%	239	228
UNDATED FLOATING-RATE SUBORDINATED NOTES				**493**	**482**

Payment of interest is obligatory on the TSDIs issued in October 1985 (representing a nominal amount of EUR 305 million), but the Board of directors may postpone interest payments if the Ordinary Shareholders' General Meeting notes that there is no income available for distribution in the twelve months preceding the interest payment date. Interest is cumulative and becomes payable in full when the bank resumes dividend payments.

Payment of interest is obligatory on the TSDIs issued in September 1986 (representing a nominal amount of USD 500 million), but the Board of directors may postpone interest payments if the Shareholders' General Meeting approves a decision not to pay a dividend in the twelve months preceding the interest payment date. Interest is cumulative and becomes payable in full when the bank resumes dividend payments. The bank may resume the payment of past interest even if dividend payments have not resumed.

Undated Participating Subordinated notes

Undated participating subordinated notes issued by BNP Paribas SA in July 1984 in a total amount of EUR 337 million are redeemable only in the event of the liquidation of BNP Paribas SA, but may be retired on the terms specified in the French act of 3 January 1983. The number of notes outstanding was 1,434,092 at 31 December 2018.

Note 4 FINANCING AND GUARANTEE AND SECURITIES COMMITMENTS

4.a FINANCING COMMITMENTS

In millions of euros, at	31 December 2018	31 December 2017
Credit institutions	**80,610**	**51,607**
Customers	**225,125**	**205,793**
Confirmed letters of credit	102,446	96,027
Other commitments given to customers	122,679	109,766
FINANCING COMMITMENTS GIVEN	**305,735**	**257,400**
Credit institutions	**98,537**	**73,172**
Customers	**47,615**	**42,511**
FINANCING COMMITMENTS RECEIVED	**146,152**	**115,683**

4.b GUARANTEE AND SECURITIES COMMITMENTS

In millions of euros, at	31 December 2018	31 December 2017
Credit institutions	20,155	20,382
Customers	96,343	104,752
GUARANTEE COMMITMENTS GIVEN	**116,498**	**125,134**
Credit institutions	81,810	84,349
Customers	130,766	123,067
GUARANTEE COMMITMENTS RECEIVED	**212,576**	**207,416**

In millions of euros, at	31 December 2018	31 December 2017
COMMITMENTS GIVEN ON SECURITIES(1)	**15,774**	**14,666**
COMMITMENTS RECEIVED ON SECURITIES(1)	**27,677**	**19,366**

(1) Transactions on trading securities are now recognised between the trading date and the settlement date under securities commitments. The comparable net balances at 31 December 2017 would have been, respectively, EUR 15,840 million for commitments given on securities and EUR 21,472 million for commitments received on securities.

4.c FINANCIAL INSTRUMENTS GIVEN OR RECEIVED AS COLLATERAL

➤ FINANCIAL INSTRUMENTS GIVEN AS COLLATERAL

In millions of euros, at	31 December 2018	31 December 2017
Financial instruments (negotiable securities and private receivables) deposited with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	50,821	48,278
■ Used as collateral with central banks	19,000	19,000
■ Available for refinancing transactions	31,821	29,278
Financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group	58,950	60,206

At 31 December 2018, the Bank had EUR 50,821 million of financial instruments (negotiable securities and private receivables) deposited or pledged with central banks for use at any time as collateral for refinancing transactions (vs. EUR 48,278 million at 31 December 2017). This amount includes EUR 36,994 million deposited with the Banque de France (vs. EUR 37,923 million at 31 December 2017) under the Banque de France's comprehensive collateral management system to cover Eurosystem monetary policy transactions and intraday loans. At 31 December 2018 the Bank had EUR 19,000 million of collateral deposited with central banks (unchanged from 31 December 2017).

The other assets that the Bank has pledged as collateral with credit institutions and financial customers totalled EUR 33,751 million at 31 December 2018 (vs. EUR 34,897 million at 31 December 2017), included in particular financing for BNP Paribas Home Loan SFH.

➤ FINANCIAL INSTRUMENTS RECEIVED AS COLLATERAL

In millions of euros, at	31 December 2018	31 December 2017
Financial instruments received as collateral (excluding repurchase agreements)	34,354	28,810

Notes 5 SALARIES AND EMPLOYEE BENEFITS

5.a SALARIES AND EMPLOYEE BENEFIT EXPENSES

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Salaries	(4,012)	(4,343)
Tax and social security charges(1)	(1,876)	(1,760)
Employee profit-sharing and incentive plans	(228)	(238)
TOTAL SALARIES AND EMPLOYEE BENEFIT EXPENSES	**(6,116)**	**(6,341)**

(1) *Including adjustments for actuarial gains and losses on post-employment benefits.*

Income stemming from the French Competitiveness and Employment Tax Credit (CICE) is deducted from salaries and employee benefit expenses. It amounted to EUR 35 million in 2018 compared to EUR 43 million in 2017.

The use of the CICE is shown in chapter 7 *A responsible bank: information on the economic, social, civic and environmental responsibility of BNP Paribas* in the Registration document.

The following table gives the breakdown of BNP Paribas SA's headcount:

Headcount at	31 December 2018	31 December 2017
Employees in Metropolitan France	36,720	37,265
of which managers	*25,059*	*24,703*
Employees outside Metropolitan France	17,579	15,813
TOTAL BNP PARIBAS SA	**54,299**	**53,078**

5.b EMPLOYEE BENEFIT OBLIGATIONS

Post-employment benefits under defined-contribution plans

In France, BNP Paribas SA pays contributions to various nationwide basic and top-up pension plans. BNP Paribas SA has set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by national schemes.

Furthermore, since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of joining defined-contribution pension plans. Under these plans, the Group's obligation is essentially limited to paying a percentage of the employee's annual salary into the plan.

The amount paid into defined-contribution post-employment plans in France and other countries for the year 2018 was EUR 294 million, compared with EUR 282 million for the year 2017.

Post-employment benefits under defined-benefit plans

Existing legacy defined-benefit plans within BNP Paribas SA are valued independently using actuarial techniques by applying the projected unit cost method in order to determine the expense arising from rights vested in employees and benefits payable to retired employees. The demographic and financial assumptions used to estimate the present value of these obligations and of plan assets take into account economic conditions specific to each country.

Provisions set up to cover obligations under defined- benefit post-employment plans totalled EUR 171 million at 31 December 2018 (against EUR 189 million at 31 December 2017), comprised of EUR 106 million for French plans and EUR 65 million for other plans.

BNP Paribas recognised EUR 264 million of retirement plan assets (recognised surplus and reimbursement rights) at 31 December 2018 as compared to EUR 155 million at 31 December 2017.

Pension plans and other post-employment benefits

Pension plans

In France, BNP Paribas SA pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees at that date and active employees in service at that date. These residual pension obligations are covered by a provision in BNP Paribas SA's financial statements or transferred to an insurance company.

The defined-benefit plans previously granted to Group executives have all been closed and converted into top-up type schemes. The amounts allocated to the beneficiaries, subject to their presence within the Group at retirement, were fixed when the previous schemes were closed. These pension plans have been outsourced to insurance companies. The market value of the related plan assets in these companies' balance sheets breaks down as 85% bonds, 7% equities and 8% property assets.

In BNP Paribas SA's foreign branches, pension plans are based either on pensions linked to the employee's final salary and length of service (United Kingdom), or on annual vesting of rights to a capital sum expressed as a percentage of annual salary and remunerated at a predefined rate (United States). In Hong Kong, a fixed number of employees are covered by a defined-contribution pension plan with a guaranteed minimum return paid by the employer until 1 December 2018. The return is set at 0% after this date. This plan is closed to new entrants. As a result of this guaranteed return, this plan is classified as a defined-benefit plan.

Some plans are managed by independent fund managers (United Kingdom). As of 31 December 2018, 89% of the gross obligations under these plans related to plans in the United Kingdom, United States and Hong Kong. The market value of the related plan assets was split as follows: 14% equities, 72% bonds, and 14% other financial instruments.

Other post-employment benefits

BNP Paribas SA employees also receive various other contractual postemployment benefits, such as indemnities payable on retirement. BNP Paribas' obligations for these benefits in France are funded through a contract held with an insurer that is independent from BNP Paribas SA.

Post-employment healthcare benefits

In France, BNP Paribas SA no longer has any obligation in relation to healthcare benefits for its retired employees.

Among BNP Paribas SA's foreign branches, there are several healthcare benefit plans for retired employees, mainly in the United States. Provisions for obligations under these plans amounted to EUR 15 million at 31 December 2018, compared to EUR 15 million at 31 December 2017.

Obligations under post-employment healthcare benefit plans are measured using the mortality tables applicable in each country and assumptions about trends in healthcare costs. They also build in assumptions about healthcare benefit costs, including forecast trends in the cost of healthcare services and in inflation, which are derived from historical data.

Termination benefits

The Bank has implemented a number of voluntary redundancy plans and a headcount adaptation plan for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for when the plan is the subject of an agreement or a bilateral draft agreement.

In 2016, a three-year voluntary redundancy plan (September 2016 to September 2018) was implemented for CIB activities in France.

Provisions for these plans totalled EUR 53 million at 31 December 2018 (EUR 82 million at 31 December 2017).

In millions of euros, at	31 December 2018	31 December 2017
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	53	82

Notes 6 ADDITIONAL INFORMATION

6.a SHARE CAPITAL TRANSACTIONS

Resolutions of Shareholders' General Meetings that can be used during the financial year are presented in chapter 2 *Corporate governance report* of the Registration document.

Operations affecting share capital	Number of Shares	Par value *(in euros)*	In euros	Date of authorisation by Shareholder's Meeting	Date of decision by Board of directors	Date from which shares carry dividend rights
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2016	**1,247,002,653**	**2**	**2,494,005,306**			
Increase in share capital by exercise of stock subscription options	1,404,830	2	2,809,660	(1)	(1)	1 Jan. 2016
Increase in share capital by exercise of stock subscription options	451,903	2	903,806	(1)	(1)	1 Jan. 2017
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2017	**1,248,859,386**	**2**	**2,497,718,772**			
Increase in share capital by exercise of stock subscription options	939,175	2	1,878,350	(1)	(1)	1 Jan. 2017
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2018	**1,249,798,561**	**2**	**2,499,597,122**			

(1) Various resolutions voted in the Shareholders' General Meeting and decisions of the Board of directors authorising the granting of stock subscription options that were exercised during the period.

6.b STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY BETWEEN 31 DECEMBER 2016 AND 31 DECEMBER 2018

In millions of euros	Share capital	Additional paid-in capital	Retained earnings and net income for the period	Total shareholders' equity
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2016	**2,494**	**23,090**	**42,350**	**67,934**
Dividend payout for 2016			(3,369)	(3,369)
Capital increases	4	85		89
Accelerated depreciation and amortisation - Additions			4	4
Net income for 2017			3,157	3,157
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2017	**2,498**	**23,175**	**42,142**	**67,815**
Dividend payout for 2017			(3,772)	(3,772)
Capital increases	2	47		49
Accelerated depreciation and amortisation - Additions			4	4
Net income for 2018			5,027	5,027
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2018	**2,500**	**23,222**	**43,401**	**69,123**

6.c NOTIONAL AMOUNTS OF FORWARD FINANCIAL INSTRUMENTS

The notional amounts of derivative instruments are merely an indication of the volume of BNP Paribas SA's activities in financial instrument markets, and do not reflect the market risks associated with such instruments.

Trading portfolio

In millions of euros, at	31 December 2018	31 December 2017
Currency derivatives	5,020,965	4,905,163
Interest rate derivatives	17,235,390	16,612,410
Equity Derivatives	1,290,807	1,203,087
Credit Derivatives	879,064	853,283
Other derivatives	225,733	177,276
FORWARD FINANCIAL INSTRUMENTS IN THE TRADING PORTFOLIO	**24,651,959**	**23,751,221**

Financial instruments traded on organised markets or admitted to clearing houses accounted for 44% of the Bank's derivatives transactions at 31 December 2018 (vs. 45% at 31 December 2017).

Hedging strategy:

The total notional amount of derivative financial instruments used for hedging purposes stood at EUR 686,468 million at 31 December 2018, compared with EUR 720,597 million at 31 December 2017. Derivatives used for hedging purposes are primarily contracted on over-the-counter markets.

Market value

The market value of the Bank's positive net position on outright transactions was EUR 9,749 million at 31 December 2018, compared with a positive net position of EUR 13,766 million at 31 December 2017. The market value of the Bank's net long position on conditional transactions was valued at EUR 3,467 million at 31 December 2018, compared with a net short position of EUR 4,903 million at 31 December 2017.

6.d SEGMENT INFORMATION

The following table gives a regional breakdown of BNP Paribas SA's interbank transactions and customer items recognised on the balance sheet:

	Interbank transactions		Customer and leasing transactions		Total by region	
In millions of euros, at	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
France	394,245	356,574	236,620	220,662	630,865	577,236
Other countries in the European Economic Area	69,580	59,899	80,855	71,435	150,435	131,334
Americas and Asia	81,392	82,823	128,408	138,415	209,800	221,238
Other countries	1,439	1,614	4,279	3,502	5,718	5,116
TOTAL USES OF FUNDS	**546,656**	**500,910**	**450,162**	**434,014**	**996,818**	**934,924**
France	195,131	187,727	263,619	242,984	458,750	430,711
Other countries in the European Economic Area	25,136	16,732	123,378	115,773	148,514	132,505
Americas and Asia	28,907	26,488	173,658	184,333	202,565	210,821
Other countries	1,180	826	6,572	4,007	7,752	4,833
TOTAL SOURCES OF FUNDS	**250,354**	**231,773**	**567,227**	**547,097**	**817,581**	**778,870**

84% of BNP Paribas SA's revenues in 2018 came from counterparties in the European Economic Area (81% in 2017).

6.e SCHEDULE OF USES AND SOURCES OF FUNDS

In millions of euros	Demand and overnight transactions	Term remaining					
		Up to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Of which provisions	Total
Uses of funds							
Cash and amounts due from central banks and CCP	164,892	729					**165,621**
Treasury bills and money-market instruments	190	62,092	15,896	31,983	42,360	(30)	**152,521**
Due from credit institutions	5,648	100,651	38,868	49,088	34,259	(157)	**228,514**
Customer and leasing transactions	32,518	179,560	46,405	111,001	80,678	(5,644)	**450,162**
Bonds and other fixed-income securities	1,121	14,100	22,794	19,206	34,085	(207)	**91,306**
Sources of funds							
Amounts due to credit institutions and central banks and CCP	40,689	110,766	20,484	66,050	12,365		**250,354**
Customer items	312,247	205,459	28,863	11,772	8,886		**567,227**
DEBT SECURITIES	624	32,224	31,379	39,528	30,204		**133,959**

6.f NON-COOPERATIVE STATES AND TERRITORIES

Authorisation from the Group's Compliance Department must be obtained through a special procedure before BNP Paribas SA or Group subsidiaries that report to BNP Paribas SA can open a location in a state considered "uncooperative" as defined by article 238-0 A of the French General Tax Code and the Order issued on 8 April 2016 amending the list of uncooperative states. In accordance with BNP Paribas' "best interests" principle, and to ensure that the Group's internal control mechanisms are applied consistently, these locations are subject to the Group's regulations on risk management, anti-money laundering, corruption, financial embargoes, and terrorism financing.

Company name	Ownership interest (%)	Legal form	Type of license	Business activity
Panama				
BNPP SA (Panama branch) - in liquidation(1)	100	Branch	Banking licence	In liquidation
Brunei				
BNP Paribas Asset Management (B) SDN BHD	98.29	SDN BHD (Private Limited Company)	Investment Advisor License	Asset Management
Botswana				
RCS Botswana Proprietary Limited	100	Proprietary Limited		Ancillary financial services

(1) The liquidation process of the entity located in Panama, initiated in July 2010, is pending approval from the local regulator.

6.2 Appropriation of income for the year ended 31 December 2018 and dividend distribution

At the Annual General Meeting of 23 May 2019, the Board of directors will propose an appropriation of income for the year ended 31 December 2018 and dividend distribution under the following terms:

In millions of euros	
Net income	5,027
Unappropriated retained earnings	29,262
TOTAL INCOME TO BE APPROPRIATED	**34,289**
Dividend	3,774
Retained earnings	30,515
TOTAL APPROPRIATED INCOME	**34,289**

The total proposed dividend to be paid to BNP Paribas SA shareholders is EUR 3,774 million, which corresponds to EUR 3.02 per share (with a par value of EUR 2.00) based on the number of existing shares at 31 December 2018.

6.3 BNP Paribas SA five-year financial summary

	2014	2015	2016	2017	2018
Share capital at year-end					
a) Share capital *(in euros)*	2,491,915,350	2,492,770,306	2,494,005,306	2,497,718,772	2,499,597,122
b) Number of shares in issue	1,245,957,675	1,246,385,153	1,247,002,653	1,248,859,386	1,249,798,561
c) Number of convertible bonds in issue	None	None	None	None	None
Results of operations for the year *(in millions of euros)*					
a) Total revenues, excluding VAT	24,598	28,160	32,458	27,707	33,333
b) Earnings before tax, depreciation, amortisation and impairment	1,766	7,323	10,153	3,003	4,631
c) Income tax expense	(218)	(74)	(278)	345	557
d) Earnings after tax, depreciation, amortisation and impairment	(3,089)	6,232	9,266	3,157	5,027
e) Total dividend payout(1)	1,869	2,879	3,367	3,772	3,774
Earnings per share in euros					
a) Earnings after tax, and before depreciation, amortisation and impairment	1.24	5.82	7.92	2.68	4.15
b) Earnings after tax, depreciation, amortisation and impairment	(2.48)	5.00	7.43	2.53	4.02
c) Dividend per share(1)	1.50	2.31	2.70	3.02	3.02
Employee data					
a) Number of employees at year-end	49,132	49,751	51,498	53,078	54,299
b) Total payroll expense (*in millions of euros*)	3,713	4,288	4,263	4,441	4,208
c) Total social security and employee benefit charges paid (*in millions of euros*)	1,328	1,404	1,599	1,577	1,604

(1) For 2018, subject to approval at the Annual General Meeting of 23 May 2019.

6.4 Subsidiaries and associated companies of BNP Paribas SA

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
BNP Paribas SA (siren 662042449) is the parent company of all subsidiaries and associated companies												
I - Detailed information about subsidiaries and associated companies whose book value exceeds 1% of BNP Paribas SA's share capital												
1. Subsidiaries (more than 50%-owned)												
Antin Participation 5 1 Boulevard Haussmann 75009 Paris France	433,891,678	EUR	184	(4)	10	9	184	(4)	10	9	100%	(1)
Austin Finance 3 rue d'Antin 75002 PARIS, France	485,260,640	EUR	799	139	0	0	799	139	0	0	92%	(1)
B*Capital 1 Boulevard Haussmann 75009 Paris France	399,223,437	EUR	4	10	3	40	4	10	3	40	100%	(1)
Banca Nazionale Del Lavoro SPA 119 Via Vittorio Veneto 00187 Rome Italy		EUR	2,077	2,809	269	2,463	2,077	2,809	269	2,463	100%	(1)
Banco BNPP Brasil SA 510 Av. Presidente Juscelino Kubitschek, 10° a 13° Andares, Itaim Bibi 04543-906 Sao Paulo Brazil		BRL	1,238	933	347	981	279	210	78	221	100%	(2)
Bank BGZ BNPP SA 10/16 ul. Kasprzaka 01-211 Warsaw Poland		PLN	147	10,063	19	2,986	34	2,338	4	694	65%	(2)
Bank BNPP Indonesia PT 35th Floor Menara BCA Grand Indonesia Jl M H Thamrin no.1 10310 Jakarta Indonesia		IDR	3,852,573	1,558,364	250,098	583,443	232	94	15	35	99%	(2)
BNP PUK Holding Ltd 10 Harewood Avenue London NW1 6AA United Kingdom		GBP	40	3	0	0	45	3	0	0	100%	(2)
BNPP Asset Management Holding 1 Boulevard Haussmann 75009 Paris France	682,001,904	EUR	23	2,017	97	189	23	2,017	97	189	67%	(1)
BNPP Bank JSC 5 Lesnaya Street, Bld. B Business Center White Square Russian Federation 125047 Moscow Russian Federation		RUB	5,798	2,534	82	1,354	73	32	1	17	100%	(2)

(*) Converted at the rate of 31/12/2018.
(1) Non-audited social contributions data as at 31/12/2018.
(2) Data used in Group consolidated financial statements at 31/12/2018
(3) Social contributions data at 31/12/2017

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
BNPP Canada Corp. 1981 Mc Gill College Avenue H3A 2W8 Montreal Canada		CAD	159	430	5	10	102	275	3	6	100%	(2)
BNPP Cardif 1 Boulevard Haussmann 75009 Paris France	382,983,922	EUR	150	2,808	319	630	150	2,808	319	630	100%	(1)
BNPP China Ltd 25/F Shanghai World Financial Center 100 Century Avenue Shanghai 200120 PRC 200120 Shanghai China		USD	653	605	77	190	570	528	67	165	100%	(2)
BNPP Colombia Corporacion Financiera SA Carrera 8A no.99-51 Edificio World Trade Center, Torre A, Piso 9 Bogota DC Colombia		COP	133,721	9,098	13,171	44,531	36	2	4	12	94%	(2)
BNPP Commodity Futures Ltd 10 Harewood Avenue London NW1 6AA United Kingdom		USD	75	277	36	84	65	242	31	73	100%	(2)
BNPP Développement 20 Rue Chauchat 75009 Paris France	348,540,592	EUR	119	628	105	142	119	628	105	142	100%	(1)
BNPP El Djazair 8 Rue de Cirta Hydra 16035 Algiers Algeria		DZD	10,000	16,081	5,862	17,008	74	119	43	126	84%	(2)
BNPP Espana SA 4 Calle Emilio Vargas 28043 Madrid Spain		EUR	52	25	(5)	30	52	25	(5)	30	100%	(2)
BNPP Factor Immeuble Seine Way 12-14 rue Louis Blériot 92500 Rueil Malmaison France	775,675,069	EUR	6	33	32	116	6	33	32	116	100%	(2)
BNPP Factor Sociedade Financeira de Credito SA 3525 Avenida de Boavista Edificio Aviz 6ø 4100 Porto Portugal		EUR	13	66	5	11	13	66	5	11	64%	(2)
BNPP Fortis 3 Montagne du Parc/ Warandeberg 3 1000 Brussels Belgium		EUR	10,965	6,008	1,912	4,818	10,965	6,008	1,912	4,818	100%	(1)
BNPP Home Loan SFH 1 Boulevard Haussmann 75009 Paris France	454,084,211	EUR	285	1	1	3	285	1	1	3	100%	(1)
BNPP India Holding Private Ltd 1 North Avenue - BNP Paribas House Maker Maxity, Bandra - Kurla Complex Bandra (East) 400,051 Mumbai India		INR	2,608	160	(52)	(30)	33	2	(1)	0	100%	(2)

(*) Converted at the rate of 31/12/2018.
(1) Non-audited social contributions data as at 31/12/2018.
(2) Data used in Group consolidated financial statements at 31/12/2018
(3) Social contributions data at 31/12/2017

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
BNPP IRB Participations 1 Boulevard Haussmann 75009 Paris France	433,891,983	EUR	46	58	82	84	46	58	82	84	100%	(1)
BNPP Ireland Unlimited Co 5 George's Dock IFSC Dublin 1 Ireland		EUR	902	772	78	80	902	772	78	80	100%	(2)
BNPP Lease Group Leasing Solutions SPA 3 Piazza Lina Bo Bardi 20124 Milan Italy		EUR	204	(39)	(27)	38	204	(39)	(27)	38	74%	(2)
BNPP Malaysia Berhad Level 48, Vista Tower The Intermark 182 Jalan Tun Razak 50400 Kuala Lumpur Malaysia		MYR	650	74	68	143	137	16	14	30	100%	(2)
BNPP Personal Finance 1 Boulevard Haussmann 75009 Paris France	542,097,902	EUR	530	5,827	60	1,574	530	5,827	60	1,574	100%	(1)
BNPP Prime Brokerage International Ltd c/o Marsh Management Services (Dublin) Limited 25/28 Adelaide Road Dublin 2 Ireland		USD	0	644	54	196	0	562	47	171	100%	(2)
BNPP Public Sector SCF 1 Boulevard Haussmann 75009 Paris France	433,932,811	EUR	24	2	1	6	24	2	1	6	100%	(1)
BNPP Real Estate 167 Quai de la Bataille de Stalingrad 92867 Issy Les Moulineaux France	692,012,180	EUR	383	343	113	885	383	343	113	885	100%	(2)
BNPP Réunion 1 Boulevard Haussmann 75009 Paris France	428,633,408	EUR	25	9	4	48	25	9	4	48	100%	(2)
BNPP SB Re 16 Rue Edward Steichen L -2540 Luxembourg Luxembourg		EUR	250	109	8	12	250	109	8	12	100%	(2)
BNPP Securities Asia Ltd 59-63/F II International Finance Centre 8 Finance Street Central Hong Kong Hong Kong		HKD	2,429	(1,472)	(123)	367	271	(164)	(14)	41	100%	(2)
BNPP Securities Japan Ltd GranTokyo North Tower 1-9-1 Marunouchi, Chiyoda-ku 100-6740 Tokyo Japan		JPY	201,050	19,514	14,016	32,296	1,601	155	112	257	100%	(2)
BNPP Securities Korea Co Ltd 24, 25Fl, State Tower Namsan, 100, Toegye-ro, Jung-gu Seoul 100-052 Republic of Korea		KRW	250,000	(3,646)	9,864	27,082	196	(3)	8	21	100%	(2)

(*) Converted at the rate of 31/12/2018.
(1) Non-audited social contributions data as at 31/12/2018.
(2) Data used in Group consolidated financial statements at 31/12/2018
(3) Social contributions data at 31/12/2017

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
BNPP Securities Services 3 Rue d'Antin 75002 PARIS, France	552,108,011	EUR	183	666	128	1,786	183	666	128	1,786	95%	(1)
BNPP Suisse SA 2 Place de Hollande 1211 Geneva 11 Switzerland		CHF	320	1,647	35	455	284	1,463	31	404	100%	(2)
BNPP UK Holdings Ltd 10 Harewood Avenue London NW1 6AA United Kingdom		GBP	1,227	200	13	16	1,366	222	15	18	100%	(2)
BNPP USA Inc. 787 Seventh Avenue NY 10019 New York United States of America		USD	15,060	2,337	67	262	13,146	2,040	59	229	100%	(2)
BNPP VPG Master LLC 787 Seventh Avenue NY 10019 New York United States of America		USD	29	20	1	1	26	17	1	1	100%	(2)
BNPP Yatirimlar Holding AS Ankara caddesi, Büyük Kelkit Han n° 243, Kat 5 Sirkeci, Eminönü/Fatih Istanbul Turkey		TRY	1,032	(10)	21	22	170	(2)	4	4	100%	(2)
Compagnie Financière Ottomane SA 44 Avenue JF Kennedy L -1855 Luxembourg Luxembourg		EUR	9	467	2	3	9	467	2	3	97%	(2)
Financière des Italiens 41 Avenue de l'Opéra 75002 PARIS, France	422,994,954	EUR	412	-192	1	(2)	412	-192	1	(2)	100%	(1)
Financière des Paiements Électroniques 18 avenue Winston Churchill 94220 Charenton le pont France	753,886,092	EUR	1	69	(3)	36	1	69	(3)	36	95%	(2)
Financière du Marché Saint Honoré 37 Place du Marché Saint-Honoré 75001 Paris France	662,047,513	EUR	107	(2)	(4)	0	107	(2)	(4)	0	100%	(1)
Harewood Helena 1 Ltd 10 Harewood Avenue London NW1 6AA United Kingdom		USD	69	26	2	4	60	23	2	4	100%	(3)
Human Value Developers Private Ltd Lodha iThink Techno Campus, 10th Flr, Beta Bldg Off. JVLR, Opp. Kanjurmarg Rly Stn, Kanjurmarg (E), Mumbai – 400,042, Maharashtra		INR	2,346	(19)	0	0	29	0	0	0	100%	(2)
International Factors Italia SPA 15 Via Vittor Pisani 20124 Milan Italy		EUR	56	627	30	105	56	627	30	105	100%	(2)
Lion International Investments SA 30 Viale Altiero Spinelli 00157 Rome Italy		EUR	110	312	1	2	110	312	1	2	100%	(2)

(*) Converted at the rate of 31/12/2018.
(1) Non-audited social contributions data as at 31/12/2018.
(2) Data used in Group consolidated financial statements at 31/12/2018
(3) Social contributions data at 31/12/2017

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
Natiocredibail 12 rue du Port 92000 Nanterre France	998,630,206	EUR	32	59	15	30	32	59	15	30	100%	(2)
Opéra Trading Capital 1 Boulevard Haussmann 75009 Paris France	433,998,085	EUR	600	3	(26)	3	600	3	(26)	3	100%	(1)
Optichamps 41 Avenue de l'Opéra 75002 PARIS, France	428,634,695	EUR	411	(169)	1	(2)	411	(169)	1	(2)	100%	(1)
Parilease 41 Avenue de l'Opéra 75002 Paris France	339,320,392	EUR	129	268	(14)	1	129	268	(14)	1	100%	(2)
Participations Opéra 1 Boulevard Haussmann 75009 Paris France	451,489,785	EUR	410	(183)	0	(2)	410	(183)	0	(2)	100%	(1)
Sagip 3 Montagne du Parc 1000 Brussels Belgium		EUR	657	3,296	22	33	657	3,296	22	33	100%	(2)
Sharekhan Ltd Lodha iThink Techno Campus, 10th Flr, Beta Bldg Off. JVLR, Opp. Kanjurmarg Ralway Station, Kanjurmarg (E) Mumbai - 400042 India		INR	4,711	11,425	(584)	4,305	59	143	(7)	54	73%	(2)
SNC Taitbout Participation 3 1 Boulevard Haussmann 75009 Paris France	433,912,250	EUR	792	(314)	(174)	(1)	792	(314)	(174)	(1)	100%	(1)
Société Orbaisienne de Participations 1 Boulevard Haussmann 75009 Paris France	428,753,479	EUR	311	(105)	1	19	311	(105)	1	19	100%	(1)
UCB Bail 2 12 rue du Port 92000 Nanterre France	329,654,784	EUR	105	9	0	0	105	9	0	0	100%	(2)
UkrSibbank Public JSC 7 Andreevskaya Street 04070 Kiev Ukraine		UAH	5,069	(1,110)	2,629	5,883	160	(35)	83	185	60%	(2)

(*) Converted at the rate of 31/12/2018.
(1) Non-audited social contributions data as at 31/12/2018.
(2) Data used in Group consolidated financial statements at 31/12/2018
(3) Social contributions data at 31/12/2017

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	Revenues or Turnover excl VAT(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
2. Associated companies (10% to 50%-owned)												
Bank of Nanjing 50 Huaihai Road 210005 Nanjing China		CNY	8,482	51,307	9,761	24,938	1,077	6,516	1,240	3,167	15%	(3)
BGL BNPP 50 Avenue J.F. Kennedy 2951 Luxembourg Luxembourg		EUR	713	6,271	339	826	713	6,271	339	826	16%	(2)
Credit Logement 50 Boulevard de Sébastopol 75003 Paris France	302,493,275	EUR	1,260	491	121	239	1,260	491	121	239	17%	(3)
Geojit BNP Paribas Financial Services Ltd (Group) 34/659-P Civil Line Road Padivattom Kochi 682024 Kerala India		INR	238	5,336	776	3,680	3	67	10	46	33%	(3)
Verner Investissements 95 Rue de la Boétie 75008 Paris France	388,271,298	EUR	15	323	32	0	15	323	32	0	50%	(2)
BNPP Leasing Solutions 16 rue Edward Steichen 2540 Luxembourg Luxembourg		EUR	1,815	315	234	213	1,815	315	234	213	50%	(2)

(*) Converted at the rate of 31/12/2018.
(1) Non-audited social contributions data at 31/12/2018.
(2) Data used in Group consolidated financial statements at 31/12/2018.
(3) Social contributions data at 31/12/2017.

In millions of euros	Subsidiaries		Associated companies	
	French	Foreign	French	Foreign
II - General information about all subsidiaries and associated companies				
Book value of shares				
Gross value	18,509	52,638	621	2,520
Carrying Amount	17,583	45,701	611	2,367
Loans and advances given by BNP Paribas SA	36,471	17,051	118	798
Guarantees and endorsements given by BNP Paribas SA	35,466	5,552	0	18
Dividends received	1,778	2,316	61	278

6.5 Disclosures of investments of BNP Paribas SA in 2018 affecting at least 5% of share capital of French companies

Crossing threshold of more than 5% of the capital		
Unlisted	CLARISSE	SA
Unlisted	METRON SAS	SAS
Crossing threshold of more than 10% of the capital		
None		
Crossing threshold of more than 20% of the capital		
None		
Crossing threshold of more than 33.33% of the capital		
Unlisted	L2M COINVEST	SAS
Crossing threshold of more than 50% of the capital		
None		
Crossing threshold of more than 66.66% of the capital		
Unlisted	BNP PARIBAS AGILITY CAPITAL	SASU
Unlisted	LA SCALA BAIL SAS	SAS

6.6 Statutory Auditors' report on the financial statements

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide 92908 Paris La Défense Cedex	63, rue de Villiers 92208 Neuilly-sur-Seine Cedex	61, rue Henri Regnault 92400 Courbevoie

For the year ended 31 December 2018

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,
BNP Paribas SA
16 boulevard des Italiens
75009 PARIS

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of BNP Paribas SA for the year ended 31 December 2018.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at 31 December 2018 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us for the period from 1 January 2018 to the date of our report and, in particular, we did not provide any non audit services prohibited by article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the financial statements.

Identification and assessment of credit risk

(See Notes 1, 2 .f, 3.b and 3.k to the financial statements)

Description of risk	How our audit addressed this risk
As part of its banking intermediation activities, BNP Paribas is exposed to credit risk. It recognises impairment losses to cover known credit risks which are inherent to its operations. Impairment losses either take the form of individual impairment losses recognised against the related on- and offbalance sheet commitments or of collective impairment losses recognised against loan portfolios presenting similar risks which are not individually impaired. Collective provisions are determined using statistical models which require judgement at each stage of the calculation, particularly with respect to building similar portfolios and determining the inputs for the applicable risks and the obligating event of the provisions. Under certain circumstances, additional collective sectoral or geographic provisions are recognised in order to take into account any risks identified by BNP Paribas which are not covered by the above-mentioned individual or collective provisions. At 31 December 2018, total balance sheet outstandings due from customers exposed to credit risk amounted to EUR 456 billion while total impairment losses stood at EUR 5,644 million. We deemed the identification and assessment of credit risk to be a key audit matter because management is required to exercise judgement and make estimates to assess credit risk, in particular as regards credit granted to companies given the potentially material amounts of the outstandings of loans to corporate counterparties.	We assessed the relevance of BNP Paribas' control system and tested the manual and computerised controls for identifying and measuring impairment. We also examined the most significant outstandings and/or portfolios at the reporting date as well as on the credit granted to companies operating in more sensitive economic sectors or geographic regions. During our work, we focused on : ■ the rating of corporate counterparties: we examined the risk presented by the significant counterparties for which a periodic review had not been carried out by BNP Paribas at 31 December 2018; we also examined the risk level of a sample of outstandings deemed to be performing by management; ■ measuring provisions recorded individually: we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and based on a sample, assessed the assumptions and data used by management to estimate impairment; ■ measuring collective provisions: assisted by our credit risk experts, we assessed the methods used by BNP Paribas across the various scopes and the effectiveness of the data quality controls. In addition, we examined the disclosures in the notes to the financial statements with respect to credit risk.

Valuation of financial instruments
(See Notes 1, 3.c, 3.h, 3.i and 6.c to the financial statements)

Description of risk	How our audit addressed this risk
As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value. Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices; (ii) using valuation models whose main inputs are observable; and (iii) using valuation models whose main inputs are unobservable. The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks. The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used. At 31 December 2018, the market value of trading securities represented EUR 148,482 million, the bank's positive net position on firm transactions was valued at EUR 9,749 million and the market value of the bank's net long position on conditional transactions was valued at EUR 3,467 million. In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of instruments requiring the use of unobservable inputs.	Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to: ■ the approval and regular review by management of the risks of the valuation models; ■ the independent verification of the valuation inputs; ■ the determination of value adjustments Based on a sample, our valuation experts: ■ analysed the relevance of the assumptions and inputs used; ■ analysed the results of the independent review of the inputs by BNP Paribas; ■ performed independent counter valuations using our own models. We also analysed on a sample basis any differences between the valuations obtained and collateral calls with counterparties. In addition, we examined the disclosures in the notes to the financial statements with respect to the valuation of financial instruments.

Measurement of equity securities held for long-term investment and investments in subsidiaries and affiliates
(See Notes 1, 3.c and 3.e to the financial statements)

Description of risk	How our audit addressed this risk
Equity securities held for long-term investment and investments in subsidiaries and affiliates are recognised on the balance sheet at a carrying amount of EUR 66.8 billion. They are measured individually at the lower of cost or value in use. Value in use is determined on the basis of available information using a multi-criteria valuation approach, including discounted future cash flows, sum-of-the-digits and net asset value methods as well as an analysis of ratios commonly used to assess future yields and exit opportunities for each line of securities. When their carrying amount exceeds value in use, an impairment loss is recognised for the difference. Given the materiality of investments in the balance sheet and the sensitivity of the models used to changes in the data and assumptions underlying the estimated values, we deemed the measurement of these investments to be a key audit matter.	Our audit work consisted in: ■ assessing, using sampling techniques, the justification for the valuation methods and data used by management to estimate values in use; ■ testing, using sampling techniques, the accuracy of the calculation of values in use used by the company. Lastly, we reviewed the disclosures on equity securities held for long-term investment and investments in subsidiaries and affiliates in the notes to the financial statements.

Analysis of legal risk with respect to regulatory and administrative investigations and to class actions
(See Notes 2.f and 3.k to the financial statements)

Description of risk	How our audit addressed this risk
In each of the countries where it is present, BNP Paribas is subject to the regulations applicable to the sectors in which it operates. If the Company does not comply with the applicable laws and regulations, it may be exposed to significant fines and other administrative and criminal penalties. It may also incur losses as a result of private legal disputes in connection with or unrelated to these penalties. Any provision recognised to cover the consequences of investigations into non compliance with certain regulations requires judgement due to the difficulty in estimating the outcome of regulatory procedures. Any provisions with respect to class actions or other private legal disputes also requires management to exercise judgement. In light of the increase in regulatory and administrative investigations and class actions brought against financial establishments in recent years and of the significant judgement exercised by management to determine the amount of provisions recognised, we deemed this risk to be a key audit matter.	We familiarised ourselves with the procedure for identifying and assessing legal risk with respect to regulatory and administrative investigations and to class actions, in particular through quarterly interviews with BNP Paribas SA's legal functions. Our work consisted primarily in: ■ obtaining an understanding of the analyses prepared by the financial and legal departments at the end of each quarterly accounting period; ■ obtaining confirmations from the specialised law firms with which BNP Paribas works when subject to legal disputes.

General IT controls

Description of risk	How our audit addressed this risk
The reliability and security of IT systems plays a key role in the preparation of BNP Paribas SA's financial statements. We thus deemed the assessment of the general IT controls and the application controls specific to the information processing chains that contribute to the preparation of accounting and financial information to be a key audit matter. In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to application settings or underlying data.	For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in: ■ obtaining an understanding of the systems, processes and controls which underpin accounting and financial data; ■ assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on material systems (in particular accounting, consolidation and automatic reconciliation applications); ■ examining the control for the authorisation of manual accounting entries; ■ performing additional audit procedures, where applicable.

Specific verifications

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French legal and regulatory provisions.

Information given in the management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements, with the exception of the following item.

Concerning the fair presentation and the consistency with the financial statements of the disclosures provided in relation to the payment terms referred to in article D. 441-4 of the French Commercial Code, we have the following matter to report: as indicated, these disclosures do not include banking and related transactions as the Company considers that such disclosures are not within the scope of the information to be provided.

Report on corporate governance

We attest that the Board of Directors' report on corporate governance sets out the information required by articles L.225-37-3 and L.225-37-4 of the French Commercial Code.

Concerning the information given in accordance with the requirements of article L.225-37-3 of the French Commercial Code relating to remuneration and benefits received by corporate officers and any other commitments made in their favour, we have verified its consistency with the financial statements or with the underlying information used to prepare these financial statements, and, where applicable, with the information obtained by your Company from companies controlling it or controlled by it. Based on this work, we attest to the accuracy and fair presentation of this information.

Concerning the information given in accordance with the requirements of article L.225-37-5 of the French Commercial Code relating to those items your Company has deemed liable to have an impact in the event of a takeover bid or exchange offer, we have verified its consistency with the underlying documents that were disclosed to us. Based on this work, we have no matters to report with regard to this information.

Other information

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Informations résultant d'autres obligations légales et réglementaires

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2018, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the thirteenth, the twenty-fifth and the nineteenth consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for preparing financial statements giving a true and fair view in accordance with French accounting principles, and for implementing the internal control procedures it deems necessary for the preparation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors of BNP Paribas SA.

Responsibilities of the Statutory Auditors relating to the audit of the financial statements

Objective and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit.

They also:

- identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant in the audit of the financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 5 March 2019

The Statutory Auditors

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
Laurence Dubois	Patrice Morot	Virginie Chauvin

7 A COMMITTED BANK: INFORMATION CONCERNING THE ECONOMIC, SOCIAL, CIVIC AND ENVIRONMENTAL RESPONSIBILITY OF BNP PARIBAS

All the information presented in chapter 7 of the Registration document has been collected by specific requests addressed to the functions, business lines, departments or territories of the Group, or by the use of the Group's internal management tools. It is expressly noted when the scope covered by information differs from that of the entire BNP Paribas Group.

Whatever the area of its economic, social, civic or environmental responsibility, BNP Paribas has distinguished itself through its accomplishments in 2018:

- BNP Paribas was designated "**World's Best Bank for Sustainable Finance**" by the British magazine, Euromoney.
- The Bank dedicated EUR 168 billion in financing to sectors considered as directly contributing to achieving the **Sustainable Development Goals** (SDGs).
- The Group helped develop and endorsed the United Nation's "**Principles for Responsible Banking**" which state the role and responsibilities of the banking sector in building a sustainable future, in order to achieve the SDGs and the climate targets of the Paris Agreement.
- Through its **Responsible Business Principles**, published in December 2018, BNP Paribas made public its willingness to work with companies that share the same environmental and social standards.
- The Group's total **support to social enterprises** amounted to EUR 1.6 billion.
- BNP Paribas is one of the founding members of the **Tobacco-Free Finance Pledge**, launched in September 2018. This initiative brings together financial institutions that have adopted policies intended to discontinue financing or insuring the tobacco industry.
- The Group signed an agreement with UNI Global Union on 7 topics relating to fundamental labour rights and the implementation of a **global social framework**.
- Jean-Laurent Bonnafé, Director and Chief Executive Officer of BNP Paribas, joined the 8 **Thematic Champions** of the UN's HeForShe movement. In this way, it reinforces its commitment with all BNP Paribas employees to support all of the concrete initiatives to be achieved regarding concepts of equality and professional diversity.
- The Group has set itself the ambitious target of one million hours of **skills-based sponsorship by its employees globally in 2020.**
- The Bank has earmarked EUR 15.4 billion in funding for **renewable energies**, and its third-party asset management subsidiary manages EUR 6.6 billion in thematic green funds.
- Lastly, with EUR 7.4 billion in **sustainable bonds structured and distributed on behalf of its clients** (as a joint bookrunner), BNP Paribas ranked 3rd in the sector globally.

7.1 Our strategy

BNP PARIBAS 2020 ENGAGEMENT MANIFESTO

BNP Paribas' engagement with society is entering a new era.

Our society is evolving. Our future is full of opportunities, but also of risks, principally due to rising inequalities and climate change.

No country, business or individual can win in the long term in a world that loses. We firmly believe that collective progress will be achieved only through growth that is both sustainable and equitable.

As a major international company and financial services group, we have the human, technological and financial resources to push boundaries, to be part of the solution and to take a leading role.

All over the world, our employees are contributing to the real economy. They help individuals, businesses, community organisations and institutions to succeed in their projects and find tangible solutions to concrete problems.

It is on this basis that we will strengthen our commitment to society, notably in line with the United Nations' 17 Sustainable Development Goals.

We are transforming our operating model to be more digital and more client-focused. This goes hand in hand with the strengthening of our positive role in society. Our customers, employees, investors and partners as well as NGOs and individual citizens all want and expect this from us.

At the heart of our commitment there is a real ambition and key imperative to corporate social responsibility, ethics, diversity and inclusion, and promoting human rights in the countries where we do business, whilst respecting local legislation and cultures. We must respond with audacity to the real expectations and expanding horizons emerging in our society.

In order to achieve the required level of engagement, we need to:

- Collectively develop our 'positive-impact' culture, our culture of diversity and inclusion, and our dialogue with society.
- Incorporate social and environmental responsibility more thoroughly into our operational processes and into the Group's major projects.
- Create new solutions and partnerships that enable us to support our clients and have a positive impact on the world around us.
- Establish specific 'engagement objectives' for each major Group entity and incorporate their contributions into the Group's overall CSR and diversity and inclusion goals.

  Beyond this quest for excellence in all areas related to our engagement, **we will support causes where we can have major impacts. We will achieve this by aligning our products and services, partnerships, employer behaviour, procurement policies, community action, philanthropy, staff-volunteering initiatives and intrapreneurial initiatives.**

- For climate: working with our customers and partners, to accelerate energy transition by encouraging renewable energies, energy efficiency, sustainable mobility and the circular economy.
- For young people: promoting their inclusion in society by encouraging projects that matter most to them and by fostering intergenerational dialogue and solidarity.
- For entrepreneurs: encouraging people from diverse backgrounds to create and develop businesses, and supporting social and entrepreneurial innovation.
- For our local ecosystems: improving the urban, social and cultural environment in the regions where we do business.

Being the bank for a changing world means continuing to improve the way we help our customers while contributing to more sustainable and equitable growth.

Being the bank for a changing world means being a bank that is committed to changing the world for a better future.

OUR CORPORATE SOCIAL RESPONSIBILITY STRATEGY (CSR)

In 2017, BNP Paribas created a Company Engagement Department in line with its 2020 strategy. Represented on the Group's Executive Committee, this Department is tasked with:

- strengthening the CSR and diversity practices and bringing all the Company's levers together to meet major societal challenges;
- defining and implementing commitments concerning economic growth, expansion, environment and energy transition, social inclusion and local development, diversity and promotion of human rights.

The Group's CSR policy is one of the main components of this approach. In line with the United Nations' Sustainable Development Goals (SDGs), it is based on 4 pillars and 12 commitments that reflect its CSR challenges, as well as the Bank's concrete achievements. As part of a continuous improvement process, this strategy aims to build a more sustainable world while ensuring the Group's stability and performance. All of the Group's business lines, networks, subsidiaries and countries apply this policy, while adapting it to their specific characteristics.

A BANK COMMITTED TO A BETTER FUTURE

OUR 4 PILLARS

THE ECONOMY	OUR PEOPLE	THE COMMUNITY	THE ENVIRONMENT
Financing the economy in an ethical manner	Developing and engaging our people responsibility	Being a positive agent for change	Combating climate change
OUR 12 COMMITMENTS			
1 INVESTMENTS AND FINANCING WITH A POSITIVE IMPACT	4 PROMOTION OF DIVERSITY AND INCLUSION IN THE WORKPLACE	7 PRODUCTS AND SERVICES THAT ARE WIDELY ACCESSIBLE	10 PARTNERING WITH OUR CLIENTS IN THE TRANSITION TO A LOW-CARBON ECONOMY
2 ETHICS OF THE HIGHEST STANDARD	5 A GOOD PLACE TO WORK AND RESPONSIBLE EMPLOYMENT MANAGEMENT	8 COMBAT SOCIAL EXCLUSION AND SUPPORT HUMAN RIGHTS	11 REDUCE THE ENVIRONMENTAL IMPACT OF OUR OPERATIONS
3 SYSTEMATIC INTEGRATION AND MANAGEMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS	6 A LEARNING COMPANY SUPPORTING DYNAMIC CAREER MANAGEMENT	9 CORPORATE PHILANTHROPY POLICY FOCUSED ON THE ARTS, SOLIDARITY AND THE ENVIRONMENT	12 ADVANCE AWARENESS AND SHARING OF BEST ENVIRONMENTAL PRACTICES

Governance

- driven by a culture of responsibility and integrity,
- based on best practices,
- involving the Board of Directors, the shareholders, the management and the whole Group,
- to ensure a sustainable future for our business and deliver a positive impact on society.

CSR MANAGEMENT DASHBOARD

BNP Paribas has set up a dashboard of 13 CSR indicators to guide its strategy in this area.

The CSR dashboard is monitored on a yearly basis by the Group's Executive Committee and Board of directors. Nine of these thirteen indicators are used in calculating the 3-year loyalty plan of 6,750 key Group employees, where they account for 20% of the conditions for granting this compensation.

Eleven out of thirteen indicators were achieved for the 2016-2018 period.

➤ BNP PARIBAS CORPORATE SOCIAL AND ENVIRONMENTAL INDICATORS

Pillar	Indicators	2015	2016	2017	2018	2018 Objective
Economic Responsibility	Share of loans to companies contributing strictly to the achievement of UN Sustainable Development Goals	15%	16.6%	16.5%	14.95% (*)	Maintain at least at 15%
	Percentage of employees trained on an ethics-related issue	No action	96.3%	96.2%	96.2%	Over 80% by the end of 2018
	Share of loans to companies subject to an environmental and social management system which is specific to the concerned activity	25%	28%	54.9%	55.6%	40%
Social Responsibility	Percentage of women among the members of cross-functional Executive Committees across business lines and/or countries(**)	21%	24%	25%	25%	23%
	Percentage of employees having at least 14 weeks of paid maternity leave and/or six days of paid paternity leave	74%	81%	82%	92%	85%
	Percentage of employees reporting having been trained (any format, including e-learning) over the past 12 months	74%	85%	86%	88%	90%
Civic Responsibility	Annual number of beneficiaries of microloans distributed by microfinance institutions financed by BNP Paribas (on a prorata basis of the financing issued by BNP Paribas)	250,000	309,000	289,000	358,000	350,000
	Percentage of employees contributing directly to the promotion of human rights who have received specific training	No action	13%	70%	85%	80% of the target population
	The BNP Paribas Group's annual sponsorship budget	€38.6m	€40.4m	€40.2m	€41.6m	Average yearly budget over the 2016-2018 period greater or equal to the 2015 budget
Environmental Responsibility	Financing for renewable energies	€7.2 Bn	€9.3 Bn	€12.3 Bn	€15.4 Bn	€15 billion in 2020
	Greenhouse gas emissions	2.89 teqCO_2/FTE	2.72 teqCO_2/FTE	2.54 teqCO_2/FTE	2.45 teqCO_2/FTP	2.41 teqCO_2/FTE in 2020
	Number of people made aware of climate issues by BNP Paribas in the 2016-2018 period	70,000	116,000(***)	60,698	50,000	140,000
Governance and steering	Percentage of employees with a positive opinion of how the Group discharges its social and environmental responsibility and its commitments as a responsible bank	69%	70%	73%	75%	72%

(*) In 2018, EUR 2 billion of B2B2C was restated.
(**) Out of approximately 500 Top executives
(***) This exceptional peak in people's awareness in 2016 was due to the organisation of an expedition in the Southern Ocean onboard the Marion Dufresne, showcasing the Soclim project supported through the Climate Initiative programme.

BNP PARIBAS' PUBLIC POSITIONS

BNP Paribas' approach to corporate social responsibility (CSR) is framed by the thematic and sector-specific public positions it has adopted. With a presence in 72 countries, the Group carries out its operations in full respect for numerous commitments, working groups and platforms.

Universal principles

For many years, BNP Paribas' actions have followed the framework of:

- the United Nations Global Compact (Advanced level);
- the UN Women's Empowerment Principles.

The financial industry's CSR commitments

The Group actively participates in designing and implementing long-term social and environmental solutions within the framework of:

- the Equator Principles;
- the UNEP FI's Principles for positive impact finance;
- the Principles for Responsible Investment (PRI), for BNP Paribas Asset Management, BNP Paribas Real Estate Investment Management, BNP Paribas Cardif and BNP Paribas Securities Services.

2018 was marked by BNP Paribas' support, alongside 27 other banks for the "**Principles for Responsible Banking**" (see *Investments and financing with a positive impact*, Commitment 1).

Commitments specific to the environment

Amongst BNP Paribas' environmental commitments:

- the Montréal Carbon Pledge;
- the Portfolio Decarbonisation Coalition;
- the Banking Environment Initiative (BEI) and its Soft Commodities Compact;
- the Institutional Investors Group on Climate Change;
- the Transition Pathway Initiative;
- the French Business Climate Pledge;
- the Principles for Mainstreaming Climate Action within Financial Institutions;
- the Financial Institutions' Declaration of Intent on Energy Efficiency from the EBRD and UNEP FI;
- the Roundtable on Sustainable Palm Oil (RSPO);
- the We Mean Business Coalition;
- the Science Based Target initiative;
- the Breakthrough Energy Coalition;
- the Task Force on Climate-related Financial Disclosures (TCFD).

In 2018, as part of the **COP 24 in Katowice**, BNP Paribas committed alongside 4 other banks to creating common CO_2 emissions measurement standards and aligning credit portfolios with the objectives of the Paris Agreement.

The Group also announced its support for **act4nature**, an initiative launched by the *Entreprises pour l'Environnement* think tank to protect and restore biodiversity, alongside 64 other international companies (see *Partnering with our clients for energy transition,* Commitment 10).

Voluntary commitments defined by BNP Paribas

BNP Paribas wanted to go further in several sensitive sectors by setting itself additional obligations, through:

- the BNP Paribas commitments for the environment defining the Group's strategy concerning these challenges;
- financing and investment policies in the following sectors: agriculture, palm oil, defence, nuclear energy, paper pulp, coal energy, mining and non-conventional hydrocarbons;
- a list of excluded goods and activities such as tobacco, drift nets, the production of asbestos fibres, products containing PCBs, or the trading of any species regulated by the CITES convention (Convention on international trade in endangered species of wild fauna and flora) without the necessary authorisation;
- monitoring and exclusion lists grouping businesses which do not meet the Group's CSR requirements;
- a Statement of BNP Paribas on human rights;
- an Anti-Corruption Policy;
- a Charter for responsible representation with respect to the public authorities;
- a CSR Charter for BNP Paribas suppliers.

In 2018, BNP Paribas published its **Responsible Business Principles Charter** stating its ambition to work with companies that share the same environmental and social standards as the Group (see *Ethics of the highest standard*, Commitment 2 and *Duty of care: 2018 BNP Paribas' vigilance plan*, chapter 7.6).

Think tanks

BNP Paribas is also a member of several think tanks on CSR issues, including:

- *Entreprises Pour l'Environnement* (EpE);
- the French Institute for Sustainable Development and International Relations (IDDRI). Founded in 2001, the IDDRI aims to create and share ways of analysing and understanding strategic sustainable development priorities with a global outlook. Since 2016, the Group's CSR Function has had a seat on its Board of directors;
- World Business Council for Sustainable Development (WBCSD);
- Businesses for Human Rights (*Entreprises pour les Droits de l'Homme*, EDH);
- the Thun Group, an informal group representing international banks which meets to discuss the application of the United Nations' guidelines on companies and human rights.

PROGRESS ACKNOWLEDGED BY EXTRA-FINANCIAL RATING AGENCIES

The following table shows the most recent evaluations from the main extra-financial rating agencies and the inclusion of the BNP Paribas share in the most recent extra-financial indexes.

Agency	Rating (year of most recent rating)	Rating (previous year)	Inclusion in the related indexes
Carbon Disclosure Project	A- (2018)	A- (2017)	
FTSE Russell	4.6/5 (2018)	4.2/5 (2017)	FTSE4Good Global Index Series
ISS-Oekom	C (2018)	C (2017)	Prime (best-in-class status)
MSCI	A (2018)	A (2017)	
Sustainalytics	79/100 (2018)	78/100 (2017)	Global Compact 100 of the United Nations and STOXX Global ESG Leaders
Vigeo Eiris	70/100 (2018) 1st European bank in the ranking	64/100 (2017)	Euronext-Vigeo Eiris World 120, Eurozone 120, Europe 120 and France 20

In 2018, BNP Paribas was also included in the following indexes: Bloomberg Financial Services Gender-Equality Index, Thomson Reuters Global Diversity & Inclusion Index, Pax Ellevate Global Women's Index Fund[1] and its Moroccan bank, BMCI, is listed in the Vigeo Eiris "100 Best Emerging Market Performers Ranking".

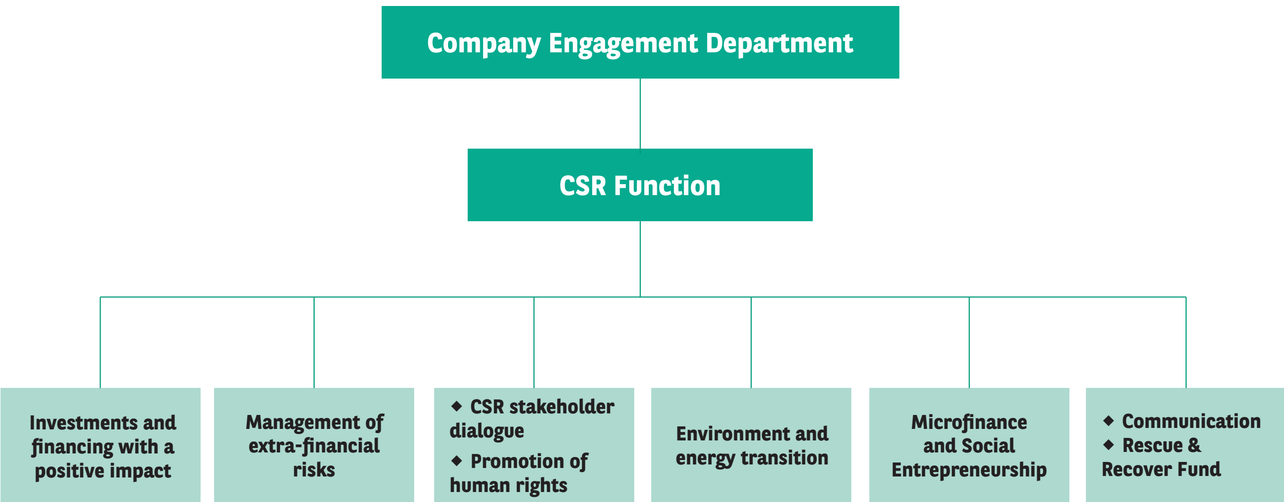
Other bodies and specialised magazines have also acknowledged the Group's improved performance. Indeed, BNP Paribas:

- was listed as the leading European and only French bank in the **2019 "100 Most Sustainable Corporations"** ranking of the Canadian magazine Corporate Knights, being placed in 24th position;
- was named **"World's Best Bank for Sustainable Finance" for 2018** by Euromoney, a reference publication in international finance;
- received the **Global Performance Trophy**, awarded jointly by the Institute for Responsible Capitalism and Vigeo Eiris, which recognises the best Annual General Meeting in terms of comprehensibility and relevance of financial and extra-financial information.

CSR TAKEN TO THE HIGHEST LEVEL IN THE ORGANISATION

Year after year, BNP Paribas is making progress in implementing its CSR policy, and this is thanks to the daily commitment of its over 202,000 employees. In the various Group entities and functions around the world, they implement multiple CSR initiatives in their business lines at all levels of the organisation.

A dedicated department is responsible for managing the Bank's CSR commitments, reporting to the Company Engagement Department and represented in the Group Executive Committee. The assignments and responsibilities of the CSR Function are clearly defined in a directive from the Executive Management. At the Head Office, the CSR team is structured as follows:



(1) The Pax Global Women's Leadership Index Fund lists the world's leading companies in terms of the promotion of women in corporate governance.

It is based on a network created in 2012, which operates in the divisions, business lines, networks, departments and subsidiaries in order to facilitate the roll-out of the CSR policy across the whole Group. In total, over 130 people spend all or a majority of their time on CSR matters within BNP Paribas. They can also call upon the expertise of nearly 300 contributors on specific topics such as direct environmental impacts, microfinance and financing and investment policies.

More generally, the Group's Executive Committee regularly decides on CSR topics and the Board of directors is given a presentation on the CSR strategy at least once a year. Finally, a member of the Executive Committee is responsible for CSR in each entity to ensure that CSR is integrated into the entity's strategy.

FOSTERING DIALOGUE WITH STAKEHOLDERS

Dialogue with stakeholders is at the heart of BNP Paribas' actions to promote social and environmental responsibility. This dialogue has a three-fold objective: anticipating change in our businesses developments and improving our products and services, optimising risk management, and finding innovative solutions which positively impact society.

- The steps to foster dialogue with **employees** or **staff representatives** are described in the social pillar of this document (see *Global People Survey*, Commitments 4 and 5). Employees may use the company's whistleblowing system (see *The whistleblowing system*, Commitment 2).
- **Individual customers and small business clients** of all BNP Paribas retail entities have access to a complaints procedure. Numerous entities provide their clients with the opportunity to use an independent ombudsman.
- Within the framework of its asset management activities, **BNP Paribas Asset Management** engages with **companies in which the entity invests** on ESG (Environmental. Social and Governance issues) themes to preserve and enhance the medium and long term value of the investments made on behalf of its clients. In 2018, discussions concerned climate change and energy transition, corporate governance, natural capital and human rights. BNP Paribas Asset Management supports the ESG commitments of these companies through its voting rights policy (see *Inclusion of ESG criteria in assets under management*, Commitment 3).
- BNP Paribas provides its **suppliers** with a redress procedure in the event of difficulties: all suppliers may refer issues to a mediator internal to the Group, but independent of the Procurement Department, in accordance with the Group's CSR Charter for Suppliers (online on www.group.bnpparibas.com). 24 cases were referred to the internal mediator in 2018, the majority of them concerning terms of payment.
- BNP Paribas presents its CSR strategy several times a year to **Socially Responsible Investors (SRI)** and regularly informs extra-financial analysts of the strategy. In 2018, BNP Paribas met 36 different SRI investors at least once in France, UK, Sweden, Denmark and Finland.
- The Group has defined a policy and a management process for its relations with **advocacy NGOs**, in order to ensure a constructive, coordinated and productive dialogue with them. In 2018, BNP Paribas had 89 different exchanges with NGOs.
- With regard to **regulatory organisations, governments** and **parliamentarians**, in November 2012, BNP Paribas adopted a "Charter for responsible representation *vis-à-vis* the public authorities", which was approved in 2015 by the Board of directors. In 2017, BNP Paribas was included in the digital register of lobbyists, managed by the *Haute Autorité pour la Transparence de la Vie Publique* (HATVP, High Authority for Transparency in Public Life). BNP Paribas is also a signatory of the joint declaration on lobbying of member companies of Transparency International France. The dedicated website of its Public Affairs France Department details its work in the area of responsible representation (www.economieetentreprises.bnpparibas/fr/). The Group's public positions concerning banking and financial regulations are also available on its website (https://group.bnpparibas/en/key-public-positions-banking-financial-regulation).

The **mapping of our stakeholders** and the dialogue with each of them are detailed in the document "Objectives and methods of the dialogue between BNP Paribas and its stakeholders", which is available under the CSR section of the institutional website (www.group.bnpparibas/organisation-gouvernance). A **materiality matrix** presenting the most important issues for the Group's internal and external stakeholders is also available at the end of chapter 7.

7.2 Our economic responsibility: financing the economy in an ethical manner

BNP Paribas' primary mission is to meet its clients' needs, in particular by financing the projects of individual clients and businesses in an ethical manner, in order to drive economic development and create jobs. Given its leading positions in financial services in the 72 countries in which it operates, the Group's financing capacity and the way it conducts its business can have a direct impact on local economies. Aware of this economic responsibility, BNP Paribas bases its actions on its three commitments:

- **Commitment 1**: investments and financing with a positive impact;
- **Commitment 2**: Ethics of the highest standard;
- **Commitment 3**: Systematic integration and management of environmental, social and governance risks.

2018 saw numerous tangible contributions promoting BNP Paribas' economic responsibility:

- With EUR 168 billion at the end of 2018, total **financing contributing to the energy transition and SDGs**, has increased by 8.4%.
- The Group has committed to complying with the "**Principles for Responsible Banking**", which state the role and responsibilities of the banking sector in building a sustainable future in order to achieve the SDGs and the climate targets of the Paris Agreement.
- The Group's total support for **social enterprises** (including microfinance institutions) amounted to EUR 1.6 billion, a growth of 59% compared to 2017.
- BNP Paribas has structured and launched 4 **Social Impact Bonds (SIBs)** (for a total of EUR 9 million), enabling social enterprises or NGOs in France and the USA to raise funds to develop their projects.
- The **SRI** funds managed by BNP Paribas Asset Management stood at EUR 36.8 billion in assets as at 31 December 2018, representing growth of over 5.2% on the previous year.
- The Group withdrew from financing the tobacco sector and became a founding member of the **Tobacco-Free Finance Pledge**, launched in September 2018.
- Through its **Responsible Business Principles**, published in December 2018, BNP Paribas made public its willingness to work with players that share the same environmental and social standards.

COMMITMENT 1: INVESTMENTS AND FINANCING WITH A POSITIVE IMPACT

SUPPORTING SMES AND BOOSTING EMPLOYMENT

Supporting SMEs

BNP Paribas has developed the necessary organisational system and has the tried and tested expertise required to contribute to the development of companies, SMEs in particular, which the Bank supports in an effective and efficient manner in its domestic markets and on the international stage. As a consequence, a wide range of products and services has been developed:

- French Retail Banking has deployed a specific **system dedicated** to SMEs and their senior management teams which covers 300 expertise centres. Its long-term commitment makes BNP Paribas a go-to bank for SMEs;
- BNP Paribas SA recognised a **Competitiveness and Employment Tax Credit (CICE) of EUR 35 million at 31 December 2018**;
- BNP Paribas Asset Management has developed a **savings product offering** to facilitate access by SMEs to loans and alternative sources of financing to traditional bank loans (BNP Paribas Action Entrepreneurs, Smallcap Euroland and MidcapFrance).

United Nations' Principles for Responsible Banking

In 2018, BNP Paribas helped develop the "Principles for Responsible Banking" alongside 26 banks from 19 countries. Signed on 26 November 2018, they recognise the central role of banks in achieving the SDGs and the climate targets set in the Paris Agreement and commit the banks to aligning their practices with these major targets. They define an overall framework for responsible banking and propose that each bank identifies its contribution goals to the SDGs and ensures that it reports its impacts consistently and transparently. The actions selected to meet the transparency challenges of the "Principles for Responsible Banking" are indicated in the table of concordance (see *Table of concordance GRI, ISO 26000, UNEP FI, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD*, section 7.8).

7

CONTRIBUTING TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

A CSR strategy aligned with the SDGs

The Group's CSR strategy fully contributes to achieving the UN's 17 SDGs that aim to build a sustainable future by 2030: ending poverty and hunger, promoting equality and building sustainable cities, whilst preserving the planet. It covers economic growth priorities, inclusion of vulnerable populations and preserving resources.

BNP Paribas contributes specifically to SDG 17 (partnership for the goals) through numerous partnerships covering the areas of the environment (see *Advance awareness and sharing of best environmental practices*, Commitment 12) or health, for example. As an example, the Tobacco Free Finance Pledge brings together banks and investors, governments, NGOs and health players to promote a tobacco-free world.

More generally, it is important for BNP Paribas to be able to measure its contribution to SDGs. At end-2018, total financing to promote the energy transition and the SDGs (loans to companies belonging to business sectors considered as directly contributing to achieving the SDGs) was EUR 168 billion (compared to EUR 155 billion in 2017).

Financing that contributes to attaining the SDGs

Economic sectors making a full contribution to the SDGs

Some business sectors are identified for their positive overall contribution to the SDGs such as, for example: community, social, education, health, agriculture, recycling, renewable energies, research. Among the financing that the Group supported:

- in the **agricultural** sector, a loan signed with Sucden, with its margin indexed on the certification of cocoa bought in Ivory Coast;
- for the **transport** sector, the creation of two metro lines in *Santiago de Chile* for a total of USD 106 million will improve the quality of life for 2.2 million inhabitants – who will access the city centre in under half an hour – and will reduce greenhouse gas emissions;
- regarding **water**, in Belgium, the company Water Link received financing of EUR 46 million dedicated to distribution infrastructures in Flanders, the installation of 200,000 digital meters and the development of an intelligent control centre, able to optimise the distribution network, in particular through better leak detection.

Other activities are also considered as having a positive impact, such as: Group support to microfinance (*Products and services that are widely accessible,* Commitment 7), to social enterprises (*Investments and financing with a positive impact,* Commitment 1) to energy efficiency (*Partnering with our clients in the transition to a low-carbon economy*, Commitment 10) and also partnerships with international institutions.

Partnerships with development banks and institutions

Thanks to these partnerships amounting to almost EUR one billion, BNP Paribas provides specific support to targeted client categories and sectors in 2018: SMEs (Tunisia), supporting exports, energy efficiency (Morocco, Poland), female entrepreneurs (Turkey, Morocco…) and financing for greener maritime transport (partnership with the European Investment Bank).

Other financing with a strong positive impact

Ultimately, some transactions do not belong to any of these sectors, although they contribute to attaining the SDGs through their positive impacts. Amongst these transactions, the *Positive Incentive Loans* (PIL) make it possible to vary interest rates on the basis of the borrower's achievement of environmental and/or social objectives. In all, over EUR 3 billion in PILs were signed in 2018.

There are some specific examples of this approach:

- in December 2018, **Thames Water** signed a GBP 1.4 billion loan: its interest rate is linked to environmental, social and governance indicators. The savings generated by good ESG performance will be paid to 21 charities active in the environment and water topics;
- in February 2018, **Danone** signed a EUR 2 billion syndicated loan including a credit margin adjustment mechanism, upwards or downwards, based on the company's ESG criteria provided by third parties, reviewed at least once per year. BNP Paribas is the sustainability agent for this loan.

The **start-ups** also contribute to attaining the SDGs by developing innovative solutions in response to major environmental and social challenges. Among the 493 high-impact start-ups which are French Retail Banking clients, 24% have a positive impact on biotechnologies, 17% are active in the fields of medical and pharmaceutical research, and 14% have a tangible impact on energy efficiency.

Investment solutions which contribute to attaining the SDGs

To **enable the savings of its individual and institutional clients to contribute to achieving the SDGs**, the Group has developed a **range of products**. Thanks to the mapping developed this year by BNP Paribas Asset Management (http://fr.zone-secure.net/52766/385002/#page=6), each investor can identify the SDGs to which it contributes through its savings.

The investment bank, BNP Paribas Corporate and Institutional Banking, has launched **a range of responsible indices**. Private investors and institutions can, therefore, identify companies that make a significant contribution to achieving the SDGs with regard to the products that they offer or their exemplary conduct. Since 2013, BNP Paribas has launched 26 ethical indices, 5 of which are closely linked to the SDGs which have made it possible to raise over EUR 5.5 billion, including EUR 600 million for the indices linked to the SDGs.

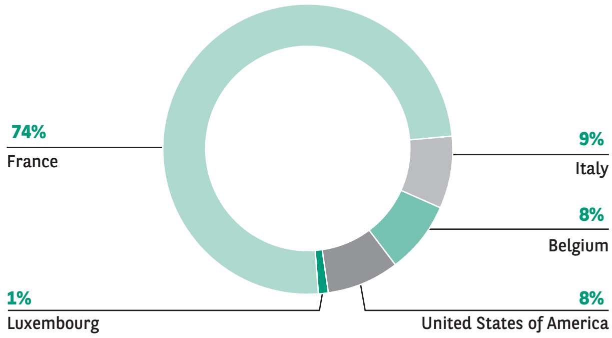
FINANCING SOCIAL ENTREPRENEURSHIP

Thanks to their hybrid business models, social enterprises (SE) (including Tech for Good), aim to generate a strong positive social or environmental impact, while seeking economic sustainability.

Strong growth of the bank's support: both in the financing volumes and in the number of Social Enterprises

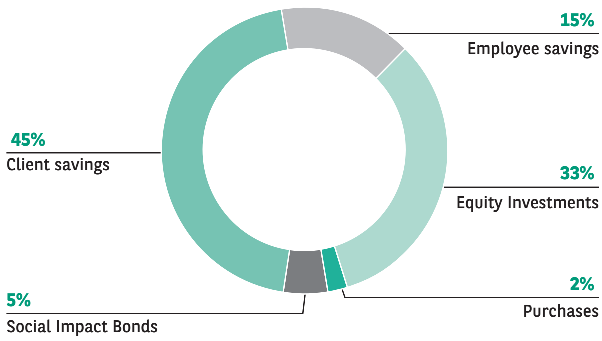
At 31 December 2018, **the Group's support for social enterprises (including Microfinance Institutions) amounted to EUR 1.6 billion**, up 59% compared to 2017. **Over 2,000 customers and partners** have benefited from it in 17 countries.

➤ FINANCING TO SOCIAL ENTERPRISES:



TOTAL : €1,126 million

➤ INVESTMENTS AND OTHER SUPPORT TO SOCIAL ENTERPRISES IN ADDITION TO FINANCING:



TOTAL : €145 million

An evolving approach to support Social Enterprises labelled Act for Impact in 2018

The Bank decided to further strengthen its support for social enterprises by creating the "*Act for Impact*" label, which streamlines and aggregates the entire existing social enterprises offer and enhances the range of products and services in that sector. This initiative was initiated by French Retail Banking and focuses on:

- an increasing number of **banking counselors trained** in the specificities of social entrepreneurship (100 in France and 30 in Belgium at end 2018);
- a **Specific Credit Policy** for customised financial analysis;
- an **impact measurement methodology, MESIS**, co-built with CDC, INCO and KIMSO, to include social impact as a fully integrated analysis criteria and to make progress in collective thinking on measuring social impact;
- **solidarity investment funds** for the employees of major companies or for individual customers, such as BNP Paribas Social Business France; those funds managed in total EUR 1.5 billion in 2018;
- **support for Social Enterprise ecosystems** in the 17 concerned countries via the implementation of new partnerships in 2018. This is the case, for example, with **French Impact**, an initiative carried by the French government to develop a Social and Solidarity Economy ecosystem in the country or the **Lab'ESS** incubator in Tunisia;
- a mobilisation of the Group's **expertise** with the deployment in 2018 of a new pro-bono legal and consulting offering;
- **equity investments** in positive impact products in 2018, in the fund dedicated to positive impact African SMEs, IPDEV II, in the microfinance fund Helenos (see *Products and services that are widely accessible*, Commitment 7) and in Social Impact Bonds (SIBs);
- **dedicated spaces to promote the local anchoring of ecosystems**: in 2018, BNP Paribas was one of the creators of *Ascenseur* (the Elevator) in Paris, which will bring together in a unique location over twenty associations, social enterprises, public and private actors from across the entire value chain of equal opportunities to provide beneficiaries with a more effective integrated path;
- **chances for visibility**, for example the "MaPubICI" competition in France dedicated to Social Enterprises in 2018.

SOCIAL IMPACT BONDS (SIB): BNP Paribas is leader in France and an important player in the United States

SIB, is a *Payment by Results* financial tool supporting social innovation. Private investors assume the risks of failure of a social experiment carried out by an association or a social enterprise, in return for compensation. The investors are repaid by the public authorities only when an independant impact auditor testifies that the project has achieved the expected social impact.

BNP Paribas continued to develop SIBs as an arranger and investor. In 2018, the Group invested in three of them and carried out the financial structuring for four new SIBs (3 in France and 1 in the United States) for a total of EUR 9 million:

- the "**Veterans CARE**"(1) programme (*Veterans Coordinated Approach to Recovery and Employment*) aims to support 480 veterans of the US armed forces suffering from post-traumatic stress disorders to enable them to find qualified, long-term employment;
- the "digital path" programme from **Wimoov**, an association that supports 10,000 people towards employment each year by promoting their mobility. In partnership with 3 French ministries, this SIB aims to implement an on-line tool to detect mobility issues of vulnerable people;
- the "Family Relay" project with the **Fondation Apprentis d'Auteuil** in Loire-Atlantique aims to avoid placing 68 children in foster care structures, by offering housing in family apartments and parental support to families in disadvantaged situations. This EUR 2.5 million experiment will be replicated in the Gironde Region;

(1) *Co-structured with Social Finance.*

- lastly, *"La Cravate Mobile"* (The Mobile Tie) project with **La Cravate Solidaire**, which fights against hiring discrimination related to physical appearance, will allow a traveling device (fully equipped bus) to offer quality professional attire and coaching to 900 young people in Ile-de-France Seine Saint-Denis or Val d'Oise.

DESIGNING AND PROMOTING SOCIALLY RESPONSIBLE INVESTMENT FUNDS (SRI)

In 2018, BNP Paribas Asset Management continued to develop its range of responsible products and services for retail clients and institutional investors. Its expertise is based on two complementary approaches: one of them focuses on engaged issuers (Best in class), while the other, theme-based, targets activities, products and services connected with environmental protection and/or social well-being.

30 ESG/SRI labels were awarded in 2018

- For 13 funds: the **SRI label granted by the French Government**. Created in 2016, it aims to give greater visibility to savers in SRI products and to ensure that the products are managed according to sound methodologies, with strong transparency and information quality requirements.
- For 5 funds: the **Luxflag Environment label** (major involvement in the environmental sector and high-level investor transparency);
- For 2 funds: the **Luxflag ESG label** (quality of the selection method);
- For 5 funds: the **Finansol label** (investments in the solidarity economy and microfinance);
- For 5 funds: the **CIES** (*Comité intersyndical de l'Épargne Salariale* – inter-union employee savings scheme committee) label.

These labels confirm BNP Paribas Asset Management' long-term commitment to develop and promote its range of SRI products.

Funds	SRI label	Finansol	CIES	Luxflag Environment	Luxflag ESG
Agipi Monde Durable	X				
Bnp Paribas Actions Europe Responsable	X				
Bnp Paribas Aqua				X	
Bnp Paribas Euro Valeurs Durables	X				
BNP Paribas Obli Responsable	X	X			
Bnp Paribas Social Business France		X			
Bnp Paribas Social Business Impact France		X			
Maif Investissement Responsable Europe	X				
Multipar Actions Socialement Responsable	X		X		
Multipar Equilibre Socialement Responsable	X		X		
Multipar Monetaire Socialement Responsable	X		X		
Multipar Solidaire Dynamique Socialement Responsable	X	X	X		
Multipar Solidaire Oblig Socialement Responsable	X	X	X		
Parvest Aqua				X	
Parvest Climate Impact				X	
Parvest Global Environment				X	
Parvest Green Tigers				X	
Parvest SMaRT Food					X
Bnp Paribas L1 SMaRT Food					X
Parvest Sustainable Bond Euro	X				
Parvest Sustainable Bond Euro Corporate	X				
Parvest Sustainable Equity Europe	X				

EUR 36.8 billion of SRI assets were managed by BNP Paribas Asset Management as at 31 December 2018. **Total SRI assets under management increased by 5.2% this year**. Thematic funds such as Parvest Green Bonds and Aqua have had record success among individual customers.

A marked increase in inflows

BNP Paribas Wealth Management continued to roll out its SRI offering in particular by extending its sustainable product offering. **In 2018, SRI assets reached EUR 13.5 billion**, 2.5 times the amount of 2010.

In Belgium, efforts made to promote SRI by **BNP Paribas Fortis** are continuing to bear fruit. The private bank of BNP Paribas Fortis obtained a 47.3% SRI market share amongst Belgian private banks (source: MIRA study – Forum Ethibel 2017). SRI assets under management reached **EUR 11.15 billion** in 2018.

TAILORED ADVICE AND SUPPORT

Supporting female entrepreneurship:

274 million women worldwide manage their own company or are in the process of setting one up. In emerging countries, they play a major role in development. In Europe, only 6% of women become entrepreneurs, a rate 60% lower than for men.

The Group contributes through its entities to accelerate the growth of women-founded start-ups and SMEs, through for example:

- the support from BNP Paribas Cardif in France, via **the Generation #Startuppeuse club**, to the programme that enables women entrepreneurs to use the help of experts (lawyers, mentors, developers etc.);
- long-standing actions carried for women entrepreneurs by French Retail Banking with **a budget of EUR 2 billion** dedicated to supporting their projects in 2018;
- the "**Women in Business**" programme, a partnership between BMCI and the European Bank for Reconstruction and Development, which finances and supports Moroccan SMEs managed by women;
- the "**EBRD Women in Business Loan**" developed by TEB in Turkey, a product sold to 6,000 women entrepreneurs with total outstandings of EUR 50 million;
- or the launch in Italy in 2018 of "**Miss in Action**", which, by mobilising different bank business lines (BNL, Cardif, Findomestic, International Financial Services), boosts innovative company projects founded by women.

Start-ups and innovative companies

BNP Paribas is developing an ecosystem designed to promote the development and support of innovative companies. This support, particularly active in its Domestic Markets, comprises:

- 60 support hubs (the WAI, We are Innovation) in France, including a specialist Fintech hub, comprising employees dedicated to innovative enterprises;
- 5 start-up houses, in Belgium, Turkey, Italy, Luxembourg and France, where the teams co-create on a daily basis with Fintech developers, digital operators and start-ups;
- booster programmes putting start-ups into contact with BNP Paribas' major clients (medium-sized suppliers (ETI) or large corporates) for 6 months of co-innovation *(WAI Boost)*;
- tailored products and services, particularly investments.

In total in 2018, over 493 start-ups have been supported by the BNP Paribas innovation hubs.

COMMITMENT 2: ETHICS OF THE HIGHEST STANDARD

The respect of the most rigorous ethical standards is a prerequisite at BNP Paribas. All Group employees are required to strictly respect all laws, rules and regulations in effect, as well as all professional standards that apply to their activities. In case of conflict between the laws of a country and the ethical rules of the BNP Paribas Group, the Group's employees are required to respect local legislation while at the same time looking for ways to apply and respect internal ethical rules.

ETHICS OF THE HIGHEST STANDARD

Code of conduct

In May 2016, BNP Paribas published and distributed to all its employees its new Code of conduct **supplemented in 2018 by a more specific section on anti-corruption**. It is accessible to everyone on the Group's website. Mandatory online training in the Code of conduct was conducted in 2016, and has continued since that date for new hires.

The Responsible Business Principles

In 2018, BNP Paribas published a **Responsible Business Principles Charter** (which can be found on www.group.bnpparibas.com) stating its ambition to work with players that share the same environmental and social standards as the Group.

The Ethics Committee

The Ethics Committee, created in 2014, met three times in 2018.

Chaired by Jean-Marie Guéhenno, an international relations expert, it is made up of members of the Group Executive Committee and independent outside individuals. The role of the Ethics Committee is to advise the Executive Management in order to ensure that the Bank's activities are in line with the values of BNP Paribas and with the highest standards of professionalism, integrity and ethics. It is an advisory body.

In 2018, the Ethics Committee discussed the concept of corporate *raison d'être* or purpose and expressed opinions on the recommendations of the Sénard-Notat report and the Label B Corporation offered by B Lab. A detailed presentation of the Group's strategy in terms of corporate commitment was also made. The following issues were also brought to the Committee's attention: the Group's business in Turkey, the implementation of the GDPR (General Data Protection Regulation) regulations and the Group's data protection policy, the implementation of the French laws on the duty of care of multinationals and anti-corruption (Sapin 2). The members of the Ethics Committee were also consulted and gave their opinion on the criteria applied by the Group in terms of the financing of light firearms in the United States and the healthcare sector. Lastly, the members discussed the record of their work since the Committee's first meeting in July 2015 and made recommendations for the future.

The whistleblowing system

BNP Paribas has a dedicated internal ethics alert (whistleblowing) system, based on dedicated communications channels, available to employees on the intranet. Every employee has the right to report ethics violations without fear of punishment, dismissal or discrimination for the simple fact of having made use, in good faith, of this system.

The whistleblowing system has been updated in order to meet regulatory requirements: Sapin 2 law (protection of whistle-blowers and provisions for the fight against corruption), MiFID II, the duty of care law. The update of this procedure enabled the whistleblowing system to be consolidated by strengthening the protection for whistle-blowers, in particular thanks to an official appointment process for "Whistleblowing" contacts, and the drafting of specific rules on confidentiality.

The fight against corruption and money laundering

In terms of financial security, as part of its transformation programme, the Group strengthened the Anti-Money Laundering/Combatting the Financing of Terrorism (AML/CFT) system by updating several key elements of its regulatory framework. The operational implementation of the new standards on transaction monitoring and the management of AML/CFT alerts defined in 2017 continued throughout the Group, with the effective implementation expected by end of 2019 in most of the entities concerned.

The BNP Paribas corruption prevention and management system was overhauled following the publication of the so-called Sapin 2 law of 9 December 2015 on transparency, anti-corruption and modernising the economy. This anti-corruption system, which was incorporated into the BNP Paribas Code of conduct in 2018 is built around governance, corruption risk mapping, policies, procedures and tools used to control identified risks, internal alert systems, and finally, controls and reports.

The measures undertaken enabled the existing system to be strengthened in 2018 to comply with new recommendations from the *Agence Française Anti-Corruption* (French Anti-Corruption Agency – AFA). Anti-corruption contacts were appointed at all operational levels of BNP Paribas and the Central team was expanded, the internal alert system and the corruption risk mapping were considerably improved and an e-learning awareness raising training module on the risks of corruption was launched for all employees. These measures will be supplemented in 2019 in particular by reinforcing operational accounting controls and the 1st and 2nd level controls of the anti-corruption system.

Training

At end 2018, 96.2% of the 184,312 employees concerned had taken online training on international sanctions and embargoes, while 93.1% of the 185,086 employees concerned received anti-money laundering and financing of terrorism training.

Regarding competition law, 91.5% of the Group's employees (non-exempt) passed the "competition law and you" training at the end of 2018.

Finally, 89% of the Group's 195,133 employees attended the "Know Your Data" (KYD) course this year and 87% of the employees in the European Economic Area passed the "Personal Data Protection" training course.

The fight against tax evasion

The amount of taxes and duties due by the Group stood at EUR 5.6 billion in 2018, including EUR 2.5 billion in France.

Each year, the Group publishes a detailed report on its locations, showing all relevant data, country by country: net banking income, headcount, results, taxes paid. It is clear from the data that the location of its offices is not driven by tax considerations, but guided in the interest of best serving its customers around the world. (See *Information on locations and businesses*, chapter 8 of the Registration document).

To this end, BNP Paribas ensures that its entities do not benefit unduly from privileged tax schemes. Moreover, the Group avoids locations in States or territories considered uncooperative by France or the official bodies of which France is a member (European Union, OECD).

Incidentally, the tax authorities around the world have all of the information they need to ensure that the Group is making its fair contribution to covering public expenses in every country in which it does business.

In addition, the Group pays close attention to customer compliance with tax laws. Thus, international private banking requires its non-resident customers to fill out a "tax compliance statement". More generally, the Group contributes to customer compliance with tax obligations due to its role of tax collector and provider of information to the tax authorities and to the taxpayers themselves.

PROTECTING CLIENTS' INTERESTS

Protecting **clients' interests** is a major concern for BNP Paribas. Therefore, the Group has chosen to place this issue at the top of its Code of conduct and has set up a dedicated expert group within the Group Compliance teams. Protecting clients' interests is based in particular on the Code of conduct and the Clients' Interests Protection (CIP) policy which now also includes the management of client complaints.

A general, Group-wide policy

The CIP policy covers the whole life cycle of products and services (from their design to sale) and the customer relationship. Employees (in particular in Front Office and Management) are continuously made aware in this area. The correct application of the policy is constantly checked by all Internal Control players: permanent control, the control functions (Compliance and Legal) and the General Inspection.

The general principles of the CIP policy are:

- products and services that meet the customer's needs and situation;
- clear, accurate, non-misleading information provided to the customer;
- identification and treatment of any conflict of interest, in order not to cause any damage to the customer.

The commitments are translated into concrete practices deployed in all Group entities, depending on their specific characteristics:

- The **procedures for approving new products and services** incorporate all the issues relating to the protection of clients' interests, and provide for dedicated committees in order to ensure their compliance and their added value for the target customers;
- The structure of the **commercial teams' remuneration**, on which many European and local regulations have been issued in the last few years, is also subject to qualitative criteria aimed at discouraging transactions that are contrary to the customer's interests. For French Retail Banking, for example, the teams' variable remuneration system is structured around four topics that express the employees' expected performance: quality of the customer relationship, business development, management of risks and compliance, and management (for the relevant individuals). At BNP Paribas Fortis in Belgium, part of the variable remuneration is already indexed on responsibility criteria specifically linked to customer satisfaction. Within this framework, each employee has received an objective corresponding to the Bank's ambition to become one of the most recommended in the country;
- The Group is committed to be exemplary in the **protection of clients' data** (see *BNP Paribas is committed to respecting human rights*, Commitment 8). In Ukraine, Ukrsibbank is one of the rare banking establishments to have offered from 2018, the chance for customers to amend their data online, via its new site (https://online.ukrsibbank.com/ibank/) without having to go to a branch. It has attracted over 500,000 visitors since its launch. More broadly, at International Retail Banking (IRB), a data breach simulation exercise was organised in September 2018 by the RISK ORC ICT[1], Data Protection Office and RaDAR teams, in association with Group Legal and IT, to confront the different possible scenarios (leak, alteration or loss of sensitive, protected or confidential data) and to better prevent them;
- **Dialogue with consumer associations** and other stakeholders is encouraged to gather their opinions on new ways to improve clients' interests protection;
- **Employees** are made aware and **trained on a large scale** about clients' interests. At the Group level, expert seminars for Compliance employees and others concerned by CIP are offered in all entities. Awareness campaigns such as "CIP Days" are conducted for the managers of entities and business lines. Moreover, the "CIP Awareness" online training updated in 2017 to align itself with the new CIP policy, is now available in 14 languages. It was made mandatory for all new hires within the Group via a specific "Discovery" path. Lastly, in 2018, the new "MiFID II Awareness" e-learning programme was deployed and had been taken by 94% of the people concerned.

Complaints management and mediation

Complaints handling reveals areas for improvement and is a way to convert dissatisfied customers into ambassadors, and as such, is of prime importance to the Bank. Hence its direct connection to the Clients' Interests Protection policy (CIP) since October 2017.

Customer complaints statistics are reported to the Central CIP on a quarterly basis (new complaints received during the period) and annually (new complaints received for which the subject described by the customer may lead us to consider a risk of non-compliance with the standards applicable to the entity). The management of complaints by the entities is also subject to specific monitoring with a dedicated control point.

Most of the Group's business lines have one or more services (internet, telephone, email, etc.) enabling clients to give feedback or make a complaint seven days a week, 24 hours a day. These reactions are taken into account in the development of new products or the improvement of customer relations.

- In **Italy**, thanks to a process of continuous improvement, the percentage of customer complaints processed within the specified time limit reached 98% in 2018 (vs. 81% in 2017 and 69% in 2016). BNL banca commerciale (bc) also set itself the target of reducing the number of complaints received, via the analysis of their sources and the definition of corrective action plans.
- In **Belgium**, the backload of complaints decreased by 40% in 2018, while the number of new files processed within the time limits increased by 10%. This progress was the result of the implementation of best practices, in particular through a better collaboration between the teams responsible for quality and complaint management.
- In **France**, there is a specific business line for processing customer complaints. The complaint processing system was strengthened by the establishment of a team and a governance dedicated to the early identification and resolution of the sources of customer dissatisfaction.

(1) ORC ICT: Operational Risk and Control, Information and Communication Technology.

Many Group entities, such as BNP Paribas Personal Finance, BNP Paribas Cardif, Retail Banking networks in France, Belgium, Italy, Morocco, Tunisia, Senegal, Poland and Turkey or the Arval subsidiary provide access to **independent ombudsmen** to whom clients can turn.

The independent banking ombudsman is a dedicated function in France, while in Italy and Belgium, clients have access to the national mediation service organised by the regulatory bodies.

Transparency of the offer

Helping to protect the clients' interests, their understanding of banking products and the transparency of the offering are more than ever at the heart of the Group's concerns. The Group is even creating some of its products in conjunction with future users.

- In **Belgium**, **BNP Paribas Fortis** organised over 100 "Customer Advice Committees", for all customer segments, with the main aim of collecting their opinions. Over 550 customers took part on one or several of these sessions, alongside experts (sales, marketing, operations) and members of the Executive Committee.
- **BNP Paribas Cardif**, the Group's insurance subsidiary, launched a major drive to simplify commercial documents and management letters sent to customers, by writing them in language accessible at the B1 level, according to the common European reference framework for languages. Simple language, common words and short sentences are therefore the criteria for clear and understandable client communication. Started in the Netherlands and UK, this simplification approach has now been deployed in all the countries in which Cardif operates. Over 10,000 documents were updated between 2015 and 2018.
- In **France, Hello factory** (http://www.hellobank.fr/fr/hello-factory), a programme to jointly shape the bank of the future, has been extended since its launch at the end of 2014. Dedicated to innovation, it encourages interaction between its customers and Hello bank!, the digital bank. Within this framework, Hello bank! customers are invited each quarter to discuss topics such as banking relationships, features and account openings. 12 topics have been discussed. At the same time, the co-building platform "BNP Paribas Ideas" was launched. All Retail Banking customers have access to the platform via the "*MaBanque*" site, where they can suggest their ideas for banking innovation. In 2018, out of 279 customer proposals, 16 were selected and published on the site.

Monitoring customer satisfaction

Customer satisfaction is crucial for adapting the offer of products and services to demand, in order to always serve their interests as best as possible. This is why most BNP Paribas business lines monitor customer satisfaction systematically, paying particular attention to how complaints are handled and improving the identification of client dissatisfaction on social networks. Thus, any evidence related to non-compliance with one or more CIP principles must:

- be recognised, categorised, tracked, and processed (potentially through mediation);
- enable the risks and potential malfunctions, as well as the opportunities for improvement, to be understood;
- result in the implementation of corrective measures for a better match between the service expected and the service delivered.

In 2018, average customer satisfaction scores were up or stable in the four **Domestic Markets**:

- French Retail Banking: 7.46/10 (7.36 in 2017)
- BNP Paribas BNL bc: 9/10 (8.7/10 in 2017)
- BNP Paribas BGL: 7.4/10 (7.2/10 in 2017)
- BNP Paribas Fortis: stable at 7.7.

Outside of these markets more and more banks in the Group's network also measure their customer satisfaction rates.

The Net Promoter Score (NPS)

The Net Promoter Score is the common indicator within BNP Paribas that measures how much the Company is recommended by our customers and employees. But beyond the score, the Net Promoter System is currently being deployed within the Retail Banking & Services entities by the "Client & Employee Advocacy" programme teams. This consists of listening to customers and employees throughout their relationship with the Bank and continuously implementing the corrective actions required to improve their experience.

The Net Promoter System, which was launched in Arval in 2013, TEB in 2014, Bank of the West and BNL in 2016, is currently being deployed in all the Domestic Markets (France, Italy, Luxembourg, Belgium, Germany and India) and in all business lines of the International Financial Services hub in direct contact with individual customers (International Retail Banking, BNP Paribas Personal Finance, Cardif, Wealth Management).

Achievements within Domestic Markets:

- At the end of 2018, each one now knows its NPS positioning compared to its competitors, has identified the main customer irritants and has implemented its action plans to remedy them. The Group has set itself the target of improving its competitive position by 2020.
- All the Domestic Markets' Executive Committees have already been trained on the NPS. They lead by example by calling back critical customers.
- Within BNL bc, in Italy, the Net Promoter System is operational in the Individuals, SME, Private, Corporate and Hello bank! markets. BNL saw a significant improvement in terms of NPS in 2018 going from third to first place amongst the traditional Italian banks for the Individuals segment.
- Within Retail Banking, Private Banking and Hello bank! in France, in 2018, all employees had awareness raising training in NPS, and pilots were carried out for customer call-backs in branches and call centres. This also occurred at BGL BNP Paribas, BNP Paribas Fortis, Consorsbank (online bank in Germany) and Sharekhan in India. These pilots will be followed by deployment throughout the networks in 2019.
- A Customer feedback management tool was also deployed at French Retail Banking (Retail and Private), BGL BNP Paribas, Consorsbank, Findomestic (Personal Finance Italy) and BNP Paribas Cardif, enabling over 10,000 users to access customer transcriptions and survey results.

Achievements within the International Financial Services (IFS):

- NPS was extended to IFS entities, in particular to International Retail Banking, where dedicated teams are in place at TEB BNP Paribas (Turkey), BancWest (USA), BGZ BNP Paribas (Poland), BMCI (Morocco) and UkrSibbank (Ukraine).
- In Turkey, TEB joined the benchmark survey in 2018 and is positioned in the "top 3" of the most recommended banks in the VSE and SME segment.
- In the USA, BancWest remains one of the best positioned IRB banks in its local market. Launched last year, its "Engage" programme enables senior leaders/managers to go into the field to meet customers and employees working in branches, call centres and Operations. The NPS is also integrated into top management's targets, and part of their compensation is indexed on it.
- At BNP Paribas Personal Finance, the Net Promoter System is currently being deployed in 24 countries and the benchmark survey has already enabled 18 of them to position themselves in their respective markets. In 2019, it will also be deployed with partners.
- BNP Paribas Cardif started to deploy NPS measurement 4 years ago, and is deploying the Net Promoter System in its main countries. To date, 24 out of 27 entities have deployed real-time surveys for their priority customer paths.
- Within Wealth Management, the Net Promoter System is currently being deployed in its main sites and for different client segments.

ETHICS AT THE HEART OF SUPPLIER RELATIONS

Group purchases amount to around EUR 10 billion in expenditures globally.

BNP Paribas is developing **balanced relations with its suppliers**, in line with its commitments.

As a French signatory to the Charter of Responsible Supplier Relations developed by the French Ministry of Economic and Financial Affairs' Inter-Business Mediation body, the Group is committed to traceability in the supplier selection process and information confidentiality. The Procurement teams monitor the risks of mutual dependence with suppliers, and offer a dedicated appeal process (see *Fostering dialogue with stakeholders*, section 7.1).

In 2018, BNP Paribas published **a new Sustainable Sourcing Charter** that it helped draft along with three other banking institutions in France. It regularly shares the main principles with its suppliers.

Within the Group Procurement division, a "Sustainable Sourcing" team supports buyers and relies on some fifty correspondents around the world.

Particular attention to SMEs

The Group deploys specific initiatives to support SMEs. In France, for example, under the partnership between Retail Banking and the Pacte PME Association, Group Procurement has worked on an action plan to improve the procurement practices with SMEs, with progress presented each year to the Pacte PME Association (see *Supporting SMEs*, Commitment 1). Each year, Pacte PME conducts a satisfaction survey of a panel of the Group's SME or medium-sized suppliers in France with the results discussed during a morning meeting. In France, nearly one-third of the Group's purchases are made with SME suppliers.

Permanent dialogue with stakeholders

The Procurement Function organises an annual discussion session on economic and procurement news with its partners. Discussion sessions are also organised on the fight against harassment as part of customer/supplier relations.

Training for buyers

Buyers receive training on human rights, and also more broadly on responsible procurement, including in particular issues such as diversity and procurement in the protected and adapted employment sector.

COMMITMENT 3: SYSTEMATIC INTEGRATION AND MANAGEMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS (ESG)

Financing and investing in industries with multiple Environmental, Social and Governance (ESG) issues, operating in countries whose legal and governance systems are not at the same level of maturity, BNP Paribas faces a wide variety of ethical challenges that require increased vigilance when making financing and investment decisions. The appropriate management of ESG risks is of prime importance as it contributes to managing the financial risk of the Group's financing and investments. Its ESG risk management system is part of an overall approach and is based on:

- the development of financing and investment policies framing the Group's activities in sectors with significant ESG issues;
- the respect of the Equator Principles for large industrial and infrastructure projects;
- the implementation of a specific ESG risk assessment framework for its products and services;
- the use of management and monitoring tools for these risks;
- integration of the risk management (RISK) stream as the second line of defence.

The framework of environmental and social risks was expanded in 2018 to meet the French law on the duty of care of parent companies and of companies using sub-contractors (See *Duty of care and Declaration on modern slavery and human trafficking*, section 7.6).

FINANCE AND INVESTMENT POLICIES GOVERNING THE GROUP'S ACTIVITY IN SECTORS WITH SIGNIFICANT ESG ISSUES

BNP Paribas strengthens its carbon risk management

Since 2011, BNP Paribas has made fighting climate change its top priority in terms of environmental commitment. Indeed, the Group's corporate financing activities have an indirect impact on climate change. BNP Paribas supports the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) and tests tools and methodologies enabling it to best assess the exposure of its loans and investments to climate risks (transition and physical). As such, the Group:

- joined the initiative in 2017 driven by **UNEP FI**, which brings together 16 international banks that have committed to developing a common methodology to implement the recommendations of the TCFD;
- participates in **Science Based Target Initiative** (SBTI) working groups, a coalition that include the CDP, the United Nations *Global Compact*, the *World Resources Institute* (WRI) and the WWF, and supports companies willing to set environmental objectives that are in line with the Paris Agreement;
- signed the **Katowice Commitment** in 2018 to contribute direct financial flows towards a low carbon trajectory. The signatory banks commit to develop tools that enable credit portfolios to be aligned with the objectives of the Paris Agreement. This approach will focus primarily on sectors that are significant greenhouse gases emitters.

As such, in 2018, BNP Paribas tested the methodology developed by the "2 Degrees Investing Initiative" think tank. This technology calculates the profile of the credit portfolio at various maturity dates for 5 highly carbon-intensive sectors (fossil energy extraction, electricity generation, transportation, steel and cement). The first tests showed that by using this methodology it could track a significant percentage of clients concerned (over 80%).

The method is adapted for each sector and the reference scenarios used are developed by independent organizations, such as the International Energy Agency. For electricity generation, fossil fuel extraction and automobiles, the approach is based on energy or technological mix. For aviation, cement and steel, carbon emission intensities are analysed. Lastly, for maritime transport, the methodology, which is currently based on a measure related to greenhouse gas emissions, is under review.

The results of this test give an overview of the client portfolio with a reference scenario at a given date and an estimation of what this same portfolio will be in 2023. The compatibility of the credit portfolio with a 2°C scenario will be achieved by dynamic portfolio management and exogenous technological developments.

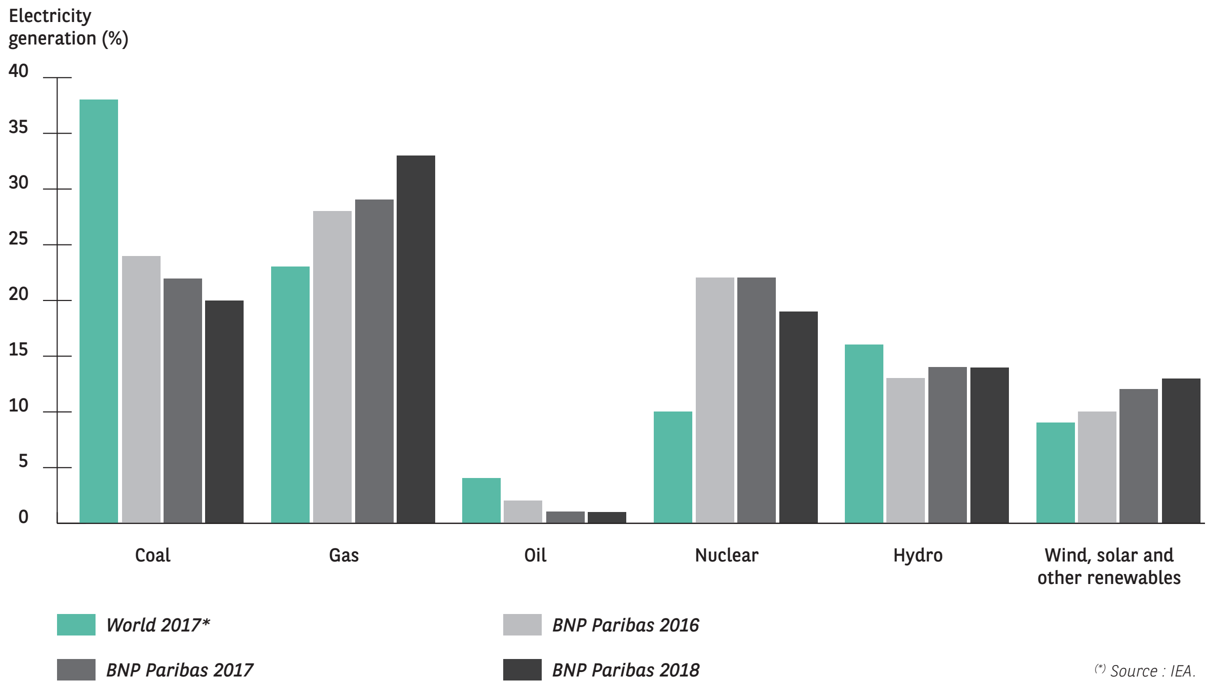
Electricity and energy mixes financed have less carbon than the world mix

In accordance with its commitment to finance the energy sector in line with the 2° C scenario of the International Energy Agency (IEA), BNP Paribas has significantly reduced its support for fossil fuels: coal, unconventional oil and gas.

After making a commitment in 2016 to cease funding coal mining projects, coal-fired power plants, and companies related to these sectors without a diversification strategy, BNP Paribas stopped supporting companies and infrastructure projects whose principal activity is dedicated to the exploration, production and exportation of shale oil, shale gas, tar sands, oil and gas in the Arctic zone. These commitments apply to the Group's existing clients who, as a consequence in some cases, will no longer be supported. For example, 295 companies were placed on the exclusion and monitoring list in 2018 because of the Group's sector-specific energy policies.

These decisions are naturally reflected in the electricity mix and the energy mix that the Group finances. In the context of measuring its indirect emissions (scope 3) BNP Paribas has since 2014 communicated the breakdown of primary energy mixes (fossil fuel extraction) and secondary energy mixes (electricity generation) financed and has committed to ensuring they evolve in line with the 2° C scenario of the IEA.

BNP PARIBAS' ELECTRICITY MIX

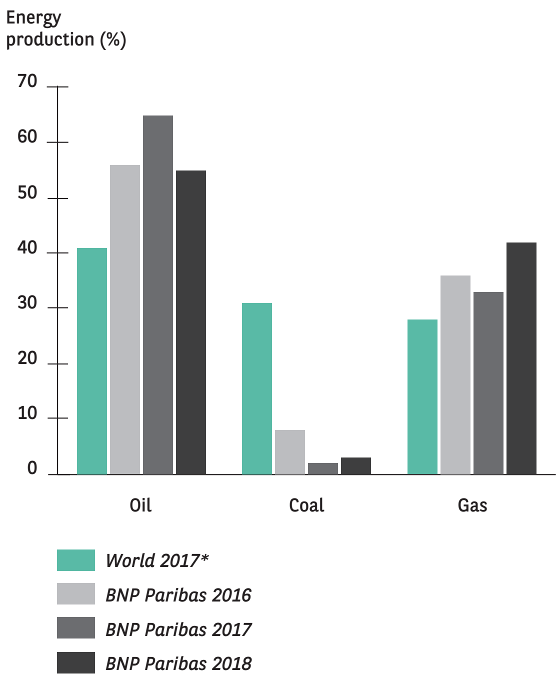


(*) Source : IEA.

With 54% fossil sources (gas, coal and oil) and 27% renewable sources (hydro, wind, photovoltaic and other renewables), **the electricity mix financed by BNP Paribas has a lower average carbon footprint than that of the world mix**, which consisted of 65% fossil sources and 25% renewable sources in 2017, according to the International Energy Agency (IEA). The kWh carbon content financed by the Group is 339g of CO_2, compared with the world average of 484g in 2017 (Source: International Energy Agency).

In line with the Paris Agreement, BNP Paribas is now committed to reducing the kWh carbon content financed as rapidly as the world average is due to fall under the IEA scenario 450 (i.e. 85g of CO_2/kWh by 2040).

BNP PARIBAS' ENERGY MIX (PRIMARY ENERGY) IN 2018



(*) Source : IEA.

Thanks to the implementation of its policy limiting the financing of coal extraction, the primary mix financed by BNP Paribas in 2018 had minimal exposure to this fossil energy (3%), is the largest emitterof greenhouse gas.

7

Strengthening respect for human rights

In 2018, BNP Paribas reinforced its analysis mechanism for stakeholder consultations and consent for projects financing, notably by adopting a general approach to all populations which respects the Free Prior and Informed Consent (FPIC) principle.

Pursuant to the application of the French Duty of care law, the Bank has developed a specific identification approach for its clients in the riskiest activities and located in the riskiest countries in terms of human rights. On this topic, a strengthened dialogue mechanism with these clients is in the deployment phase (See *Duty of care: 2018 BNP Paribas' vigilance plan*, section 7.6).

After revising its sector policy for the defence sector, the Group withdrew from the tobacco sector and became a founding member of the Tobacco-Free Finance Pledge, launched in September 2018. This commitment includes 105 signatories and 38 supporters representing USD 7,000 billion in assets under management, USD 1,890 billion in corporate loans and USD 180 billion in insurance premiums.

Measures to combat deforestation and protect biodiversity

BNP Paribas is committed to fighting deforestation and to protecting biodiversity through several sector policies, including those governing agriculture, palm oil, and wood pulp manufacturing, and through its commitment to several multi-stakeholder initiatives. **In 2018, the Group undertook the following measures to strengthen its commitment:**

- strengthened its criteria in the **palm oil sector** whereby its customers must protect High Carbon Stock (HCS) forests;
- signed the Cerrado Manifesto, a voluntary commitment made by BNP Paribas Asset Management, aimed at preventing **deforestation** in the Brazilian tropical savannah;
- joined act4nature, an initiative launched by the French think tank EpE to promote **biodiversity** (see Commitment 10: *Partnering with our customers in the transition to a low-carbon economy*);
- contributed to the development of the "Global Biodiversity Score" methodology within the context of its participation in the B4B+ business club launched by CDC Biodiversité.

With these measures, along with those begun in previous years, such as Zero Net Deforestation commitment by 2020, the Group has been acknowledged as **one of the leading financial institutions by The Global Canopy Program**, an international forest protection NGO.

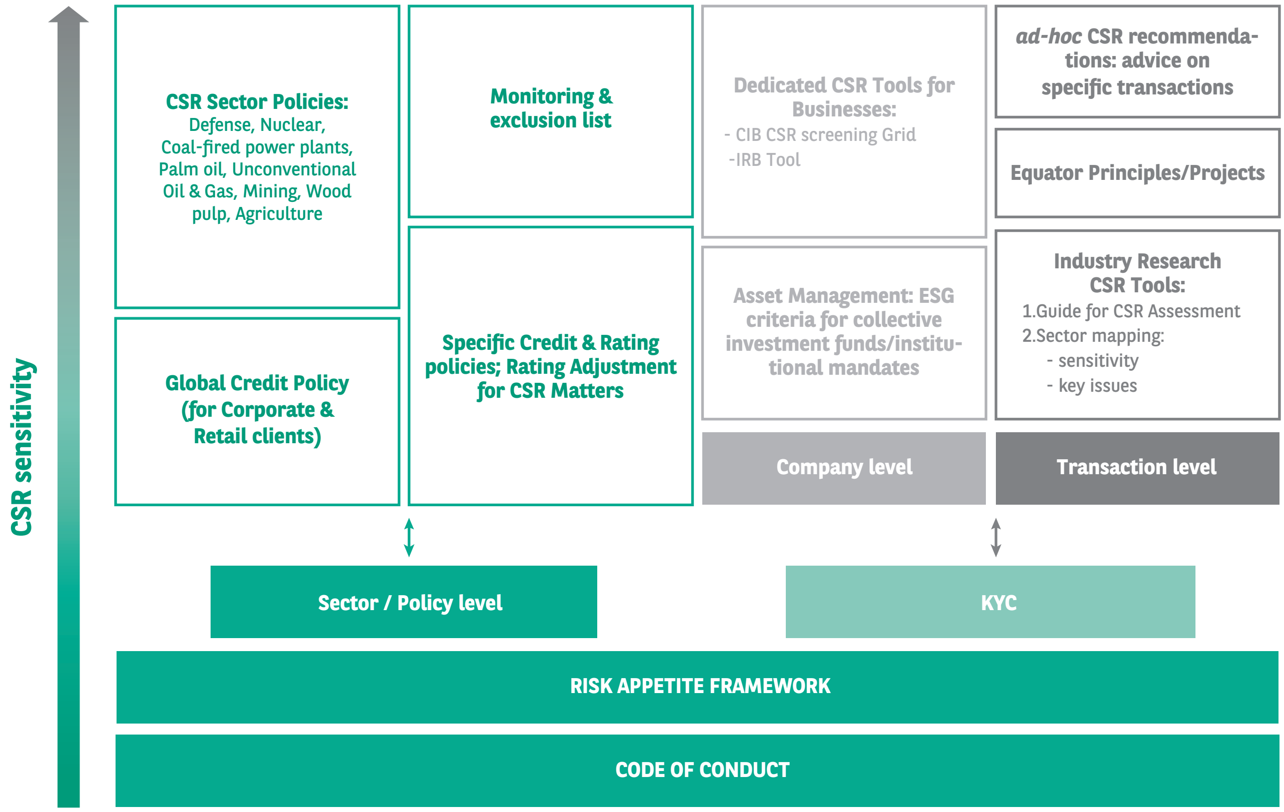
UPHOLDING THE EQUATOR PRINCIPLES ON PROJECT FINANCING

As signatory to the Equator Principles along with 93 other financial institutions worldwide, and in its role as financial service provider and advisor, BNP Paribas works with its customers to identify, assess, and manage the environmental and social risks and impacts linked with major industrial and infrastructure projects. According to these principles, the negative impacts of these projects on communities, ecosystems or the climate must be avoided or minimised, mitigated and/or offset. Projects graded A present significant risks and systematically involve an external review; those graded B present more limited risks; and those graded C present minimal or no risks. Since end-2017, under the initiative of BNP Paribas and 9 other member banks, the Equator Principles Association is reviewing key topics such as social impacts and Human Rights (FPIC – Free Prior and Informed Consent), as well as designated countries and applicable standards. This extensive updating work should be completed in mid-2019 with the publication of the revised version of "EP4".

	2011	2012	2013	2014	2015	2016	2017	2018
Number of transactions concerned in the year	30	13	21	26	17	23	8	17
Number of grade A transactions in the year	5	2	3	6	1	2	1	3
Number of grade B transactions in the year	20	10	13	18	15	21	7	14
Number of grade C transactions in the year	5	1	5	2	1	0	0	0

A COMPREHENSIVE ESG RISK MANAGEMENT SYSTEM FOR PRODUCTS AND SERVICES PROVIDED BY THE GROUP

➤ REINFORCEMENT OF THE GROUP'S ESG RISK MANAGEMENT SYSTEM



In keeping with its ESG risk management system, BNP Paribas includes ESG criteria in its decision-making process, and strengthened its control of these risks in 2018:

- as was the case for the Know Your Client (KYC) process, in 2017, ESG criteria were integrated into 5 specific credit and rating policies, increasing the number of policies containing ESG criteria to 20 at the end of 2018;
- pursuant to the Duty of care law, additional analytical grids are being developed on ESG risk analysis for sectors that are not covered by an ESG risk management system and deemed sensitive, as a supplement to the current mechanism (sector policies, CSR screening).

Since 2012, 29,476 employees received online training on at least one of the Group's financing and investment policies. Classroom-based training sessions have also been enhanced. In 2018, 150 employees in the Risk teams also received training as part of the integration of the Risk stream as the second line of defence in the credit and investment decision-making processes.

Integrating ESG criteria into assets under management

With the double objective of managing risk and investing responsibly, BNP Paribas Asset Management – the BNP Paribas Group's asset management business line – has applied ESG criteria to all its collective investment funds since 2012. These criteria are notably based sector policies and on the UN Global Compact's ten principles in the areas of human rights, labour law, protection of the environment and anti-corruption. As such, BNP Paribas Asset Management maintains the dialogue with companies that are excluded by its responsible investment policy or on a watch list, as well as for its ESG analyses.

In 2018, BNP Paribas Asset Management also:

- committed to measuring its ESG integration progress through the implementation of ESG performance indicators at the portfolio and management company levels;
- signed, on 26 September the **Tobacco-Free Finance Pledge**. As such, the Company has excluded tobacco companies in all of its open-ended funds;
- systematically exercised its **voting rights**, as a shareholder, to promote ESG best practices in companies in which the management company and its clients have invested. In 2018, BNP Paribas Asset Management voted at 1,464 General Meetings on 17,953 resolutions, and abstained from or opposed 22.2% of these resolutions. In accordance with its strategy on climate change, the BNP Paribas Asset Management adapted its voting policy and reserves the right to abstain from approving the financial statements or the discharge of companies that do not sufficiently communicate their CO_2 and 2° C strategy. In 2018, this right to abstain was implemented 16 times;

- engaged in a direct 5-year **dialogue** with 7 of the top 100 companies worldwide with the highest level of greenhouse gas emissions, so that they improve their governance vis-à-vis climate change, and finalised its commitment made in 2017 as a member of the **Climate Action 100+**;
- strengthened the "**Sustainability Centre**" led by Jane Ambachtsheer, the new Director of Sustainable Development and CSR World, the CSR team has appointed a head of climate change research, Mark Lewis. The scope of responsibility of the Head of Governance and commitments made with companies, governments and legislators was broadened with the appointment of a stewardship manager for the Americas zone, who will be shortly joined by a stewardship manager for Asia;
- was again awarded the highest **score**, **A+, by the PRI** (UN Principles for Responsible Investment) for its expertise in terms of sustainable investment and integration of ESG criteria in management.

BNP Paribas Cardif, the Group's insurance subsidiary:

- systematically factors ESG and carbon criteria into its investment and divestment choices. In 2018, the scope of ESG analysis was extended to 80% (versus 58% in 2017) of the assets in the general fund (totalling EUR 112.4 billion at 31 December 2018);
- **promotes the transition to a low-carbon economy** by financing innovative projects. The objective set in 2016 to double green investments within its general euro-denominated funds (green bonds, funds or infrastructure projects involving energy efficiency) by 2020, was reached as early as 2018 with EUR 2.6 billion at the end of December;
- Since 2017, the general fund has applied a tobacco-free investment policy and in 2018 signed the **Tobacco-Free Finance Pledge**.

Integration of ESG criteria into supply chain management

ESG criteria are integrated into the supply chain at various levels in accordance with the Group's Sustainable Sourcing Charter: first, in standard contracts used by the Procurement teams which include a clause on respect for the environment and social practices; and second, in tender offers issued by Group Procurement. Thus, **in 2018, 2,300 supplier ESG assessments** were carried out. Specific questionnaires were created for categories with high environmental or social challenges, such as printing, publishing, temporary work, bank cards and IT services.

In the high or very high risk categories, these questionnaires are now carried out using the ESG risk mapping prepared by AFNOR on the initiative of BNP Paribas and three other banks.

MANAGEMENT AND MONITORING TOOLS FOR ESG RISKS

Monitoring and exclusion lists

To identify the companies presenting the highest environmental and social risks, the Group defines and applies financing and investment policies and manages exclusion and monitoring lists in accordance with the level of identified ESG risks. **At the end of 2018, these lists included 992 companies: 857 were excluded and 135 under monitoring**. Whereas no business relationship whatsoever is allowed with a company on the exclusion list, the companies on the monitoring list are subject to Group measures intended to ensure that they permanently change their practices and reduce their ESG risks. Lastly, BNP Paribas compiled an exclusion list that clearly mentions specific goods and activities the Group does not want to finance. These lists are periodically updated using data supplied by customers and external sources, and by analysing the key controversies involving companies faced with serious violations of environmental standards or human rights.

Transactions handled by the Group's CSR teams

In 2018, the Group's CSR teams were asked to give an expert opinion in the assessment of ESG risks for 1,627 complex or sensitive transactions (financing, new accounts, export support, etc.) compared to 1,251 transactions the previous year.

Share of loans to companies subject to an environmental and social management system which is specific to the sector of activity concerned

In order to manage the gradual deployment of ESG risk management approaches specific to the different sectors, the Group annually monitors the share of corporate loans governed by this system. **In 2018, it was almost unchanged at 55.6%**.

Operational control plan

In order to ensure that ESG risk management tools are strictly applied in all entities and business lines, the Group deployed a CSR operational control plan in 2015. It ascertains that the operational measures put into place at every level are adequate, and initiates a continuous improvement dynamic, necessary for the proper management of ESG risks. Work to update this operational control plan was started to incorporate the new ESG requirements defined by the Group pursuant to the Duty of care law.

7.3 Our social responsibility: developing and engaging our people responsibly

In 2018, the Group signed a global agreement on fundamental rights establishing a common social framework covering 72 countries. Furthermore, in a demonstration of its commitment to equality, BNP Paribas was also announced as one of the Thematic Champions of the UN Women's HeForShe global solidarity movement for gender equality. The Group is continuing its deployment of the 2020 HR Strategy in order to ensure the development of the employees' skills that will be required to meet the business needs of tomorrow. The Group is thus consolidating its three ambitious and proactive commitments:

- Commitment 4: Promotion of diversity and inclusion in the workplace;
- Commitment 5: A "Good place to work" and responsible employment management;
- Commitment 6: A learning company supporting dynamic career management.

PROMOTE EMPLOYEES' FUNDAMENTAL RIGHTS AND EQUAL OPPORTUNITIES WHEREVER THE GROUP OPERATES(1)

2018 marked a decisive turning point in the Group's social responsibility strategy with the signature of a Global agreement on 18 September 2018 with UNI Global Union, the International Trade Union Federation of the service sector. The agreement is in line with the BNP Paribas 2020 Engagement Manifesto and strengthens the Bank's membership of the multi-party international partnership, the Global Deal, which seeks to encourage governments, companies, trade unions and other organisations to make practical commitments to promote more equitable globalisation. This **agreement on fundamental rights and global social framework (Global agreement)** addresses seven topics that all contribute to improving quality of life and working conditions for employees, thereby helping to promote a more equal society and inclusive growth. The concrete, ambitious commitments in this agreement must be applied to all Group employees progressively from 2019 for certain measures and by 2021 at the latest for others. This period is required for subsidiaries to tailor their policies and provide the resources to implement the resulting social improvements in some regions.

In March 2018, Jean-Laurent Bonnafé committed to the United Nations Women to make the Group a Thematic Champion of the "**HeForShe**" movement. This commitment, defined as a priority for the Company, is in line with the UN's Sustainable Development Goals, which BNP Paribas included in its 2020 Engagement Manifesto. Harnessing all our skills and talents to create wealth, regardless of gender, is not only the key to economic success but also a requirement to address the challenges facing our societies.

CONSOLIDATING THE 2020 HR STRATEGY

The 2020 HR transformation strategy, launched in 2017, continued to be deployed this year. It focuses on the employees, their long-term development and engagement in the Group. It intends to better meet employees' expectations and to offer them a smooth and personalised HR experience at all key stages of their career path.

These goals are the rationale behind the design of the new HR interface, "**About Me**", now accessible to approximately 70% of Group employees. **About Me** allows employees to self-assess their skills, build their own personal development plan with their manager and proactively receive personalised job and career development suggestions. In addition, the deployment of positive management, a key factor to manage change, is encouraged, including using continuous feedback, which simplifies the professional evaluation process.

(1) To monitor proper implementation of the measures undertaken, in particular with respect to the three CSR social commitments and their objectives, Group Human Resources compiled a social report, in which human resources from entities in 68 countries responded, representing 95% of Full-Time Equivalent staff (FTEs) managed by the Group at 31 December 2018 (for the fourth consecutive year).

COMMITMENT 4: PROMOTION OF DIVERSITY AND INCLUSION IN THE WORKPLACE

Diversity and inclusion in the workplace continue to be promoted due to initiatives implemented across the whole Group in line with the challenges of the **Global agreement** on fundamental rigths.

WELL-ESTABLISHED DIVERSITY AND INCLUSION POLICIES

Robust diversity and inclusion governance

The Group diversity Committee is composed of 39 members representing the Group's different businesses and its Human Resources Department and meets twice a year. Similar committees exist in the different businesses and countries. The manager in charge of Group diversity and inclusion reports to the Head of Human Resources and is a member of the Company Engagement Committee.

More active employee networks

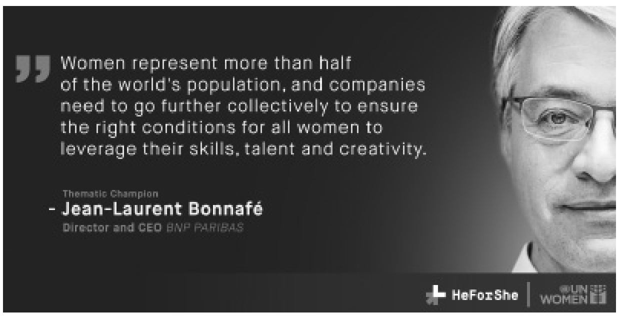
Employee networks continue to grow and strengthen their important role in promoting diversity and inclusion, raising awareness, acting as a conduit for information and a source of innovation.

Thus over 20,000 employees in 19 countries are involved in interacting about topics as varied as gender equality, sexual orientation, inter-generation harmony, parenting, disability, inter-religion harmony and veterans.

Commitment supported by Executive Management

Already deeply involved in the drive to promote solidarity between men and women launched by UN Women in 2014, Jean-Laurent Bonnafé became a "**HeForShe**" Thematic Champion in the spring of 2018. He joins heads of States and industry leaders in both the public and private sectors who have publicly committed to promoting greater gender equality.

"Creating a respectful environment that promotes equal opportunities for all employees is a fundamental prerequisite for an organisation's success. Women represent over half of the world's population, and businesses have to collectively strengthen their actions to empower all women to use their skills, talents, and creativity. It is an essential condition for accelerating economic development that benefits everyone and contributes to a better future."



In the framework of this three-year partnership, BNP Paribas is committed to:

Advancing gender equality internally by beginning to better balance male and female representation in roles that historically had a preponderance of female (HR) or male (Global Markets) employees.

Supporting externally, alongside the United Nations Women, for women entrepreneurs who are working to create and develop renewable energy solutions in Africa.

Promoting diversity and inclusion: a pillar of the "Global Deal" Global agreement

Built around the European agreement on gender equality in the workplace signed in September 2014, the measures guaranteeing equal treatment during recruitment, training and professional development have been extended across all business lines worldwide in the BNP Paribas Group due to the **Global agreement**.

CONTINUED INITIATIVES TO RAISE AWARENESS AND PROVIDE TRAINING TO PROMOTE A CULTURE OF INCLUSIVENESS

Training

Awareness training and/or awareness-raising initiatives to promote diversity and fight discrimination are continuing in 64 countries.

On top of training covering stereotypes and bias in many countries, the Group also rolled out a number of personal development programmes, including "**Active Inclusion**", "**#WomengotTalent**" or "**Women in Business**" to facilitate more inclusive career opportunities in the Group.

Raising awareness among employees and managers

Diversity weeks are organised by Human Resources bringing together thousands of staff around the world. They are the perfect opportunity to spread the message about the Group's commitment to the **HeForShe** programme, using livestreaming, and to launch our "**Reveal yourself**" campaign to highlight role models in an effort to prevent stereotypes from keeping people from their chosen occupation."

For the third year running, BNP Paribas teamed up with the UN International Day for the elimination of violence against women and issued a press release globally outlining the actions and initiatives introduced and the systems in place to better spread the word.

OUTSTANDING INITIATIVES

Gender equality in the workplace and support for women in business

The Group has long been a partner of the Women's Forum and was elected to the strategic Committee in May 2018.

In the United Kingdom, CIB and BNP Paribas Personal Finance signed the "**Women in Finance Charter**" committing to increase the number of women in senior management positions.

BMCI agreed a partnership with "**Women In Africa**" (WIA) offering the first international platform dedicated to the economic development and support of leading and high-potential African women.

BNP PARIBAS Wealth Management and the "**Women Initiative Foundation**" (WIF) organised the 4th "**Women Entrepreneur Program**" at the Stanford Graduate School of Business. 150 women have benefited from this program since its inception.

Promoting the employment and insertion of people with disabilities

➤ NUMBER OF DISABLED EMPLOYEES(*)

	Disabled Employees			of which Recruitment		
	2016	2017	2018	2016	2017	2018
France	1,722	1,893	2,138	80	75	76
Belgium	69	71	71	2	0	1
Italy	836	868	859	7	11	11
Luxembourg	58	57	65	0	0	0
Europe (excluding Domestic Markets)	726	777	812	89	126	108
Rest of the world	133	148	159	28	33	55
TOTAL	**3,544**	**3,810**	**4,104**	**206**	**245**	**251**

(*) Physical headcount taking into account 95% of Group headcount (94% in 2017).

In line with its previous commitments, BNP Paribas' **Global agreement** requires all Group entities to implement one or more of the 10 commitments contained in the **ILO Global Business and Disability Network Charter**, focusing on employability, equal treatment and accessibility. Among the approximately 60 countries legally authorised to record disabled employees, there were 4,104 people with disabilities in 43 countries, i.e., an overall employment rate of 2% (identical to 2017).

In France, within the framework of its 3rd corporate agreement (2016-2019) to promote employment of the disabled, BNP Paribas SA achieved its objective with 55 new hires and 2,161 actions undertaken in 2018 to ensure personnel remain in employment. The employment rate of disabled personnel increased with an employment rate (direct and indirect) of 4.37% (3.8% in 2017). Close to 80 awareness initiatives and training actions were organised, as well as an e-learning module to provide training in digital access at all stages of a project.

Furthermore, BNP Paribas Cardif was recognised for its efforts in this area with the special "**Mission Handicap**" disability award in the "**Deauville Green Awards**" on 20 June 2018. In Poland, BGZ was honoured with the "**Facility without barriers certificate**", a prestigious certification in Poland issued by the Integration Foundation.

Origins and internationalisation

163 different nationalities are present in the Group, with 11 of them represented in the G100. The percentage of different nationalities among expatriate employees has increased steadily: French nationals dropped from 68% to 59% in the 2011-2018 period.

The subject of origin is systematically discussed during diversity weeks, and was a particular focus this year with the question of "**white privilege**".

LGBT+

Paris hosted the "**Gay Games**" for the first time this year from 4 to 12 August 2018. This sporting, cultural and festive event, started in 1982 to celebrate diversity, without discrimination based on gender, age, sexual orientation, sporting achievement or disability, has welcomed this year more than 10,000 participants. BNP Paribas was proud to have the largest delegation of all the main sponsors with 200 or more employees from 15 countries. The Group's employees won 24 medals, 9 of them gold.

In Italy, BNL hosted the second "**Global BNP Paribas LGBT conference**" in Rome.

In the United States, BNP Paribas signed the "**Business Statement for Transgender Equality**" alongside 180 other companies, pledging to stand for equal rights and respect for people who identify as transgender, gender non-binary, or intersex.

Fighting sexism and violence against women

BNP Paribas Personal Finance launched a campaign against sexism both internally and on social media.

The revamped "**RespectU**" app was relaunched by FRB to clarify the regulatory framework, the Bank's commitments and the whistle-blowing alert system.

On 9 November 2018, BNP Paribas and six other large companies launched the European network "**One in Three Women**". By signing the charter, the companies commit to pooling their efforts to create and try ways to combat violence against women.

Parenting and work-life balance

On top of the "family days" and "kids days" set up around the world, BNP Paribas also organised for the sixth consecutive year a parenting week in France.

Generations

For the fourth consecutive year, BNP Paribas took part in the "**One Young World**" annual international summit for the leaders of tomorrow, with a delegation of 40 "**Emerging Leadership**" talents from 15 countries.

In France, the Group contributed to "**PaQte 2021**", an initiative of the French President, and pledged to offer at least 1,500 practical training seats to secondary school students in designated disadvantaged urban areas.

Promoting and complying with the International Labour Organization fundamental conventions on Human Rights

BNP Paribas does not tolerate any form of slavery or human trafficking. In its Code of conduct, the Group has, in particular, committed itself to promoting the respect for human rights in its sphere of influence and to treat in a dignified manner all employers, who owe each other mutual respect.

BNP Paribas carries out an annual review of countries that are high-risk in terms of human rights[(1)]. The Group operates in 26 countries with a worrying situation representing 16% of its total headcount (versus 18.5% in 2017) and no longer operates in any high-risk country. Furthermore, 5 employees in the Group are listed as being under the age of 18 but older than 16 (1 in Brazil, 2 in Germany, 1 in the United States and 1 in the United Kingdom). (For further information, see chapter 7, part 4 – Commitment 8: *Combat social exclusion and support human rights*).

STRONG RESULTS

Regarding gender equality

The Group continues to increase gender equality in key populations[(2)].

Share of women		2017	2018	2020 Objective
Board of directors		7 women out of 14 members, of which 2 elected by employees (41.7% according to the rules set by the Copé-Zimmermann Act).	6 women out of 14 members, of which 1 elected by employees (41.7% according to the rules set by the Copé-Zimmermann Act.[(1)])	-
Executive Committee		10.5% (2/19)	10.5% (2/19)	
G100 (Top 100 executives)		26% with 36% of appointments during the 2012-2017 period	27% with 39% of appointments during the 2014-2018 period	-
Leadership for Change (Top 500)		25%	25%	25%
Senior Management Position[(2)]		27%	28%	30%
Talents – Leaders for Tomorrow	Top	31%	36%	30%
	Advanced	38%	42%	40%
	Emerging	43%	47%	50%

(1) This ratio is calculated by excluding the 2 directors representing employees on the Board.
(2) The Senior Management Position (SMP) or the Group's senior management is comprised of employees in 3,000 positions considered by the Executive Committees of all the Businesses/Operating Entities/Group functions as positions having the most important impact on the strategic, commercial, functional and skills plans.

(1) Source: Verisk Maplecroft (Human Rights Risk Index) identified 8 high-risk countries countries and 97 countries faced with a worrying situation in 2018 (compared with 20 and 87 countries respectively in 2017).

(2) This information complies with the obligations set forth in article L.225-37-4-6 of the French Commercial Code relating to the way in which the company seeks a balanced representation of women and men on the committee created by Executive Management, where applicable, to assist it regularly in the performance of its overall missions and on the results in terms of gender diversity in the top 10% of senior management.

The internal survey (GPS) remains very positive concerning diversity

The GPS results show that employees continue to have a very positive view of the Group's diversity and inclusion policy.

The many initiatives promoting diversity and CSR improve how employees perceive the Group's social responsibility: "management promotes diversity in the workplace"(76%, +1 point, +20 points from 2010); "social and environmental responsibility and responsible bank commitments" (75%, +2 points vs. 2017, +9 points vs. 2013) and "respect for the environment" (82%, +1 point vs. 2017).

External recognition

BNP Paribas' high scores for diversity and gender equality were confirmed in 2018.

In France, the Group was awarded the gender equality label and the diversity label was renewed.

BNP Paribas is also included in gender equality-specific indices such as the **Bloomberg Financial Services Gender Equality Index** (BFGEI) and **Pax Ellevate Women's Index Fund**.

In 2018, BNP Paribas remains second in the Thomson Reuters Index (Global D&I index).

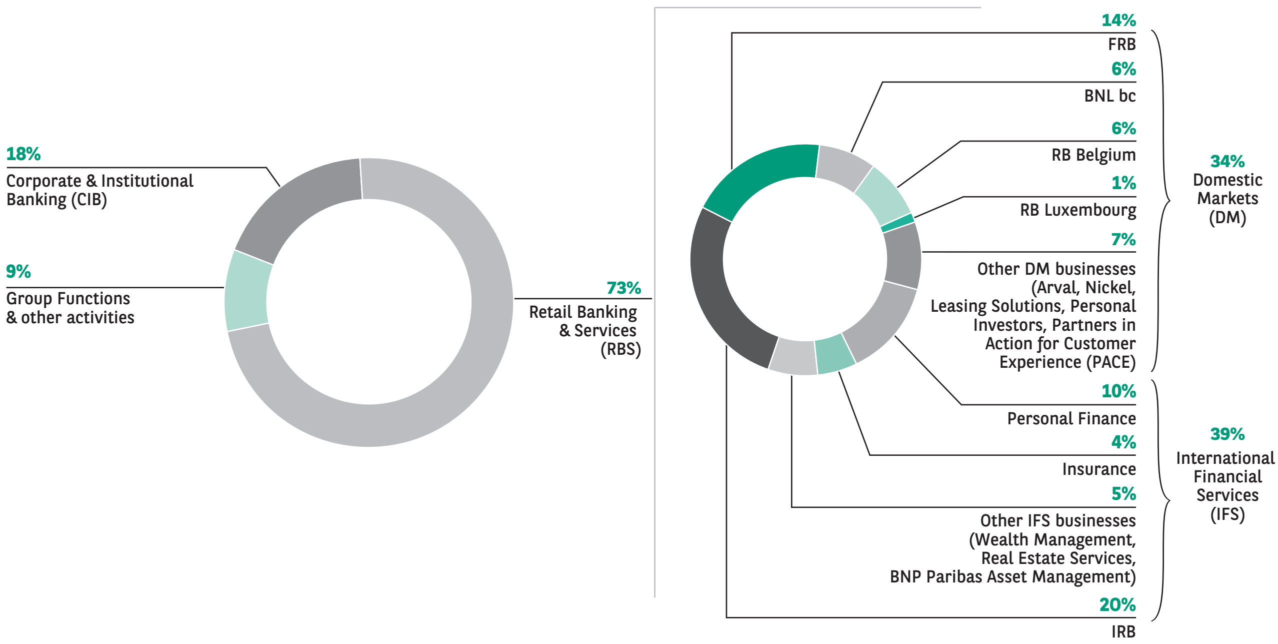
Jean-Laurent Bonnafé was again included on the "FT's Outstanding List" for his actions to promote inclusion of LGBT+ people.

COMMITMENT 5: A "GOOD PLACE TO WORK" AND RESPONSIBLE EMPLOYMENT MANAGEMENT

WORKFORCE EVOLUTION

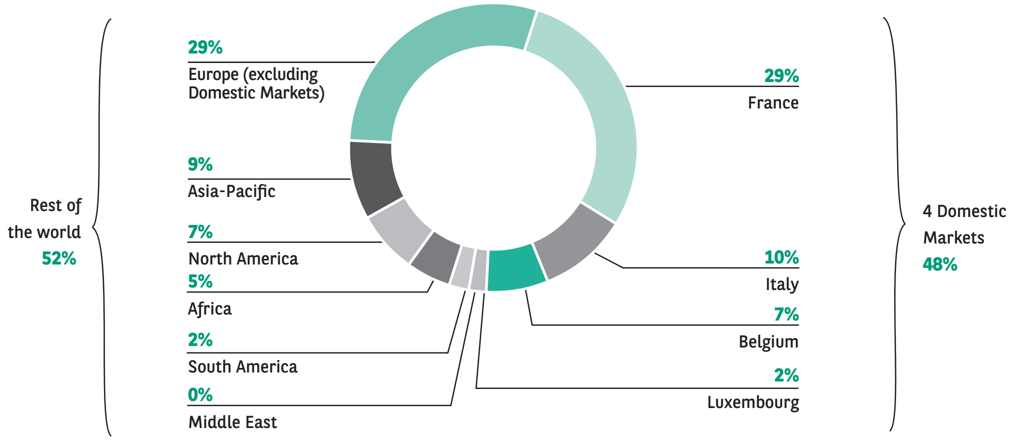
End 2018, the number of employees managed by the Group had reached 202,624 FTE (Full-Time Equivalent – 197,162 financial FTE[1]), up from 2017 (196,128) and 2016 (192,419).

BREAKDOWN OF THE WORKFORCE BY BUSINESS LINE



(1) Financial headcount: Full-time equivalents (FTE) at 31 December 2018 in wholly controlled, fully consolidated entities.

BREAKDOWN OF TOTAL WORKFORCE BY GEOGRAPHICAL AREA

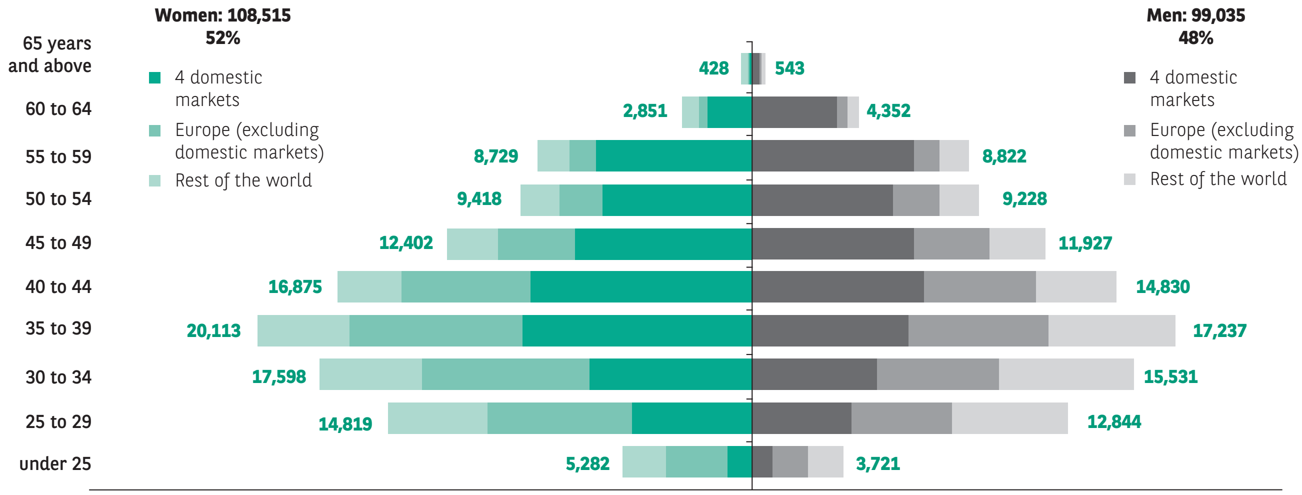


CHANGE IN THE WORKFORCE OVER THE LAST TEN YEARS

	2008	2013	2018		
France	57,990[(*)]	56,794[(*)]	58,372	4 Domestic Markets 95,611	Europe 154,974
Italy	19,397	18,194	19,040		
Belgium	855	17,390	14,514		
Luxembourg	1,445	3,939	3,685		
Europe (excluding Domestic Markets)	46,845	45,185	59,364		
Asia-Pacific	10,173	15,160	18,737		Rest of the world 47,650
North America	15,222	14,734	14,456		
Africa	8,883	9,049	10,027		
South America	3,957	3,512	3,915		
Middle East	2,194	588	516		
TOTAL	**166,961**	**184,545**	**202,624**		**202,624**

(*) Excluding workforce of Laser entities not yet managed by the Group, which would have increased total workforce to 64,217 in 2008.

BREAKDOWN OF GROUP WORKFORCE BY AGE, GENDER AND GEOGRAPHICAL AREA[(1)]



Overall, the age pyramid is balanced. The overall average age remained stable at 40.7 years old and the average length of service decreased slightly (11.7 to 11.4 years).

(1) Physical headcount taking into account total Group financial headcount (permanent and fixed-term contracts).

RECRUITMENT

In 2018, the Group hired over 26,500 people on permanent contracts (+22%) worldwide, including over 4,000 in France. With nearly 60% of hires in Europe (58% in 2017), BNP Paribas confirmed its position as the European reference bank. Even though France once again became the leading recruiting country with 16%, the United States (15%) and India (13%) remained very dynamic, followed by Portugal (6%). The United States and India are markets with a high turnover. At Group level, the turnover[1] was 10.5%. In France, the Group systematically favours internal mobility over external recruitment.

A Group framework to offer employees a personalised recruitment and onboarding experience that delivers on the promise of our Employee Value Proposition

The "**DAY1 Ready to Perform**" programme revamped the onboarding process for new hires from their very first day.

A "**Digital, data & agility**" taskforce was created to better address the businesses' future recruitment challenges and to better coordinate and strengthen our initiatives in this area. In Italy, BNP Paribas partnered with Bocconi University last year to establish the "**BNP Paribas Chair in Service Marketing and Analytics**".

The partnership with the ESSEC "**Digital Disruption Chair**" has been renewed for a further three years. To date, the programme counts a little over 60 alumni, 10 of whom have joined the Group, some through the Digital Path, one of the Graduate Programs for young graduates.

To raise the profile of career opportunities in the fields of digital and innovation with talented young people, the Group organised a number of "**Learning Expeditions**" to colleges, such as la Bocconi and ESADE in Italy and Spain.

BNP Paribas was awarded the **Top Employer Europe certification** for the fifth consecutive year in seven countries: Belgium, France, Italy, Luxembourg, Poland, Turkey and Spain. Employees appreciate the strong corporate culture, the support to develop their talents and the diverse range of career paths. Other entities were also recognised as the "Top Employer" in their country, such as RCS in South Africa.

The Group attracts applicants through good visibility on social media. With over 500,000 followers on LinkedIn, the Group ranks seventh in the LinkedIn 2018 Top Companies France ranking.

BNP Paribas France launched Job Preview this year: a new platform to connect our employees and applicants. The initiative promotes discussion and offers direct contact so that applicants gain insight into the Group.

CHANGES IN HEADCOUNT

➤ CHANGES IN HEADCOUNT: NEW HIRES OF PERMANENT CONTRACTS AND GEOGRAPHICAL DISTRIBUTION[(1)]

	Men	Women	2017 Total	Men	Women	2018 Total
TOTAL	**10,784**	**11,137**	**21,921**	**13,450**	**13,306**	**26,756**
Domestic Markets	51%	49%	4,527	52%	48%	5,971
Europe (excluding Domestic Markets)	44%	56%	8,287	44%	56%	9,938
Rest of the world	53%	47%	9,107	69%	31%	15,909
TOTAL	**49%**	**51%**	**21,921**	**50%**	**50%**	**26,756**

(1) Physical headcount (Total in FTE on permanent contracts = 26,358).

➤ CHANGES IN HEADCOUNT: REASONS FOR EMPLOYEES WITH PERMANENT CONTRACTS LEAVING THE GROUP[(1)]

	Men	Women	2017 Total	Men	Women	2018 Total
Retirement/early retirement	1,320	1,306	2,626	1,206	1,184	2,390
Resignation	5,602	6,200	11,802	6,759	6,944	13,703
Dismissals[(2)]	1,169	1,218	2,387	1,002	1,081	2,083
Mutually agreed departures and equivalent	433	781	1,214	572	917	1,489
Assisted departure plans	414	360	774	400	371	771
Other terminations of permanent contracts (unspecified, end of trial period, death)	1,162	1,386	2,548	1,250	1,579	2,033
TOTAL	**10,100**	**11,251**	**21,351**	**11,189**	**12,076**	**23,265**

(1) Physical headcount (Total in FTE on permanent contracts = 22,529).
(2) In France, the grounds for the 567 dismissals (416 in 2017) were professional failings, unsuitability and misconduct.

(1) Method used (Employees in FTE (permanent contracts) definitively leaving during the year N)/(FTE headcount present at 31/12 in the year N-1 + Hires of employees in FTE during the year N) – permanent contract employees only.

ORGANISATION OF WORKING HOURS

➤ TYPE OF CONTRACT[(1)]

	Men	Women	2017 Total	%	Men	Women	2018 Total	%
Number of permanent contracts	91,876	96,801	188,677	96%	95,293	99,611	194,886	96%
Number of fixed-term contracts	2,725	4,726	7,451	4%	2,854	4,887	7,739	4%
TOTAL	**94,602**	**101,527**	**196,128**	**100%**	**98,147**	**104,498**	**202,624**	**100%**

(1) Full-Time Equivalent.

➤ PART-TIME[(1)]

	Men	Women	2017 Total	%	Men	Women	2018 Total	%
Number of part-time employees	2,322	15,304	17,626		2,746	15,287	18,033	
Of which part-time employees working 80% or more	1,346	10,084	11,430	65%	1,457	10,076	11,533	64%
% of part-time employees	2%	15%		9%	3%	14%		9%
% of part-time employees by gender	13%	87%			15%	85%		

(1) Physical headcount taking into account 98% of Group headcount.

QUALITY SOCIAL DIALOGUE

BNP Paribas promotes effective social dialogue, particularly on employment issues, prioritising internal mobility and confirming the Group's commitment to responsible social management. This context led to the signature of the **Global agreement**, based on three previous European agreements, on employment, gender equality in the workplace and stress prevention.

In Europe

At end 2018, the European Works Council covered 22 countries and more than 67% of the total workforce.

In 2018, the European Works Council was involved in monitoring the European agreements signed by the Group and actively contributed to the negotiation of the **Global agreement** through its delegation.

Worldwide

The Global agreement is a collective social framework focused on the following seven topics:

- human rights, social dialogue and trade union rights, reiterating the BNP Paribas commitment to internationally recognised standards and to strengthening employees' awareness and training;
- corporate social responsibility, underlining the Group's ambition to contribute to a more sustainable and fairly shared growth;
- employment management and change management, confirming the Group's wish to support staff as its skills requirements change through its HR 2020 strategy and and to give priority to voluntary-based solutions in the event of organisational change;
- gender equality in the workplace;
- promoting diversity and inclusion to continue to implement the Group policies worldwide;
- preventing and combatting psychological and sexual harassment;
- health and quality of life at work, with at least 14 weeks of paid maternity leave for all employees, life insurance, incapacity/disability insurance and a health insurance scheme taking into account the regulatory framework.

These measures will be phased in during 2019 and 2020. An annual follow-up will be carried out through a monitoring committee including representatives of Executive Management, the UNI Global Union and the European Works Council Secretariat.

A forum for discussion and collective agreements

➤ NUMBER OF COLLECTIVE AGREEMENTS SIGNED

	Collective agreements		
	2016	2017	2018
France	149	111	114
Belgium	10	11	7
Italy	71	54	48
Luxembourg	-	-	0
Europe	51	84	94
Rest of the world	15	11	24
TOTAL	**296**	**271**	**287**

Employment management

BNP Paribas is the top European bank in the **Vigeo Eiris** 2018 ranking. The Group's overall corporate social responsibility performance improved this year. Vigeo said: "The bank is strengthening our assurance in its willingness and capacity to develop this strategic asset, the cohesion of its human capital [(1)]".

Given the current profound disruption in the banking industry, strengthening employability is one of the key issues addressed by the HR 2020 strategy through improved knowledge of the skills needed for the jobs of the future, through *ad hoc* development programmes and the promotion of a strong and agile digital culture.

Under the European agreement on employment management, signed in 2012 and automatically renewed, the following principles are rigorously applied:

- anticipate as much as possible the structural and organisational adjustments made necessary by the adaptation of the Group's entities, and provide regular updates to employee representatives;
- use best efforts to avoid forced redundancies in the event of organisational changes with significant consequences on employment through the use, in particular, of natural turnover, mobility and voluntary departure solutions.

After the merger with Raiffeisen at the end of 2018 in Poland, an agreement on the measures to be included in the social plan that affected 2,200 jobs was negotiated and signed with all the trade unions.

LISTENING TO EMPLOYEES THROUGH THE GLOBAL PEOPLE SURVEY (GPS)

77% of employees responded to the 2018 survey and the results were stable overall. For the Group as a whole, we focused on three priorities: employee engagement, customer focus and efficiency. They are the keys to our collective and successful performance. The detailed results were sent to each entity and nearly 6,700 reports/links were sent to managers to help implement new actions to continue BNP Paribas' transformation. In this context, a majority of employees keeps an optimistic view of BNP Paribas' future. 76% believe that it "will improve or remain stable" (versus 75% in 2017).

A COMPETITIVE COMPENSATION POLICY

The Group's compensation policy is founded upon principles of fairness and transparency, which are notably supported by a single annual review of the compensation paid to all employees. The principles on the composition of compensation and its evolution are common throughout the Group and consistent with the objectives of risk management.

➤ AVERAGE YEARLY COMPENSATION[(1)]

	2016	2017	2018	Change 2017/2016 in %	Change 2018/2017 in %
France[(2)]	€53,458	€54,386	€56,145	+1.73%	+3.23%
Belgium (BNP Paribas Fortis)	€70,277	€71,970	€74,833	+2.41%	+2.41%
Italy (BNL SpA)	€51,689	€52,099	€52,975	+0.79%	+1.68%
Luxembourg	€78,621	€80,660	€83,703	+2.59%	+3.77%

(1) Gross data for workforce with over two years' seniority, excluding executive managers (G100), paid at 31/12 excluding employers' contributions, but including fixed salary, sales incentives and variable compensation paid throughout the year, excluding deferred payments, and profit-sharing plans.

(2) All entities excluding BNP Paribas Real Estate Services, on a 35-hour work week.

(1) Study published on 25 September 2018, http://www.vigeo-eiris.com/vigeo-eiris-upgrades-bnp-paribas-rating-on-human-rights-in-the-workplace/.

A compensation policy aligned with regulatory changes[(1)]

The Group's compensation policy, applicable to all branches and subsidiaries, including those outside the European Union, aims to ensure consistency between the behaviour of employees whose professional activities have a significant impact on the Group's risk profile and the Group's long-term objectives, particularly in terms of risk management. Since 2009, the implementation of this policy has contributed to:

- strengthening governance (with the involvement of the control functions, the Executive Management and the Compensation Committee of the Board of directors);
- identifying employees qualified as Material Risk Takers (MRT);
- taking into account, in the allocation of their annual variable compensation, their behaviour with regard to the Group's principles, whether this is their "compliance with the Code of conduct, rules and regulations", or their contribution to the "assessment and control of risks";
- deferring a significant fraction of their variable compensation over at least three years (from 40 to 60% deferred for the highest compensation);
- indexing a portion of their variable compensation (over 50% for 2018 allocations in respect of 2017) to the performance of the share and the Group, in order to align the interests of the beneficiaries with those of the shareholders and BNP Paribas;
- linking deferred payment at each due date to the achievement of performance and behavioural conditions, the non-compliance with which may result in the partial or total loss of the annual portion ("malus" system).

Information on the compensation policy and on compensation practices as well as quantitative information on the compensation of Group MRT employees in respect of 2018 will be published in a report that will be posted on the BNP Paribas website (http://invest.bnpparibas.com) before the General Meeting of 23 May 2019.

The compensation policy also complies with applicable regulations, notably (i) regulations in relation to customer protection (MiFID II[(2)] or European Banking Authority guidelines on compensation practices in relation to the sale of Retail Banking products) for employees working directly or indirectly with customers, (ii) sector-specific provisions (asset management with AIFMD and UCITS, and insurance with Solvency), or (iii) business-specific regulations with the application of the provisions of French banking law and the Volcker rule applicable to market participants.

It complies with the laws and regulations in force, including those that might exist on minimum wages, which can be used to compensate employees according to their level of experience, expertise and market practices.

A competitive and fair compensation policy

In 2018, for retention purposes, the Group awarded for the 6th consecutive year to over 6,750 key employees[(3)] a three-year retention plan (maturing in June 2021), known as the **Group Sustainability and Incentive Scheme (GSIS)** of which 20% of the initial allocation is related to the Group's CSR performance, while the rest is indexed to its operational performance. CSR performance is based on nine objectives reflecting the four pillars of the Group's governance and CSR policy[(4)].

Since 2016, a new monitoring indicator on the consistency of compensation granted to men and women has been included in the annual compensation review process, for all the Group's businesses and functions. For a number of years, measures may also be taken locally to reduce any pay gap between men and women. In 2018, BNP Paribas SA set aside a EUR 5 million budget[(5)] to address any possible gender differences in annual compensation. In addition, the budget provided by subsidiaries in France increased to around EUR 1.3 million.

In France, the Group associates employees with its performance as part of profit-sharing and incentive mechanisms. For 2018, EUR 147 million will be distributed to the estimated 67,269 beneficiaries of entities that are members of the Group profit-sharing agreement (compared with EUR 153 million to 67,355 beneficiaries in 2017).

In addition, BNP Paribas SA and almost all of the Group's entities in France have established an incentive agreement specific to their business. To that end, EUR 117 million will be allocated to approximately 45,746 beneficiaries of BNP Paribas SA for 2018 (compared with EUR 124 million for 46,206 beneficiaries in 2017). The amounts to be paid for 2018 with respect to the incentive agreements put in place in the subsidiaries will be known at the end of the first quarter of 2019.

Social benefits relating to retirement and savings

In France, the Group supports employees' voluntary saving efforts with an employer's contribution to savings and retirement plans, totalling EUR 71 million in 2018 (EUR 72 million in 2017). It offers a mandatory mutualised health plan to employees and a protection insurance system that allows employees to adjust their level of protection according to their personal situation.

For **BNP Paribas SA,** the incentive agreement signed for a three-year period in 2016 has three components, with one relating to CSR based on paper consumption per employee, with a target already met in 2017. In accordance with the government scheme, BNP Paribas SA decided in December 2018 to pay a one-off EUR 1,000 bonus to all employees earning total compensation of less than three times the minimum wage in France (the SMIC), for a total amount of around EUR 24 million. At **BNP Paribas Fortis in Belgium**, part of the variable compensation known as "collective" compensation is linked to Sustainable Development Goals such as customer satisfaction, promoting diversity, improvement of well-being in the workplace, risk awareness and compliance and the reduction of the Bank's negative impact on the environment. The 2018 objectives

(1) European Directive CRD 4 of 26 June 2013, as transposed into French law in the French Monetary and Financial Code, as well as Delegated Regulation 604/2014 on the criteria for identifying risk-taking employees (MRTs) and the European Banking Authority guidelines on sound compensation policies of 27 June 2016.

(2) Markets in Financial Instruments Directive.

(3) Key employees: senior managers, high-potential employees or key local resources.

(4) For the 2015 plan, payable in 2018, 8 of the 9 CSR criteria having been achieved, the corresponding fractions of the initial allocation have been maintained and paid to the plan beneficiaries.

(5) The entities can freely allocate this total amount to fixed or variable compensation.

were met, and a total of EUR 24.1 million was paid to all employees. In **Luxembourg**, the Bank paid non-managerial employees an incentive premium with respect to 2017, which amounted to nearly EUR 3.6 million.

At end-2018, the percentage of capital held directly or indirectly by Group employees was estimated at 3.52% (4.0% at end 2017).

FOCUS ON PEOPLE

Working conditions

Since 2015, BNP Paribas SA has successfully rolled out new flex office workplaces and the option of working remotely, as part of a consensus approach working with employees, the social partners and occupational health services.

In France, more than 12,000 employees work in flex offices, and 9,000 opted to work remotely on a regular basis.

Health and safety conditions at work

The **Global agreement** states that all BNP Paribas Group businesses/countries must establish a healthcare plan for its entity for all employees that covers health expenses (medicines, medical consultations, hospitalisation, etc.). In accordance with its regulatory environment, each business/country determines what coverage is provided, the specific applicability conditions and the terms of financing. These provisions must be in place by the expiry date of the **Global agreement** (i.e., 1st June 2021) with the goal to anticipate the deployment of these measures by 31st December 2020.

The Group has an **international partnership with ISOS** on health and safety, to provide support to employees on business or private trips. Should a traumatic incident occur (such as a terrorist attack or an earthquake) in any country, ISOS will provide 24/7 telephone support.

The European agreement on preventing stress in the workplace, signed in January 2017, defines the principles and common framework to implement (information, awareness-raising, evaluation, training, support, communication). In general, almost all of the Group's entities have initiatives and awareness-raising programmes on the themes of health and safety at work.

The Group signed the **Cancer and Employment Charter**, intended to improve employee support and care and help them return to work, reorganising workstations where necessary.

Prevention of occupational risks

In **42** countries (**75%** of the workforce), entities have taken steps to improve the work environment, prevent occupational risks or promote assessment of musculoskeletal or ergonomic risks. **In France**, all employees benefit from medico-social follow-up, either via an internal service (18 doctors, 37 nurses and some 40 social workers) or via external inter-company services.

Prevention of work-related stress

Programmes addressing work-related stress have been stepped up in practically all our locations, for managers or open to all employees. Listening sessions for employees are also widely available, internally or externally, by telephone or face-to-face.

In France, an individual stress assessment is systematically offered to employees during their medical visits. This is supplemented by the **Greenpulse** measurement tool focused on quality of life at work and stress, which is available online for all employees. The response rate for the first campaign was 60%. Employees in difficulty can also avail themselves of the 24/7 **Care** line and can make an appointment with medico-social services. This year, a **Guide on professional exhaustion** was added to our prevention materials. All employees in France must take the compulsory e-learning module on psycho-social risks..

Public health issues

In **47** countries (**57%** of the workforce), entities improved or developed awareness-raising campaigns on health and nutrition. Free flu vaccination programmes are offered in several countries (**Germany, Japan, Russia**). In **South Africa**, **RCS** has an AIDS awareness-raising policy. In Gabon, a uterine cancer screening programme was set up.

In 25 countries, entities developed initiatives to support employees suffering from addictions (**South Africa, Germany, Belgium, Brazil, Canada, Spain, United States, France, Ireland, Luxembourg, United Kingdom, Turkey, Taiwan, etc.**).

In France, the Group continues to screen for occupational and, more generally, public health risks, including cardiovascular problems and diabetes, and carries out blood donor campaigns and flu vaccination campaigns.

Healthy eating workshops were offered for the first time in 2018.

Information sessions on a range of health-related themes are organised in the Group. Awareness campaigns were rolled over this year: "No-smoking month", "Well-being" and "Quality of life at work" weeks with information stands (smoking, ergonomics, sleep apnoea). The Group also offers First Aid training, brief sessions on "Gestures that Save Lives" and flex office training for employees.

Harassment and violence at work

The update to the Code of conduct in 2016 strengthens the Group's commitment to combatting harassment, including sexual harassment. The Human Resources Department also introduced an internal procedure on how to deal with reports of harassment. Under the **Global agreement**, this will be implemented in all Group entities, together with measures to support victims. In 2018, penalties were imposed on the grounds of sexual harassment and/or sexism (including 20 cases in France for BNP Paribas SA which led to 2 dismissals for serious misconduct, 1 demotion, 3 reprimands, 3 warnings and 7 reminder letters).

Absenteeism and work-related accidents

The Group's absenteeism rate[1], calculated on 57 countries, was 3.2% (identical in 2017, calculated on 67 countries), plus 2.5% for maternity/paternity[2] leave (2.3% in 2017).

	2017		2018	
	Absenteeism rate	Maternity/ Paternity	Absenteeism rate	Maternity/ Paternity
France	5.0%	2.0%	5.1%	1.9%
Belgium	4.4%	0.9%	4.8%	1.2%
Italy	3.1%	1.6%	3.4%	2.2%
Luxembourg	2.5%	1.2%	2.9%	1.2%
Europe (excluding Domestic Markets)	3.0%	4.7%	2.9%	4.7%
Rest of the world	1.2%	0.8%	1.2%	0.9%
TOTAL	**3.2%**	**2.3%**	**3.2%**	**2.5%**

About 1,000 work-related or commuting accidents were reported in 2018, none of which was lethal.

Social benefits relating to protection benefits and retirement

In addition to the legal and agreement-based provisions, according to the regulations and practices of the countries in which the Group operates, employees can benefit from complementary social security insurance covering their health costs and those of their families. Furthermore, they also generally benefit from defined contribution pension plans (see *Financial statements*, note 7 – *Salaries and employee benefits*), which enable them to build up capital during their professional life for their supplementary pension (in addition to any pensions paid by compulsory local plans), and to collective incentive plans designed to associate them with collective performance. The **Global agreement** states that, by the end of 2020, all BNP Paribas Group employees have death and disability insurance regardless of cause, except as provided in the policy. In accordance with its regulatory environment, each business/ country determines what coverage is provided, the specific applicability conditions and the terms of financing. These provisions must be in place by the expiry date of the **Global agreement** (i.e., 1st June 2021) with the goal to anticipate the deployment of these measures by 31st December 2020.

It also offers flexible employee benefits, enabling employees to select, to a certain extent, their level of coverage from a range of benefits offered aiming at long-term employability and offering sustainable choices. These benefits are notably available at **BNL** in Italy, at **BNP Paribas Fortis** in **Belgium** and in the **United Kingdom** since 2017.

(1) The absenteeism rate includes illness, work-related accidents and occupational illness, excluding travel and other authorised absences. For the first time, it was calculated taking into account the method used locally by each entity, weighted in relation to headcount.

(2) The maternity/paternity rate includes maternity and paternity leaves as well as for adoption.

COMMITMENT 6: A LEARNING COMPANY SUPPORTING DYNAMIC CAREER MANAGEMENT

The will to create an environment that is conducive to employees' development also depends on the Group's ability to create, for each of them, a variety of opportunities.

The 2018 objective for commitment 6: the percentage of employees reporting that they were trained at least once over the past 12 months was set at 90%[(1)]. This rate, which has been steadily increasing since 2015 (when it was 74%), reached 88% in 2018, slightly below the target.

MANAGING CAREER PATHS

Develop skills and improve employability

The Group is committed to supporting its employees in the direction of the jobs of the future. The diverse offer is increasingly focused on digital. BNP Paribas has its own campuses, training centres and academies.

Update on the "Leaders for Tomorrow" Talents programme

As part of its transformation process, by the end of 2015 the Group launched the "**Leaders for Tomorrow**" initiative, aimed at identifying, developing and promoting high potential employees in order to ensure succession planning for the Group's cross-functional Executive Committees for Businesses, Functions and Regions (Top 500 LfC)[(2)].

These "Leadership Talents" have been identified by their managers and HR supervisors at the business lines/functions on the basis of "leadership profiles" or of their skills, experience, motivations and personal preferences, which are key elements for a successful transformation.

By the end of 2018, nearly 6 500 "Talents" belonging to three different levels (Emerging, Advanced or Top) had been identified and will benefit from specific support and development mechanisms at business, country and corporate level.

In the past year, more than 950 Talents of around 40 nationalities from all the business lines/functions participated in Corporate events (mentoring, skills sponsorship, seminars, Personal Development Plan training sessions), in addition to initiatives offered locally or by Business or Function.

TRAINING POLICY

Forging and strengthening the Group's corporate culture

Group campuses, training centres and academies

As in 2017, the **Louveciennes Campus**[(3)] hosted around **40,000** people. Construction work continued to add services such as a business centre and outside area to hold meetings in the open air.

At the **Singapore Campus**, the objective of digitisation (webinars, online platforms, virtual reality) was achieved with a growth in the number of employees trained in their entities in Asia, and 3,985 employees in 198 recurring training programmes.

A number of innovative paths were designed and rolled out **in Africa**, such as the professional certification "**Professional qualifying Scheme**" *("Parcours qualifiant Pro")*. The **BICI Academy** (regional training centre) is one of the leading cooperative training structures in sub-Saharan Africa helping employees to tackle the challenges of the changes ushered in – by new technologies especially.

The **Leadership & Management Academy** is a cross-functional initiative that aims at disseminating strategic managerial communication and internal and external approaches to current topics, and offers workshops for managers to develop a vision and leadership skills.

(1) Source: 2018 GPS over the scope of employees present in the Company at the time of the annual survey (15 May to 5 June 2018). 77% of respondents out of the 182,595 employees consulted

(2) Leadership for Change : 500 members of the cross-divisional Executive Committees of the Group.

(3) In France.

TRAINING: TOTAL NUMBER OF HOURS AND EMPLOYEES(1)

	2016	2017	2018
Total number of employees trained	188,759	196,912	203,426
Total number of training hours	5,370,853	4,972,231	4,843,539

(1) Source: My Learning reporting tools (for almost all countries/entities) and social reporting campaign (Bank of the West); this includes 100% of the physical headcount of fixed-term and permanent contracts in the Group in 72 countries (99% in 72 countries in 2017), even though other employees (apprentices, professional contracts, vocational contracts, casual workers, interns) also benefit from training.

With an average of approximatively 24 hours of training per employee and per year, alternative formats (videos, quizzes and e-learning) continue to grow and now represent 89% of training. Mandatory training covers sanctions, embargoes, fraud, anti-money laundering and corruption.

There is a sharp increase in training on "Business line & functions" (+9 points) reflecting the digital transformation of businesses and the need to upskill personnel as a result.

TRAINING: OVERVIEW BY METHOD AND CONTENT(1)

	Training method(2)			Training content(3)			
	Classroom based	E-learning	Other formats	Business techniques & functions	Risks & compliance	Culture & awareness of the Group and its entities	Individual skills & management
France	13%	75%	12%	56%	25%	10%	8%
Belgium	15%	81%	4%	32%	47%	13%	7%
Italy	5%	57%	38%	46%	15%	24%	3%
Luxembourg	33%	65%	2%	46%	41%	5%	6%
Europe (excluding Domestic Markets)	11%	72%	17%	31%	45%	13%	8%
Rest of the world	14%	77%	9%	20%	50%	16%	7%
TOTAL	**11%**	**69%**	**20%**	**41%**	**32%**	**15%**	**6%**

(1) Source: My Development; physical headcount taking into account 95% (94% in 2017) (permanent and fixed-term contracts).
(2) % interns per method out of the total number of training sessions.
(3) % interns per subject out of the total number of training sessions. An employee/beneficiary may attend several training sessions. The total is less than 100% since undetermined training sessions are not included in the report.

A dynamic offer to better develop the skills of the future

BNP Paribas identified future skills needs with the business lines and founded the **Digital, Data & Agile Academy** in 2018. 149 employees have already attended technical courses to top up their skills or retrain and obtain qualifications.

BNP Paribas Personal Finance set up "Upskilling 2.0" for web developers, combining classroom learning and practical training. One of the programmes developed by Cardif is "**Skills Up**" for employees to hone their existing skill set or add new skills to prepare them for roles in data design and UX execution. The integrated "Legal" Function was also on the front foot with an innovative "**Digital Legal Skills Centre"** (**DLC2**) that will help legal experts address the challenges of digital transformation in their profession.

The Group diversified its employee development sources, with the opportunity for personnel to take part in internal (BNP Paribas International Hackathon, TEB Hackathon) or external hackathons, as well as "Learning Expeditions".

Learning to work differently

Positive management was the theme for several internal campaigns, and was introduced in different forms in some entities. Trust, empowerment and recognition are the key words of this new managerial approach as the Group refashions its culture to become more multidisciplinary, collaborative and open.

Intrapreneurship(1)

Intrapreneurship helps to develop skills and drive the transformation of business models, as demonstrated by the **People'sLab4Good Corporate Engagement** programme to fully support **100% positive impact projects**. The 2018 campaign gathered 15 intrapreneurs from France, Switzerland, Luxembourg and Ivory Coast. Nine projects were organised in the business lines.

Other initiatives are being continued such as the IFS "**Bivwak**" programme, "**TIZ**" in Luxembourg and the "**TEB intrapreneurship program**" in Turkey.

Lastly, Bank of the West developed the Leap program which resulted in a team of 5 finalists being chosen to spend 4 months in San Francisco, to develop MentorConnect, a specific employee platform to encourage mentoring.

(1) An intrapreneur is an employee who develops, in-house, an entrepreneurial project with the agreement and support of the company.

Corporate volunteering work and other Group solidarity activities

BNP Paribas' desire to contribute to society (NGO, associations) by sharing the skills of volunteer employees is reflected in the **Global agreement**, which sets a Group worldwide target by 2020 of 1 million solidarity hours, equivalent to a little more than half a day of volunteering per employee per year, fully paid.

In **France**, BNP Paribas Personal Finance, Leasing Solutions, Asset Management, Arbitrage and Arval set up, in 2017, similar arrangements to those of BNP Paribas SA, which included a section dedicated to the **sponsorship of skills** for employees at the end of their careers in the Generations Contract agreement of 2016. In 2018, 105 employees (78 who started during the year) were able to participate in work with non-profit organisations lasting 6 to 24 months.

Other solidarity actions are also multiplying across the Group, such as *pro bono*(1) work, community team-building initiatives, or CSR days. Thus, more than 20 000 employees stated that they had been involved in solidarity initiatives totalling over 300 000 hours, either during working hours or outside of working hours with compensatory leave.

MOBILITY

There were 5,989 transfers between entities and business lines(2) in 2018, an increase of 8.65% (5,512(3) in 2017). They stood at 2,798 in France (+3% compared to 2017).

The Group mobility policy is a pillar of our HR 2020 transformation plan and is not only a key factor in hiring and retaining the best talents, but is also central to our Employee Value Proposition.

The three main challenges of mobility are:

- the development of the Company, mobility being a preferred way of adapting resources to changing employment needs and skills;
- individual development, allowing employees to develop their skills and build a motivating career path;
- social responsibility by contributing to responsible employment management.

For the fifth consecutive year, "**Mobility Days**" organised over three weeks in **40** countries involved around **10,000** employees. A Snapchat campaign around the "jobs of the future" was launched to promote roles in digital and data. In France, an interactive game aimed to introduce staff to future banking roles.

TOTAL NUMBER OF POSTS PUBLISHED AND POSTS FILLED INTERNALLY

	2017			2018		
	Estimated number of posts published	Posts filled internally	% posts filled/internally	Estimated number of posts published	Posts filled internally	% posts filled/internally
France	5,796	2,422	42%	4,945	1,646	33%
Belgium	1,080	954	88%	1,496	1,384	93%
Italy	180	31	17%	615	127	21%
Luxembourg	224	113	50%	272	128	47%
United Kingdom	1,216	407	33%	1,630	521	32%
Ukraine	2,099	824	39%	2,405	876	36%
Poland	1,465	203	14%	1,548	276	18%
Turkey	320	105	33%	293	26	9%
United States	5,661	1,310	24%	5,936	1,476	26%
Other countries (Algeria, Spain, Hong Kong, India, Morocco, Portugal, etc.)	4,758	557	12%	6,622	709	11%
TOTAL	**22,799**	**6,926**	**30%**	**25,762**	**7,169**	**28%**

Source: Extract from e-jobs and Taleo and the complementary declarations of the countries/entities

In France, nearly **12,800** internal moves have been completed versus 10,300 in 2017.

To encourage internal mobility throughout the Group, two major tools have been deployed, one with 140,000 employees in 33 countries (My Mobility), and the other with 160,000 employees in 50 countries (Taleo).

(1) *Pro bono: Latin expression describing professional work performed voluntarily without any payment or consideration in return (mainly legal services provided to low-income customers).*

(2) *On the basis of 96.9% of the Group's workforce.*

(3) *Figure corrected after the publication of the 2017 Registration Document and Annual Financial Report.*

7.4 Our civic responsibility: being a positive agent for change

BNP Paribas is a committed participant in society: the Group initiates and takes part in numerous initiatives to combat social exclusion, and promote education and the arts. In the context of its civic responsibility, the Group uses all the available tools, as a banker, employer and philanthropist, to foster a sustainable and harmonious development of society. These actions are in line with its three commitments:

- **Commitment 7**: Products and services that are widely accessible;
- **Commitment 8**: Combat social exclusion and encourage respect for human rights;
- **Commitment 9**: Corporate philanthropy policy focused on the arts, solidarity and the environment.

2018 saw numerous concrete contributions promoting BNP Paribas' economic responsibility:

- At the end of 2018, **the Group's subsidiary, Nickel,** which offers prepaid "accounts for everyone" that are sold at *buralistes*, had opened 1.142 million bank accounts;
- In the field of **microfinance,** more than 350,000 people across 17 countries benefited from the Bank's support to microfinance Institutions (MFIs);
- As a committed philantropist, BNP Paribas conducted five fundraising campaigns via the **Rescue & Recover Fund**, which raised more than EUR 570,000 for NGO partner actions on the field;
- BNP Paribas strengthened its commitment to the integration and **inclusion of refugees** in Europe by raising its support plan budget by EUR 4.5 million by 2021.

At the same time, the Group contributed to several key events in 2018 aimed at the emergence of new solutions to address current and future global challenges. In line with the priorities of the Group's Corporate Engagement Department, these actions were particularly focused on young people.

- For the 4th year running, BNP Paribas participated in **"One Young World"**, an annual international summit for the leaders of tomorrow, held in The Hague in 2018. For the occasion, BNP Paribas sent an unprecedented delegation of 40 employees from 15 countries and 20 representatives of Group partner associations or social businesses.
- Another flagship commitment in 2018 was the five-year partnership between BNP Paribas and the NGO **Whitaker Peace & Development**, as part of a programme in South Africa enabling young people from disadvantaged neighbourhoods in Cape Town to act as entrepreneurs and ambassadors of peace in their community. The aim of the project is to have a positive impact on nearly 60,000 young people and residents.
- In addition, BNP Paribas also supported and participated in the **Paris Peace Forum**, which emphasises cooperation to address global challenges for lasting peace.

COMMITMENT 7: PRODUCTS AND SERVICES THAT ARE WIDELY ACCESSIBLE

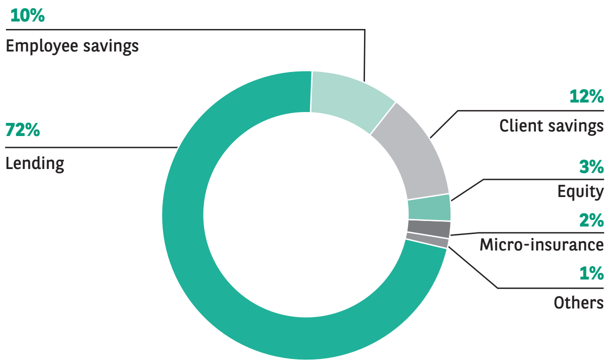
The Group strives to improve financial products accessibility around the world, since financial inclusion of populations is a key accelerator of economic development and satisfies the 1st, 8th and 10th Sustainable Development Goals of the United Nations. Financial inclusion is supported by financial education which is necessary to ensure a better understanding of financial products.

GROUP SUPPORT TO MICROFINANCE

BNP Paribas has been committed to microfinance for 30 years and uses several levers to promote its deployment: direct financing of microfinance Institutions (MFIs), investment in specialised funds, development of impact funds, performing technical assistance mission, etc.

In 2018, the Group's overall support towards microfinance reached 296 million, enabling 31 MFIs in 17 countries to be financed directly and more than 100 MFIs indirectly in most countries around the world via 12 dedicated funds in which the different entities of the Group invest.

BNP PARIBAS' SUPPORT TO MICROFINANCE AS AT 31 DECEMBER 2018



TOTAL: € 296 million

BNP Paribas, **mindful of the social impact** of its partners, is one of the **few players** to support microfinance in **developed countries**, such as France, Belgium, Italy, Luxembourg and the United States, as well as in **emerging countries**. For more than 25 years, the Group has been a partner of **Adie** (*Association pour le Droit à l'Initiative Économique*) in France, it has been supporting **PerMicro** in Italy for 10 years, and **co-created microStart in Belgium and Microlux in Luxembourg**, both of which are the first MFIs in their countries.

The year 2018 saw:

- **The strengthening of impact measurement**: in **Italy**, Politecnico di Milano conducted an impact study in December 2018 on Permicro, the leading Italian MFI, in which the Group holds a 20% stake and is the largest financier. This study showed that PerMicro financed entrepreneurs under 35 years old increased their annual income by EUR 3,200, and 43% of them were lifted out of poverty. In **Ivory Coast**, the impact study conducted on Advans CI, one of the Bank's MFI client, revealed that after their first micro-loan, 59% of its customers saw their incomes increase by 34% per year and that 88% reported an improvement in their quality of life;
- **The involvement of the Group's Leaders for Tomorrow in MFI technical assistance programmes:** to raise their awareness regarding microfinance, some 40 of them carried out assignments in 15 countries such as South Africa, India, China and Morocco.

PROVIDING ASSISTANCE TO VULNERABLE CUSTOMERS

BNP Paribas takes particular care in disadvantaged customers, whether due to a disability or to their financial situations, and ensures their access to banking services. As such, the Group subsidiary Nickel has become the leading "Fintech start-up for Good". With **1.142 million accounts opened at the end of 2018**, Nickel offers an account for everyone, from the age of 12, without conditions or any minimum income requirements, and provides a fresh start to those prohibited from banking. 52% of Nickel's customers are below the poverty line and 75% have an income lower than the minimum wage.

Customers with disabilities

The Bank has set up systems throughout dedicated to customers with disabilities or reduced mobility. From July **2018 in France**, before it became a legal obligation for all insurers, **BNP Paribas Cardif** launched a new service: Acceo, which enables **customers who are deaf or partially deaf** to access relationship centres autonomously and receive the information they need to monitor their savings plans, borrower's insurance or individual retirement cover. If required, a sign language interpreter can guide customers using video-conferencing through a route adapted to their needs.

In some countries, BNP Paribas Cardif has also identified elderly or disabled people reporting claims and arranged home visits to help them complete documents and process their claims. **In Belgium, BNP Paribas Fortis** further improved the accessibility of its premises. At end-2018, 30% of its branches were accessible to people with reduced mobility. **In the IRB network**, several initiatives are being developed, as for example, **in Senegal, BICIS has signed a partnership with Humanité et Inclusion** (HI). In this context, accessibility diagnostics are carried out for every new branch opening or renovation. BICIS also initiated the **Diversity Charter**, signed by the major companies in Senegal.

Customers experiencing financial difficulties and access to credit facilities

The Group is, on one hand, committed to developing responsible credit and promoting access to loans for as many people as possible, and on the other hand preventing over-indebtedness.

French Retail Banking has implemented several prevention and support mechanisms for its customers experiencing difficult situations. Throughout the year, **300 advisors specialised in budget solutions** help customers in financial distress. Furthermore, the Centres in which these advisors are based obtained the **Human for Client INRC** label in December **2018**. This label, assessed by AFNOR Certification and issued by a joint committee comprising trade union and employer organization representatives, value customer relationships carried out on a one by one basis or online.

BNP Paribas Personal Finance aims at having a system to **detect and support customers in difficulty** by 2020 **in every country in which it operates.**

In 2018, 23 countries have a specific score and operational system for fragile customers. Solutions to fight over-indebtedness have effectively been in place for nearly 10,000 customers in difficulty. Numerous initiatives have been launched by BNP Paribas Personal Finance to promote access to credit for young people, people with precarious employment and senior citizens. It also offers "car" deals to students in Mexico and to young people on short-term contracts in France, as well as specific products for migrants in Italy and for young entrepreneurs in the United Kingdom.

Supporting innovative entrepreneurship and financial education programs for the youth

Financial education has demonstrated its effectiveness in **combating excessive indebtedness and encouraging economic growth**. Most Group entities deploy training programs in several countries. **In 2018**, these included "Responsible Budget" training initiated by **BNP Paribas Personal Finance:** a digital platform that shows teachers, young students and their families how to manage their budgets by way of "serious games" Moreover, the **French Retail Banking** run in collaboration with the *Fédération Bancaire Française* (French Banking Federation), the game entitled "J'invite un banquier dans ma classe" (I invite a banker to visit my class). This was hosted by BNP Paribas employees during 185 sessions in schools. This game raised awareness of how to manage a budget of pupils in junior school, aged 9 to 10.

COMMITMENT 8: COMBAT SOCIAL EXCLUSION AND SUPPORT HUMAN RIGHTS

A player in combating social exclusion for many years, BNP Paribas works on providing long-term support in the areas of at risk communities, in particular in sensitive urban areas. More broadly, its commitment to promoting human rights continues to gain strength.

COMBAT SOCIAL EXCLUSION

Projet Banlieues: an initiative to foster social inclusion in disadvantaged urban areas

The BNP Paribas Foundation and the French Retail Banking (FRB) network support community projects in priority urban areas, working closely with people affected by economic and social exclusion, in particular young people. The BNP Paribas Foundation therefore supports a wide range of associations renowned for their work in the field of social inclusion.

For young people

Multiple social inclusion actions target young people including some flagship measures carried out in 2018. The fight against academic failure with the Afev association enabled 4,200 children and young people to be supported; and a school mentoring programme set up by Proxité benefited 1,150 people.

In addition to this, the BNP Paribas Foundation pursued its policy of **supporting local associations**, to foster social ties in priority urban neighbourhoods. In 2018, 143 associations benefited from the Foundation's EUR 452,000 budget, including 66 which are more specifically dedicated to young people.

For residents of disadvantaged urban areas in search of work

With more than EUR 12 million in subsidies granted between 2006 and 2018, BNP Paribas is a key partner of Adie. In 2018, the Group contributed significantly to **the development of Adie's activity** by directly supporting 16 of its branches installed in priority urban neighbourhoods. By reinforcing its local roots, supporting its communication with potential creators and offering the means to manage its so-called "neighbourhood" teams, BNP Paribas enabled the association to fund more than 4,000 people in 2018. 4,200 micro-companies were thus created and 1,800 developed. In total, **7,800 jobs were created or maintained** through this joint action.

BNP PARIBAS IS COMMITTED TO RESPECTING HUMAN RIGHTS

BNP Paribas adheres to internationally-recognised human rights standards. The Group supports the **United Nations Guiding Principles** on Business and Human Rights, in accordance with the "Protect, Respect and Remedy" framework. It has also chosen to follow the recommendations of the United Nations Guiding Principles Reporting Framework, launched in February 2015.

Commitment at the highest level

In 2012, the Executive Management signed the BNP Paribas Human Rights Declaration committing the organisation to ensuring that human rights are respected within its sphere of influence, which includes employees, suppliers, customers and communities. Furthermore, two human rights related indicators are included in the nine 2016-2018 CSR management indicators used to calculate the deferred variable remuneration for the top 6,750 key employees (see Our strategy, chapter 7.1).

Specificity of the banking industry

Since 2013, BNP Paribas has been taking part in the meetings of the Thun group, an informal group representing international banks which meets to discuss the application of the "Protect, Respect, Remedy" framework. **The activities of BNP Paribas's customers** may pose a risk to human rights. To ensure respect for human rights, banks are thus faced with specific challenges and increasing complexity.

The Thun group endeavours in particular to share its expertise and experiences to improve the integration of the UN Guiding Principles in the policies and practices of financial institutions. Every year, it organises a meeting where stakeholders are invited to exchange ideas, and if possible develop them further.

Training

The Group focuses on employee training, which is an important component of its human rights risks management process.

At the end of 2018, 85% of the employees assigned the training had completed the online awareness module about taking human rights into account in funding decisions, i.e. 7,552 people.

Management of indirect salient risks in the management of distribution of the Group's financial products and services

BNP Paribas has identified two main risks in the distribution of its products and services:

- **non-discrimination in access to financial services;**
- **right to privacy** (protection of clients' personal data).

Non-discrimination in access to financial services

The Group considers that sustainable economic development promotes wider access to fundamental rights. For that reason, it strives to boost **access to financial services** in the communities in which it operates. (see Commitment 7: *Products and services that are widely accessible*, Commitment 7).

Right to privacy

Data protection was a **priority issue in 2018**, with the introduction of European General Data Protection Regulation (GDPR), which came into force on 25 May 2018. The Group **strengthened its data protection system and DPO network** ("Data Protection Officers") **in 2018**.

The implementation of a data protection system based on the responsibility of the teams for the processing of personal data is a significant element with regard to meeting regulatory demands and is an integral part of the Group's mission to meet the expectations of its customers, employees, clients and partners.

In addition, the activities of its corporate clients may pose a risk to human rights, particularly in the area of workers' rights, and have an impact on local communities.

Management of salient risks in the Group's financing and investment activities

The Group uses its influence to strongly encourage the companies with which it maintains a commercial relationship to manage their own activities in a way that is respectful of human rights. It also aims to identify, assess (due diligence process), monitor and encourage improvements in current performance and work with clients operating in sensitive sectors in order to prevent them from having negative impacts on human rights, in their operations and in their supply chain.

In 2018, BNP Paribas published a **Responsible Business Relationships Charter** (available on www.group.bnpparibas.com) for its customers, thus reaffirming the Group's desire to work with companies whose business practices demonstrate a high level of governance and responsibility with respect to human rights, fundamental freedoms, personal health and safety and the environment.

To ensure that the existing system is adapted to the requirements of the Duty of care law, in 2018 BNP Paribas finalized a risk mapping of its clients that covers all business sectors and all the countries where the Group's clients' legal entities are located. As a result of this, and depending on the level of risk exposure of client legal entities, in-depth diligence measures were decided by the business lines and functions concerned and validated by the Group's Supervisory and Control Committee (GSCC) (see *Duty of care and Declaration on modern slavery and human trafficking*, section 7.6).

Workers' rights

The **human rights criteria of the policies for financing and investment** in sensitive sectors deal with matters such as workers' rights, in particular child labour and forced labour, employee health and safety and freedom of association. These issues are also taken into account for projects within the scope of the Equator Principles (see *Systematic integration and management of Environmental, Social and governance risks*, Commitment 3).

Rights of local communities

Another "salient" issue identified – the one of local communities' rights – is at the heart of most controversies affecting major industrial projects. In accordance with one of the commitments of the Equator Principles (see *Systematic integration and management of Environmental, Social and governance risks*, Commitment 3), which, in particular, concerns potentially impacted stakeholders and communities, the **Group ensures that the negative impacts are avoided and, if necessary, remedied**.

Thus, in the sectors identified as highly sensitive, BNP Paribas requests its customers to demonstrate that they have consulted the local population before the project or that they set up a mechanism to address grievances. For example, the human rights criteria of the policies regarding financing and investment in sensitive sectors integrate local communities rights issues.

Due diligence and dialogue

In the event of suspected or identified serious abuses of human rights by a BNP Paribas customer or a company in its portfolio, the Group conducts in-depth due diligence procedures and discusses the matter with the company concerned (see *Systematic integration and management of Environmental, Social and governance risks*, Commitment 3).

COMMITMENT 9: CORPORATE PHILANTHROPY POLICY FOCUSED ON THE ARTS, SOLIDARITY AND THE ENVIRONMENT

BNP Paribas is developing a structured corporate philanthropy policy that is both global and local. The BNP Paribas Foundation coordinates this commitment around three areas of application: solidarity, the arts and the environment (see *Advance awareness and sharing of best environmental practices*, Commitment 12). In 2018, the BNP Paribas philanthropy budget of EUR 41.6 million was broken down as follows:

- 69.6% for solidarity, including support for refugees;
- 20.8% for the arts;
- 9.6% for the environment.

SOLIDARITY

The extent and diversity of BNP Paribas' commitments are reflected in the broad range of initiatives to promote social inclusion, equal opportunities and employee commitment.

Promoting social inclusion

Support the integration of refugees

2017 posted the bleak record of 68.5 million people forced to leave their country of origin because of violence and persecution. In response to this humanitarian disaster, since 2016 BNP Paribas has been supporting refugees in Austria, Germany, Belgium, Spain, France, Greece, Italy, Luxembourg and Poland. **From 2016 to 2018, the Group helped more than 170,000 refugees** in Europe and plans to extend its commitment until at least 2021 **by also providing support in the United Kingdom and Switzerland with a budget of EUR 4.5 million**, in addition to the EUR 8 million plan set up in 2016.

In this context, the BNP Paribas Foundation supports UNHCR, the *Apprentis d'Auteuil*, *Samusocial de Paris* and the Refugee Food Festival.

Supporting major players helping vulnerable populations

Since 2012, the BNP Paribas Foundation has been working with two key players in the fight against extreme exclusion in France, namely: ***Restaurants du Cœur***, by financing the modernization and renewal of their computer equipment, and the ***Samusocial de Paris***, by supporting the only "*maraude de jour*" (daily patrol) that reaches out to people in great physical and social distress with 1,200 interventions recorded in 2018, 15% up on last year.

Supporting equal opportunities

Many partnerships are in place to assist future generations and provide educational support to the most disadvantaged young people.

Odyssée Jeunes: educational school trips

Created in 2009 by the BNP Paribas Foundation and the Seine-Saint-Denis local authority, this programme also involves the French Ministry of National Education. **In 2018,** with an annual budget of EUR 950,000**,** the Group enabled **nearly 3,400 middle school students** to take a school trip, accompanied by their teachers, thus bringing the total number of beneficiaries to 50,000 over 10 years.

Dream Up: education through art

Launched in 2015 in 26 countries, this international solidarity programme has opened the door for **30,000 disadvantaged children and teenagers** to learn or improve their artistic skills throughout the school year: music, dance, painting, theatre, etc. **In 2018**, the Dream Up programme was **renewed for another three years in some 30 countries**.

International community initiatives

A wide range of initiatives promoting quality education are either starting up or operated on a worldwide basis. For example, the "Klasa" programme, launched in 2003 by the BGZ BNP Paribas Foundation in Poland, enables students from disadvantaged backgrounds and living in rural areas to enrol in the most prestigious Polish boarding schools, and benefit from all the materials necessary for their studies. Nearly **800 high school students** benefited from this action.

Fostering employee commitment

Help2Help

BNP Paribas encourages employees to donate their time and energy to community and humanitarian causes. The "Help2Help" programme devised by the BNP Paribas Foundation is testimony to this. Now deployed **in more than 29 countries**, this programme supported the projects of 260 associations **in 2018** thanks to an endowment totalling **EUR 945,000**

Rescue & Recover Fund: six years of campaigning

Launched in 2012, the "Rescue & Recover" endowment fund makes it possible to react quickly and effectively worldwide in the event of a humanitarian disaster. Intended for employees, French Retail Banking customers in France and retired members of the Group's ADR (*Association Des Retraités* – Retirees' Association), this fund collects their donations and matches the amount to finance the projects of its three NGO partners. **In 6 years, nearly EUR 4 million** has been **donated to on-the-ground actions.**

2018 was marked by emergency responses related to the eruption of the *De Fuego* Volcano in Guatemala in the spring, as well as the series of earthquakes in Indonesia, the floods in India during the summer, the tsunami on the Celebes islands in September and the deadly fires in California at the end of the year. The fund made it possible for emergency care to be provided to the victims and help local populations cope with the material consequences of these disasters. At the end of the year, Group employees also participated in a campaign to help three vulnerable communities adapt to climate change in Haiti, Niger and Madagascar.

ARTS

Contemporary creation is at the heart of the BNP Foundation's cultural philanthropy programme. A committed patron of many artists and the institutions that welcome and present their works, the Foundation mainly supports contemporary dance and jazz.

Imagining the dance of the future with Dansathon

Held simultaneously in **the cites of Lyon, Liege and London**, the Dansathon is a **collaborative and connected event**, intended to create the innovations that will mark the future of dance;

For 72 hours, from September 28 to 30, around a hundred people from the worlds of dance, technology, design and communication shared this co-creation experience. This original initiative, inspired from a BNP Paribas Foundation idea, was produced with the active collaboration of *Maison de la Danse* in Lyon, Sadler's Wells in London and the Liège Theatre.

Supporting creation through jazz

Since 1995, the BNP Paribas Foundation has supported the careers of many **jazz musicians** and backed **several international festivals**. In 2018, the Foundation restructured its initiatives in Africa in particular and launched new partnerships. As such, in 2018 it backed the "Bamako Jazz Festival", a 3-day concert event organized in Mali that brings together some of the major names in the world of jazz. Also in 2018 in the Middle East, the Group also supported the 2nd "Bahrain Jazz Fest", which welcomed around 5,000 spectators.

7.5 Our environmental responsibility: combating climate change

Since 2011, BNP Paribas has put climate change as the priority focus of its efforts, given its position in the financing of the global economy, particularly in the energy sector. The "**BNP Paribas Commitments for the Environment"** which were updated in 2017 reaffirmed this proactive approach while making a formal commitment **to extend them to biodiversity, water, air, natural resources and the circular economy**. Implemented through actions and positions set out elsewhere (see *Systematic integration and management of Environment, Social and governance risks*, Commitment 3), three commitments define the Group's approach to environmental responsibility:

- **Commitment 10**: Partnering with our clients in the transition to a low-carbon economy;
- **Commitment 11**: Reduce the environmental impacts of our operations;
- **Commitment 12**: Advance awareness and sharing of best environmental practices.

2018 saw numerous tangible contributions promoting BNP Paribas' environmental responsibility:

- alongside 64 other international companies, BNP Paribas has supported **act4nature**, an initiative launched by the think tank EpE (Business for the Environment) to protect and restore biodiversity;
- at end-2018, in addition to **renewable energy** financing, which reached a level of EUR 15.4 billion, the Bank structured and placed EUR 6.3 billion in **green bonds**;
- the Bank also launched nine **Climate indices**, which raised more than EUR 750 million in 2018. BNP Paribas Asset Management **green funds** invested in alternative energy and energy efficiency, for example, accounted for EUR 6.6 billion in assets under management at 31 December 2018;
- in October 2018, BNP Paribas received its **accreditation from the Green Climate Fund**, whose objective is to catalyse funding for low-carbon projects that are resilient to climate change impacts;
- BNP Paribas Securities Services launched *ClimateSeed*, a voluntary carbon offsetting platform that puts investors seeking to offset their carbon emissions in contact with project developers;
- the Group launched **Green Company for Employees**, an environmental programme that calls on employees to contribute towards reducing the Group's environmental impact. The first two priority issues have been identified: the fight against single-use plastics and the promotion of sustainable mobility;
- since its launch in 2010 by the BNP Paribas Foundation, the **Climate Initiative** programme has provided financial support totalling EUR 12 million to 324 researchers, professors and engineers and raised the awareness of around 300,000 people on climate change.

COMMITMENT 10: PARTNERING WITH OUR CLIENTS IN THE TRANSITION TO A LOW-CARBON ECONOMY

The Group assists its customers, whether individuals or businesses, in their transition to a low-carbon economy. To this effect, it uses several levers to cater for their specific needs.

SUPPORTING THE ENERGY TRANSITION

Doubling the support for renewable energy

At the end of 2018, the amount of funding for this sector was EUR 15.4 billion (compared with EUR 12.3 billion in 2017). The target of EUR 15 billion set for 2020, equal to double the 2015 amount, has already been surpassed. In particular, the Bank's teams participated in the SeaMade project, which is expected to become the largest offshore wind farm in Belgium with a production capacity of 487 MW.

In total, **in 2018**, the Group financed or advised on renewable energy projects totalling more than **6.6 GW of installed capacity**.

A significant role in sustainable bonds

At the end of 2018, the Group was the **3rd largest global player, all currencies taken together,** on the sustainable bond market. Since 2012, the Group has been joint lead manager for EUR 17.8 billion.

The total value of the green bonds placed in 2018 was EUR 6.3 billion, including:

- *Société du Grand Paris*' **inaugural EUR 1.75bn Green bond**, whose net proceeds will be exclusively dedicated to finance the Grand Paris Express automatic metro;
- Ireland's **inaugural green bond** (NTMA's), **whose net proceeds** will be used in particular to finance projects that promote Ireland's transition to a low carbon, climate-resilient and environmentally sustainable economy.

Financial innovation supporting the transition

Since 2015, BNP Paribas has launched nine Climate indices raising over EUR 2 billion (including EUR 750 million in 2018). These solutions give investors a financial return while enabling them to contribute to the energy transition. In 2018, the Group launched the following products:

- **a range of indices with Euronext** aimed at supporting the energy transition, by selecting 40 to 50 companies with the best energy transition strategies from those with the largest market capitalisations in France and in the euro zone;
- **The first climate impact bond** that allows investors to generate financial returns while offsetting their carbon footprint via the Kasigau ecological corridor project in Kenya.

A key actor in the booming Positive Impact Loans market (PIL)

BNP Paribas is very active in the recent and fast growing market for Positive Incentive Loans (PIL). The interest rates paid by the borrowing company on PILs depend on the rate of achievement of a set of predetermined Ethical, Social, Governance (ESG) objectives. As such, the rates are reduced if the Company exceeds its objectives and increase if it does not achieve them. In particular, BNP Paribas participated in the following green PILs:

- **a EUR 2 billion PIL for Solvay**, with an interest rate linked to the Company's ability to achieve (in absolute terms) a greenhouse gas emissions reduction objective;
- **a USD 500 million PIL for Olam,** a leader in the agribusiness based in Singapore with an interest rate linked to a wide range of ESG indicators.

Supporting companies in achieving carbon neutrality

Achieving the goals of the Paris Agreement requires reducing global greenhouse gas emissions as much as possible, as well as achieving carbon neutrality. This involves offsetting residual carbon emissions (notably through carbon sequestration in soils and plants). With this in mind, in November 2018, BNP Paribas Securities Services launched **ClimateSeed**, a voluntary carbon offsetting platform for companies. At launch, 19 project developers selling carbon credits – representing 8 million tonnes of carbon dioxide equivalents – were already on the platform.

Support for innovative start-ups in the energy transition

The energy transition also requires developing more efficient and new technologies. To support this necessary technological development, at the end of 2015, the Group committed to investing EUR 100 million by 2020 in innovative energy transition start-ups. At the end of 2018, the Group had invested more than EUR 35 million in seven start-ups and three energy transition funds. Out of the **four direct investments in start-ups made in 2018,** one is in the French company METRON, which has developed artificial intelligence software designed to optimize and reduce the energy consumption of industrial processes. Another investment was made in RIDECELL, an American company, which will help deploy fleets of shared vehicles that will ultimately become autonomous and electric.

International recognition

In October 2018, BNP Paribas received its **accreditation from the Green Climate Fund** (GCF), whose objective is to catalyse funding for low-carbon projects that are resilient to climate change. In particular, this fund will help to direct growing funding to the most under-developed countries, small islands and African states.

HELPING COMPANIES TO IMPROVE THEIR ENERGY EFFICIENCY

Since energy efficiency plays a key role in reducing greenhouse gas emissions, BNP Paribas is committed to stepping up its actions in this area. Its subsidiaries BNP Paribas Real Estate Services, BNP Paribas Leasing Solutions and Arval make a particular contribution.

Assisting entrepreneurs in their energy efficiency efforts

In its **Domestic Markets**, the Group offers specific support to entrepreneurs to help them assess, design and finance the work required to boost their energy efficiency. For example, in Belgium, through its Sustainable Business Competence Centre, BNP Paribas Fortis offers expertise and support to its SME clients in order to design and finance infrastructure for the production of renewable energy or works to improve energy efficiency within their plants. In 2018, this department was involved in projects representing EUR 620 million of investment, including 9 projects in the field of energy efficiency.

In **Brazil**, BNP Paribas has strengthened its commitment to energy efficiency by developing a new financing solution. Signify (formerly Philips) used this solution to finance an LED lighting installation project for a car factory and dispose of the used light bulbs.

BNP Paribas Real Estate Services, offering companies responsible real estate

In 2018, BNP Paribas Real Estate Services – of which 100% of the real estate activity with corporates has obtained an environmental certification (with the two highest certification labels) – has made an environmental commitment particularly through the signing of the following **two charters**:

- Call for action: Make our Planet Green again charter with the International Biodiversity & Property Council;
- The charter of the CIRCOLAB association which encourages real estate players to promote the circular economy.

BNP Paribas Real Estate Services also conducted a pilot operation by installing an **urban farm on the roof of its headquarters**. This is not only a means for the Group to showcase its business lines and an urban agriculture laboratory in relation with AgroParitech, but also provides an area for employees to socialize.

In 2018, BNP Paribas Real Estate Services financed **a pre-planning study for a future low carbon** neighbourhood label developed by CSTB and Eliot consultants.

Arval and BNP Paribas Leasing Solutions: greener vehicles and equipment for their customers

Arval is developing new offers to encourage customers to use low-carbon vehicles with:

- SMaRT (Sustainable Mobility and Responsibility Targets): an **innovative consulting offer** that enables fleet managers to define and implement their energy transition strategies, in particular by deploying alternative mobility solutions (low-carbon vehicles, telematics-based services, etc.);
- **a new green mobility offer: developed in partnership with Engie**, the goal of which is to simplify access to electric vehicles for companies, communities and individuals. For the price of a month's rent, this integrated offer includes the rental of an electric vehicle as well as charging point installation and maintenance. It also includes a "green energy" option, making it innovative and unique in its market. The offer will be initially launched in Belgium in early 2019.

In France, **BNP Paribas Leasing Solutions** offers a range of services relating to the leasing of low-carbon vehicles, such as natural gas-powered lorries, support for customers regarding their economic and environmental performance, LEDs with a long-term leasing offer and "green real estate leasing" to encourage clients to select energy efficient buildings.

HELPING PRIVATE CUSTOMERS REDUCE THEIR ENERGY CONSUMPTION

In line with its commitments, the Group continues to expand its offers to help households to improve the energy efficiency of their dwelling, via dedicated products or partnerships with industrial players.

The Group has undertaken several initiatives to help its customers finance work to improve the energy efficiency of their homes.

The joint subsidiary of EDF and BNP Paribas Personal Finance, **Domofinance**, specialised in the financing of energy efficiency in customers' homes, granted **over 44,400 loans in 2018**. Outstanding Domofinance credits amount to nearly EUR 1.2 billion.

Elsewhere in Europe, BNP Paribas Personal Finance developed similar **new partnerships in 2018,** as, for example, with Innogy in Poland.

In Belgium, BNP Paribas Fortis offers **green retail mortgages** to facilitate work to reduce home energy consumption for both new constructions and renovations. At the end of 2018, these green retail mortgages totalled EUR 3.3 billion.

In the United States in September 2018, Bank of the West launched a **low-rate offer for some real estate loans** to promote energy renovation work. At the end of 2018, over 40 loans had been approved for a total amount of USD 6.1 million.

THIRD PARTY ASSET MANAGEMENT SUPPORTING THE ENERGY TRANSITION

In addition to its carbon risk management system (see *Systematic integration and management of Environmental, Social and governance risks*, Commitment 3), BNP Paribas Asset Management offers a diversified range of "green" funds invested, in particular, in alternative energies and energy efficiency. **At 31 December 2018,** they represented **EUR 6.6 billion in outstandings,** including:

- **BNP Paribas Green Business:** a new fund launched in 2018 that allows French savers to direct their savings towards energy and environmental transition players. The assets of this fund at the end of December 2018 stood at EUR 75 million;
- **Parvest Green Bonds**: an SRI fund, invested in the green bonds of European companies financing projects to combat global warming (EUR 230 million in assets under management at the end of December 2018);
- **Parvest Global Environment** and **Parvest Climate Impact**: SRI equity funds invested in companies working in renewable energies, energy efficiency, water treatment, or waste management and environmental services (EUR 821 million and EUR 612 million, respectively, in assets under management at the end of December 2018).

SUPPORTING THE CIRCULAR ECONOMY

In 2018, BNP Paribas committed to support the circular economy by activating three levers: financing circular economy players (particularly innovators), developing the functional economy through leasing, and committing its own operations (see Commitment 11: *Reduce the environmental impacts of our operations*).

The leasing offer proposed by the Arval and BNP Paribas Leasing Solutions subsidiaries is a service based on the use, rather than the possession, of an asset, thus optimising the use of assets and managing taking into account the whole life cycle of their assets. In order to broaden its approach, BNP Paribas has implemented several projects, such as improving financing solutions for extending equipment life-cycles (rental solutions for new and used equipment, recycling and end-of-life).

In order to move forward and innovate with regard to the circular economy, **Leasing Solutions joined the Circular Economy 100 programme** (CE100) **of the Ellen MacArthur Foundation**. This initiative mobilises companies, public institutions, researchers and innovators to go beyond the issues raised by this new economy.

A NEW GLOBAL COMMITMENT TO BIODIVERSITY

Alongside 64 other international companies, BNP Paribas has supported act4nature, since its creation. Launched by the association EpE (Business for the Environment), this initiative aims to protect and restore biodiversity. BNP Paribas has thus made ten generic commitments to voluntarily integrate biodiversity issues as tangibly as possible in all of its activities, governance and operating strategy. At the same time, the Group also made additional individual commitments: integrate biodiversity into its overall growth strategies, eliminate deforestation businesses from its portfolio by 2020, and participate in the work of CDC Biodiversité to develop biodiversity performance metrics in certain economic sectors, such as agriculture.

INNOVATIVE FINANCING TOOLS TO PROMOTE AGRO-ECOLOGY AND AGRO-FORESTRY IN EMERGING COUNTRIES

Rural areas in emerging countries are particularly affected by climate change, deforestation and the loss of biodiversity. BNP Paribas is developing innovative financing solutions to facilitate the implementation of projects that tackle these issues.

Together with the United Nations Environment Programme (UNEP), the World Agro-forestry Centre (WAC) and ADM Capital, **BNP Paribas co-founded the *Tropical Landscape Finance Facility* (TLFF)**. This unprecedented initiative intends to finance sustainable projects in Indonesia to improve the quality of life of inhabitants and protect biodiversity. The inaugural USD 95 million transaction was finalised in February 2018 and finances a rubber plantation project for the production of natural rubber. Out of the 88,000 hectares, only 34,000 are intended for the rubber plantation, while the rest of the land is reserved for the preservation of biodiversity, the restoration of the Indonesian forest and the protection of elephants, tigers and orangutans of Sumatra, three species threatened with extinction.

COMMITMENT 11: REDUCE THE ENVIRONMENTAL IMPACT OF OUR OPERATIONS

The reduction of the environmental footprint of the Group's own operations mainly relates to three issues: greenhouse gas emissions (GHG), responsible paper consumption, and waste management. The nature of its activities means that the Group is not a significant source of noise pollution or any other specific form of pollution.

To monitor the successful implementation of measures to limit these impacts with specific objectives, the Group CSR pilots an environmental reporting system in 20 countries, accounting for 90% of the full-time equivalent staff (FTE) managed by the Group at 31 December 2018. Around forty indicators have been identified including kWh, m^3 of gas, km travelled, litres of water, tonnes of paper, tonnes of waste. The results are extrapolated across the entire Group, and are used to calculate the environmental data presented in this section.

In 2018, BNP Paribas launched the "**Green Company for Employees" programme**, which aims to step up the reduction in the Company's direct environmental impact, by drawing on employee contributions, particularly concerning two priority issues: the fight against plastics and the promotion of sustainable mobility.

In 2018, 23 separate ISO 14001 certificates were in effect within the Group. This number establishes **BNP Paribas** as a **world leader** in the **banking/insurance sector** for Environmental Management Systems (EMS). BNP Paribas in the United Kingdom, including Arval and its 15 certified subsidiaries throughout the world, have implemented an ambitious certification programme. Collectively, these entities represent a total of 10,902 employees. In addition, 67,861 employees work in France and Belgium in offices covered by an environmental management system. In total, these two scopes represent nearly 39% of Group employees.

A CARBON NEUTRAL BANK ACROSS ITS OPERATIONAL SCOPE

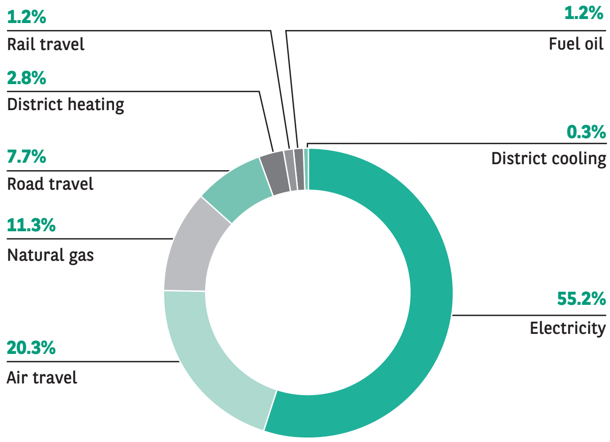
As part of its policy to combat climate change, **in 2017** BNP Paribas became a **carbon neutral bank** at all levels of its operations through three complementary actions:

The reduction of its CO_2 emissions

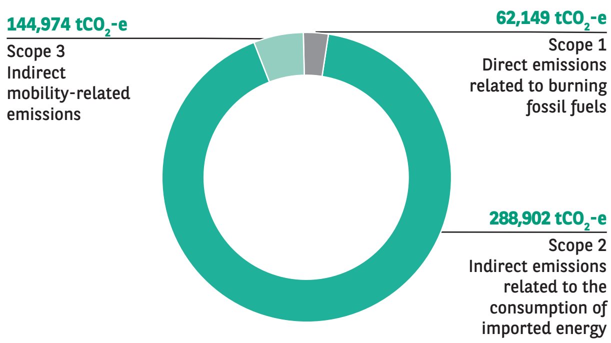
The Group's target is to reduce greenhouse gas emissions per employee by 25% by 2020 as compared to 2012: in other words, to go from 3.21 to 2.41 tCO_2-e equivalent per employee in 2020. GHG emissions are measured by converting the energy consumed in buildings and employee business travel into tonnes of CO_2 equivalent (tCO_2-e, including all six greenhouse gases covered by the Kyoto protocol).

In 2018, the Group emitted a total of 496,025 tCO_2-e, or 2.45 tCO_2-e/FTE, representing **a 23.6% reduction compared to 2012**. 71% of these emissions stem from building energy consumption and 29% from business travel. There are three mechanisms to reduce them: energy efficiency of buildings, energy efficiency of IT equipment, and business travel optimisation. In order to reach its 2020 target, the Group set up the **"Carbon Reduction 2020" programme** to share best practices, which it **extended to Asia in 2018.** BNP Paribas's carbon management performance was evaluated by the Carbon Disclosure Project in 2018 resulting in a rating of A-for the transparency and quality of its reporting.

BREAKDOWN BY TYPE OF GREENHOUSE GAS EMISSION



BREAKDOWN OF THESE EMISSIONS BY SCOPE OF GHG PROTOCOL/ISO IN tCO_2-e



- The Group's **energy consumption** was 1,417 GWh in 2018 with an average of 191 kWh/sq.m. compared to 195 kWh/sq.m. in 2018. This reduction is the result of several initiatives taken to optimise the energy efficiency of buildings together with favourable climatic conditions in 2018 in the majority of countries where the Group operates.
- In terms of **Green IT**, BNP Paribas is seeking to virtualise servers and work stations in order to share resources and to reduce the associated electricity and cooling consumption. It also installs servers in cooled bays with confined cooled aisles to further optimise ventilation.
- **Business travel** by Group employees is the other major source of GHG emissions. In 2018, 964 million km were travelled, i.e. 4,759 km/FTE (of which 63.2% by air, 14% by train, and 22.8% by car), compared with 4,587 km/FTE in 2017; i.e. a year-on-year km/FTE increase of 3.75%. This increase, correlated with the economic activity of the Company, was mitigated by recourse to web conferencing, videoconferencing, and even telepresence. Furthermore, new and more restrictive travel policies have been set up: they encourage employees to use public transport rather than their company vehicles, or to choose economy class over business class when travelling by plane.

Use of low-carbon electricity

The Group's second commitment as part of the carbon neutrality programme is to progressively increase the use of low-carbon electricity for all its needs, in all countries where this is possible. In 2018, renewable electricity represented 32.2% of electricity consumed in the Group's buildings. It came either from purchase of renewable electricity certificates, or from direct consumption of renewable energy produced by the Group's buildings.

Offsetting residual emissions

Each year, BNP Paribas offsets residual GHG emissions generated during the previous year for the Group as a whole. In 2018, offsetting all of 2017 emissions was actually carried out as part of the **Kasigau Wild Life Works**' project, i.e. 412,014 teqCO_2. This conservation and restoration programme covering 200,000 hectares of forest in Kenya also funds access to health services, water and education for local populations.

Lastly**, adaptation to climate change** is also an issue taken into account by the Group through its Business Continuity Plan, which encompasses 98.6% of the Group. From an environmental perspective, they integrate the management of extreme weather events and their impact on the Group's sensitive infrastructures, in particular on its data centres.

CONSUMING LESS PAPER AND USING RESPONSIBLY SOURCED PAPER

The Group has committed to reducing paper consumption per employee by 43% in 2020 compared to 2012, moving from 165 to 94 kg/FTE. In 2018, 19,555 tonnes of paper were consumed, i.e. 97kg/FTE i.e., a 41% decrease compared to 2012. The data includes paper used internally, paper for customer relationship purposes (letters, bank statements, etc.) and other types of paper (envelopes, cheque books, etc). To extend this target long term, the reduction of consumption is often based on the replacement of individual printing equipment with shared equipment. The Group also focuses specific attention on innovations achieved through digitalisation in order to reinforce the migration of its relationships with customers to electronic media, thus reducing paper consumption.

Lastly, the paper policy aims to **bring by 2020 the share of responsibly sourced paper to 80%** (from recycling or sustainably managed forests, i.e. more than 50% recycled or PEFC or FSC labelled). 62.5% of paper was from responsible sources in 2018.

REDUCING WASTE AND RECYCLING WHENEVER POSSIBLE

In the context of its actions to promote the circular economy (see *Partnering with our clients in the transition to a low-carbon economy*, Commitment 10), the Group committed to **making progress each year on the amount of waste recycled by employees**, mostly paper, and on the quality of data in this respect. More reliable information concluded that a total of 28,180 tonnes of waste generated by the Group was collected, or 139kg/FTE. 36.6% of the total volume of waste is recycled, or the equivalent of 51kg per employee.

Since 2011, the Group also has an **IT equipment processing policy** (PC, servers, screens, etc.) which makes it possible to manage the associated environmental and social risks. Its goal is to give them a second life (donations or resale) whenever possible, while ensuring their traceability. Dismantling is only considered as a last resort, with a focus placed on maximising the recycling rate.

COMBATING LOSS OF BIODIVERSITY AND MANAGING WATER CONSUMPTION

BNP Paribas helps to combat the loss of biodiversity in several ways:

- by taking measures to protect biodiversity. For example, in 1985, BNP Paribas Fortis bought the **Virelles pond** (125 hectares) and transferred its management to three associations with a long-term lease of 99 years. Today, the pond has a nature centre, a bird-watching centre and a hospital for birds and mammals;
- by opting for **responsibly-sourced paper** in its paper purchases, BNP Paribas helps to protect forest ecosystems and their biodiversity.

Controlling impacts on ecosystems also involves controlling **water consumption**, which was 19.05 m^3/FTE in 2018. This is achieved through the installation of meters to identify leaks, equipment to optimise flows in sanitary facilities, and the installation of presence-detector sensors that automatically turn off taps.

COMMITMENT 12: ADVANCE AWARENESS AND SHARING OF BEST ENVIRONMENTAL PRACTICES

In addition to its commitments to support its customers in the energy transition, BNP Paribas contributes to boosting and spreading knowledge as well as good environmental practices with civil society.

SUPPORT RESEARCH AND DEVELOP KNOWLEDGE ON CLIMATE CHANGE

The BNP Paribas Foundation supports scientific research programmes in the fields of climate change and biodiversity. Two philanthropy programmes in particular benefit from these actions.

Launched by the BNP Paribas Foundation in 2010**, Climate Initiative** has already financially supported 8 projects for EUR 12 million involving 18 international research teams. Issues being researched include the collection of new data on past climates in Antarctica and the carbon sequestration capacity of cultivated soils in Africa.

A total of 324 researchers, professors and engineers have benefited from this programme since 2010 and the programme has raised the climate change awareness of around 300,000 people.

Climate change is also a major factor in biodiversity erosion, as demonstrated by 11 of the 18 projects supported by the Foundation since 2010. With this in mind, at the end of 2018, the Foundation decided to change the name of the programme to **"Climate & Biodiversity Initiative"**. In 2019, a new call for projects will be launched to support scientific research on climate and biodiversity.

In 2018, BNP Paribas maintained its commitment to the **"One Planet Fellowship**" programme. With a 5-year grant of USD 15 million, this philanthropy programme is equally funded by the Bill & Melinda Gates and the BNP Paribas Foundations. Its goal is to support 600 African and European researchers working on the adaptation to climate change in Africa.

COP24: PROMOTING GROUP ACTIONS IN THE FIGHT AGAINST CLIMATE CHANGE

Several BNP Paribas representatives spoke at the COP24 in Poland, notably at a conference on the commitment of BGZ – the Polish subsidiary of BNP Paribas – to participate in a United Nations Global Compact programme in Poland on "Sustainable Cities and Communities" (SDG 11). Several experts also participated in round tables on agro-ecology, scientific research on climate change adaptation in Africa, and nature-based climate solutions.

The 4th **Global Youth Video Competition,** an international competition for young people committed to the fight against climate change, was also held during COP24. More than 968 entries, including 300 eligible documentaries from 110 countries, were submitted for the 2018 edition. The BNP Paribas Foundation supported this competition which was launched by the UNFCCC.

2018: INTERNATIONAL YEAR OF THE CORAL REEF

Several other actions underscored the commitment of the BNP Paribas Foundation this year.

- through its support for the **Reef Services** project, the Group supports research that is aimed at measuring and predicting the consequences of global warming on coral reefs, and which highlights the services that these render to ecosystems;
- another flagship action is the **Corals Matter online platform**, developed by the Group in collaboration with the ASTC (Association of Science-Technology Centres) intended to provide the general public with the tools and information needed to protect the coral reefs.

7.6 Duty of care and Modern Slavery Act and human trafficking statement

DUTY OF CARE: 2018 BNP PARIBAS' VIGILANCE PLAN

REGULATORY FRAMEWORK

Law no. 2017-399 of 27 March 2017 on the Duty of care of parent companies and of companies using sub-contractors applies to the Group as a whole and requires a vigilance plan to be established and implemented to identify and prevent the risk of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment. Starting with the 2018 financial year, the law also requires the preparation of a report on the effective implementation of the Group's vigilance plan.

GOVERNANCE

Initiated and overseen by Group Management, the CSR policy is a strategic issue for BNP Paribas. It reflects a commitment at the highest level of the company, to combine performance, responsibility, ethics and transparency. CSR objectives were included in the Group's 2017-2020 business development plan.

Actions related to Group vigilance measures are defined by the CSR Function and jointly designed with the relevant stakeholders concerned in the main businesses and functions: Domestic Markets, International Financial Services, Corporate & Institutional Banking, Group Human Resources, Group Procurement, Compliance, Risks and Legal. These actions are intended to cover all of the Group's businesses, functions and countries of operation. In 2018, vigilance measures were discussed and approved at four meetings of the Group Supervision and Control Committee (GSCC), which is composed of members of the Executive Committee and chaired by the Chief Executive Officer.

For the analysis of Environmental, Social and Governance (ESG) risks, the CSR Department relies on the various businesses, which constitute the first line of defence. The CSR Function supports businesses in the most complex analyses, providing its thematic and industry expertise. Since the first half of 2018, the GSCC has commissioned the Risks Function to carry out a second-level control of the CSR analyses realized in the credit and investment decision processes. Within the Group's risk appetite framework, two CSR indicators are also monitored: the evolution of the energy mix financed by the Group, and the coverage of the loan portfolio by specific CSR procedures.

Executive Management made a series of commitments on the environment as of 2011, and on Human Rights as of 2012, by signing the Declaration of Human Rights. In 2016, the Group's management reiterated its strong commitment to respecting human rights and protecting the environment through the publication of its Code of conduct applicable to all employees around the world. The latest update was published in 2018.

Furthermore, the purpose of the Group's ethics warning system is to enable any BNP Paribas employee to report a proven breach – or a suspicion of such a breach – of the Code of conduct, of a policy or of a Group procedure or regulation, not only to their organisational superior, but also, alternatively, to the compliance team of the entity to which they belong, or of a higher level.

Consequently, any suspicion by a BNP Paribas employee of serious or potentially serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment, may be reported under this ethical alert system.

OUR VIGILANCE APPROACH

Scope

As part of the preparation of its vigilance plan, BNP Paribas conducted, consistent with its commitments, risk mapping and a review of its existing risk assessment and control policies and tools, on a scope consistent with the text of the law.

This scope includes employees (Human Resources (HR)), suppliers and sub-contractors (Procurement) and the main business lines within the three principal BNP Paribas divisions (Domestic Markets, International Financial Services, Corporate & Institutional Banking).

Risks taken into account in the development of different mapping exercises

In line with its CSR commitments, the Group has included in its vigilance approach the risks of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment, and the following issues in particular:

- issues related to human rights and fundamental freedoms: child labour, forced labour and human trafficking, freedom of association and collective bargaining, exercise of the right to strike, discrimination, failure to respect the rights of local communities, harassment, unfair wages and excessive hours of work;
- issues related to human health and safety: workplace and consumer health and safety;
- environmental issues: air pollution, water pollution, soil pollution, scarcity and depletion of commodities, water scarcity, erosion and soil depletion, waste management, greenhouse gas emissions, degradation of ecosystems and biodiversity.

Systems used to manage these risks

The Group has taken stock of its existing systems and analysed them in view of the elements required to develop the vigilance plan.

In 2017, an inventory of ESG risks analysis tools (such as HR, procurement and credit policies) was conducted for the entire group. This inventory was compared against the requirements of the law regarding the preparation of the vigilance plan. This comparison made it possible to ensure that the main risks were effectively covered by the existing systems for employees, suppliers and banking and financial activities.

In 2018, BNP Paribas finalised its risk mappings for its banking and financial activities and the activities of the suppliers and subcontractors with which the Group has commercial relationships.

Action plans have been defined by scope to complete the existing risk prevention systems. These action plans are monitored by the heads of the relevant businesses and functions, who are members of the Group Executive Committee.

OUR EMPLOYEES

The Group wants to foster a stimulating work environment in which every person is treated fairly. In particular, the Group places an emphasis on respect, the need to apply the highest standards of professional behaviour, and the rejection of all forms of discrimination. The Group also ensures the safety and security of people in their workplace.

The review conducted in 2017 and 2018 by BNP Paribas made it possible to ensure adequate coverage of all salient risks as well as their formalisation in the pre-existing Group HR policies.

The Group's diversity policy and remuneration principles reaffirm the principle of non-discrimination in the recruitment and career development of employees up to the Company's highest levels. These policies are supported by the Group HR control plan as well as by a specific alert procedure on discrimination issues via "Discrimination advisers", who can be called upon, in the countries where they exist, by any employee who believes he/she is a victim of discrimination.

- BNP Paribas has also signed the 10 Principles of the International Labour Organisation's Disability Charter, designed to promote the employment and working conditions of people with disabilities. The agreement on fundamental rights and global social framework (**Global agreement**) signed in September 2018 with UNI Global Union, the International Trade Union Federation of the service sector, aims to implementing in each entity in the countries where the Group operates, at least one of the 10 commitments of the ILO Enterprise and Disability Charter. At the end of 2018, 91% of entities with more than 1,000 employees already made such a commitment. The objective included in the criteria of the medium-term incentive plan of 6,750 key employees is to reach 95% in 2020;
- As part of the UN Women HeForShe programme, BNP Paribas is especially committed to advancing gender equality by beginning to better balance male and female representation in roles that historically had a preponderance of female (HR) or male (Global Markets) employees. For example, a goal of at least 40% women in the Graduate & Talent programmes of the market activities will be pursued by 2020. At the end of 2018, women represented 28% of the Group's Senior Management Position (SMP) population. The target of 30% was included in the medium-term incentive plan criteria of 6,750 key employees for the period 2018-2020 (see *Our social responsibility: developing and engaging our people responsibly,* chapter 7.3).

BNP Paribas also supports the United Nations LGBTI Standards of Conduct, unveiled in September 2017 to combat discrimination against LGBTI people at work.

The update of the Code of conduct in 2016 strengthens the Group's commitment to combating harassment, including sexual harassment. The HR Function also introduced an internal procedure on how to deal with reports of harassment. Under the **Global agreement**, this will be implemented in all Group entities, together with measures to support victims.

The European social charter from which derives the European agreement on the prevention of stress at work, applied since 2017, the programmes related to the prevention of psychosocial risks and stress at work, commitment on maternity/paternity, the charter on the balance of professional life and personal life in France, the principles of performance evaluation and new ways of working contribute to a better balance of work patterns.

BNP Paribas has also updated its HR personal data protection policy to apply the provisions of the General Data Protection Regulation (GDPR), which came into force on 25 May 2018, and carries out awareness-raising activities for employees in the territories where the GDPR is applicable.

Occupational risk prevention programmes and occupational health and safety policies are adapted to the specificities of the Group's different business lines; they are described in more detail in paragraph 7.3.

The policies and actions already undertaken by Human Resources will continue to be implemented and monitored over time.

OUR SUPPLIERS AND SUB-CONTRACTORS

Within the Group Procurement Department, a structure dedicated to Responsible Procurement based on a network of around 50 correspondents covers all CSR topics, including CSR risks related to the activities of tier 1 suppliers and sub-contractors.

In 2018, the Group Procurement Department completed, with three other French banks, an initial version of the risk mapping initiated in 2017, using a common methodology developed with an external service provider. Since the autumn of 2018, this mapping has been tested by several BNP Paribas entities for gradual deployment in various countries starting in the second half of 2019.

In addition to the risk identification procedures, the Group has tools to prevent and evaluate ESG risks:

- a new "Sustainable Sourcing Charter" charter drafted jointly with three other French banks was published on the Group's website in March 2018 and made available to the Procurement teams. This new Group Charter completes existing charters adapted to local conditions. It includes both the commitments of the signatories to their suppliers and the commitments expected from suppliers in terms of ethics, human rights, respect for the environment and progress, including with regard to subcontractors. A total of nearly 1,000 supplier charters were signed in 2018 or included in contracts signed by suppliers;
- contractual clauses incorporating or completing expectations in terms of environmental and social criteria were communicated in the Sustainable Sourcing Charter;
- in 2018, the human rights training requirement was extended to the middle and back offices of the Procurement teams. In this extended scope, more than 70% of the employees concerned were trained, as were more than 85% of Procurement teams at head office level. This requirement will be renewed in 2019 as part of the progress initiative in partnership with human resources;
- 2,300 CSR assessments of suppliers and sub-contractors were conducted in 2018 as part of requests for proposal, in particular those relating to categories of risky purchases, such as printing equipment or promotional items;
- the deployment of specific questionnaires continues. They were developed by the Responsible Procurement team at the request of buyers in connection with the ESG risks highlighted by the new mapping.

The use of CSR evaluation questionnaires in requests for proposal and the inclusion of their results in the overall evaluation of the supplier are included in the Group Procurement Department's operational control plan.

In France, BNP Paribas is a signatory to the Responsible Supplier Relations Charter promoted by the Business Mediation body of the French Ministry of the Economy and Finance, which notably offers recourse to an independent internal mediator.

For its Annual Procurement Morning in June 2018, the Procurement Department, in conjunction with the Group's Legal Function, presented a hundred of suppliers with an update on regulatory developments and their implications, including the duty of care.

OUR BANKING AND FINANCIAL ACTIVITIES

The distribution of financial products and services

The Group has identified two main risks in the distribution of its products and services for individuals: non-discrimination in the access to financial services and the right to privacy (protection of customers' personal data).

To reduce the risk of discrimination in the access to financial services, the Group implements a financial inclusion approach, by supporting microfinance through financing and services provided to specialised institutions, by improving access to credit and insurance, and by supporting clients facing difficulties as a result of their disability or their financial situation. In addition to regulatory requirements in relation to the Duty of care, the Group has launched several initiatives that fall under its CSR commitment No. 7 on "Products and services that are widely accessible".

Moreover, as part of its general policy on managing personal data, BNP Paribas intends to use the best data protection systems available in all the entities and countries where the Group is present. In 2017, BNP Paribas began to change its current system to address all the requirements of the new European General Data Protection Regulation (GDPR).

Financing and investment activities

The activities of BNP Paribas customers may involve risks in relation to human rights and fundamental freedoms, human health and safety, and the environment. At the end of 2018, the Group published Responsible Business Principles for its customers, thus reaffirming BNP Paribas's expectation to engage with customers whose business practices demonstrate a high level of governance and responsibility with respect to human rights, fundamental freedoms, human health and safety, and the environment.

With a view to limiting the impacts of greenhouse gas emissions and to participate in the energy and ecological transition, the Group has already decided to stop the financing of coal extraction as well as the financing of entities whose main activities are in shale gas and oil and oil sands. In order to promote United Nations health recommendations (in particular through Sustainable Development Goal No. 3), the Group has also announced that it was ending its financing and investment activities for tobacco manufacturers, as well as for producers, wholesalers and traders whose revenues come mainly from tobacco.

The Group has an exclusion list and a monitoring list. These lists are periodically revised to include, in particular, new situations involving serious harm to the environment or human rights. The exclusion list covers companies that the Group does not wish to maintain commercial relations with. Reasons may notably include failures to protect the environment or negative social impacts on communities. At the end of 2018, these lists included 992 legal entities (857 excluded and 135 under monitoring), compared to 338 legal entities at the end of 2017. This increase is related to the implementation as of early 2018 of commitments for tobacco, shale gas and oil and oil sands companies.

Before the enactment of the law on the duty of care, BNP Paribas had already put in place ESG risk management systems for its financing and investment activities. These systems are notably based on:

- the respect of the Equator Principles for major industrial and infrastructure projects. BNP Paribas has been a signatory to the Equator Principles since 2008: they aim to avoid, reduce, mitigate or offset the negative impacts of large industrial or infrastructure projects on communities, ecosystems or the climate;
- the integration of ESG criteria into the "Know Your Customer" process (KYC);
- the development of financing and investment policies to regulate sectors with high ESG risks. These policies, which are available on the Group's website, are updated according to regulatory changes, their expected changes, and reports from the operational teams of the Group's businesses;
- a progressive integration of ESG criteria into lending and rating policies;
- a dedicated tool, "CSR screening", for large companies belonging to sectors not covered by sectoral policies. This tool is available in all regions of the Corporate & Institutional Banking division;
- the use of management and monitoring tools for these risks.

In 2018, the share of loans to companies subject to an environmental and social management system which is specific to the concerned activity was 55.6% compared to 54.9% in 2017 and 28% in 2016, the year of reference for this key performance indicator of Group CSR. This increase is mainly due to a more systematic deployment of CSR screening. In 2018, the Group's CSR teams were asked to give an expert opinion in the assessment of ESG risks for 1,627 complex and/or sensitive transactions related in particular to financing, new accounts, export support, and other matters, compared to 1,251 transactions the previous year.

To ensure that the existing system is adapted to the requirements of the French duty of care law, in 2018, BNP Paribas finalised a mapping of the risks to which its clients are exposed that covers all business sectors and all the countries where the clients' legal entities are located:

- For each business sector, the salient risks related to human rights and fundamental freedoms, personal health and safety and the environment were defined according to a methodology for rating the level of sensitivity and occurrence of each risk, that is based on the United Nations Guiding Principles reporting framework. The level of risk inherent in each business sector was then determined based on the presence of salient risks;
- A level of environmental and social risk was defined for each country where the Group operates on the basis of reference sources from recognized international organizations and NGOs, such as the International Labor Organization, the World Bank, the United Nations Environment Programme, Human Rights Watch, Transparency International, and the World Resources Institute;
- The risk levels inherent in the sectors and countries where the Group operates were then combined to take into account the clients' legal entities with a high level of environmental and social risk.

As a result of this mapping exercise, depending on the level of risk exposure of the Group clients' legal entities, extensive vigilance measures were decided by the business lines and functions concerned and validated by the Group Supervision and Control Committee (GSCC).

OUR COMMITMENT TO CONTINUOUS IMPROVEMENT

BNP Paribas' vigilance approach is part of a drive for continuous improvement. As such, the Group will complete, where necessary, its identification, control and management tools for identified risks, and will report on them each year in its Registration document.

MODERN SLAVERY AND HUMAN TRAFFICKING STATEMENT

The Modern Slavery Act ("MSA") came into force in the United Kingdom in 2015. It requires large organisations doing business in the UK to produce a "Slavery and Human Trafficking" statement. The Act applies to both organisation subsidiaries and the parent organisation if they carry on a business or part of a business in the UK.

This Statement(1) relates the steps that BNP Paribas has taken to ensure that slavery and human trafficking are not taking place in its direct operations or supply chains. It also refers to the risk management that the Group has put in place in the context of its financing and investment activities, which govern the potential cases of human rights violations that may affect the activities of its clients. This Statement is for the financial year ended 31 December 2018. The Board and CEO attest annually that the Group complies with this Statement through the information provided by the respective departments of Corporate Social Responsibility (CSR), Procurement and Human Resources.

INTRODUCTION

BNP Paribas is a leading bank in Europe with an international reach. It operates in 72 countries and has more than 202, 000 employees, including nearly 155,000 in Europe. The Group has key positions in its three main activities: Domestic Markets and International Financial Services (whose retail-banking networks and financial services are covered by Retail Banking & Services) and Corporate & Institutional Banking, which serves two client franchises: corporate clients and institutional investors.

BNP Paribas has had a presence in the UK for nearly 150 years. The UK is a key hub for the Group with a presence across BNP Paribas' core businesses: Corporate & Institutional Banking and Retail Banking & Services. There are about 7,900 employees in the UK with more than half based in and around London.

BNP Paribas seeks to be a contributor to responsible and sustainable global development. The Bank's ambition is to have a positive impact on its stakeholders and on the wider society. That is why the Group upholds the highest standard of conduct and ethics in the areas of human rights, labour, environment and anti-corruption.

OUR COMMITMENT AND POLICIES

BNP Paribas is committed to respecting a number of principles and norms which underpin the way it does business:

- the United Nations Sustainable Development Goals;
- the 10 Principles of the United Nations Global Compact;
- the United Nations Guiding Principles on Business and Human Rights;
- the internationally-accepted OECD Guidelines for multinational enterprises;
- the internationally-accepted standards of human rights, as defined in the International Bill of Human Rights;
- the core labour standards set out by the International Labour Organisation.

In addition to these public commitments, Group Policies are in place, which contribute to tackling numerous subjects on social, environmental and governance issues, including human rights violations. These include:

- BNP Paribas Group Code of conduct;
- the BNP Paribas statement on Human Rights;
- the BNP Paribas Suppliers CSR Charter;
- the BNP Paribas Responsible Business Principles.

OUR EMPLOYEES

BNP Paribas commits to offer a working environment in which all employees are treated fairly. In particular, the Group focuses on respect, the need to apply the most stringent norms of professional behaviour and rejects all forms of discrimination. The existing Group's permanent policies and procedures notably include the Diversity policy and the remuneration principles which reaffirm the non-discrimination principle in the recruitment and career management of the employees. The BNP Paribas' Code of conduct, whose rules must be understood and followed by all employees, confirms the Group's commitment against harassment, including sexual harassment.

On this basis, everyone within the Group has the responsibility to treat all colleagues with respect; make sure that interactions with colleagues are professional and effective at all times; listen to and value the input from colleagues, even if they express different views.

The BNP Paribas agreement on fundamental rights and the establishment of global minimum social standards (Global agreement), signed with the UNI Global Union on 18 September 2018, sets up an ambitious plan to fight against inequalities and indecent working conditions in all countries where the Group operates.

RAISING CONCERNS

All BNP Paribas employees should report any proven or suspected breach of the Group's Code of conduct or of a Group policy, procedure or regulation to their line manager.

Alternatively, they are entitled to raise an ethical alert within the framework of the Group whistleblowing procedure.

(1) This Statement applies to all companies within the BNP Paribas Group that are required to have a slavery and modern trafficking statement, except where they have chosen to produce their own statement.

Any concern about an issue or a suspicion on human rights within the BNP Paribas business operations or in the supply chain can be reported in accordance with the Group whistleblowing procedure, unless local regulations or procedures provide otherwise.

Our whistleblowing policy ensures that action taken in good faith by an employee in connection with the mechanism will not cause the employee to be penalised in any way.

OUR SUPPLIERS

BNP Paribas believes that the behaviour of suppliers must also adhere to its commitments on Environmental, Social and Governance (ESG) issues.

Within the Group Procurement Department, the Risks teams and Responsible Procurement teams monitor the CSR risks related to the activities of suppliers and subcontractors. The Group Procurement Department relies in particular on the department's standards and requirements in force which are applicable across the Group and provide for environmental and social criteria to be taken into consideration in the suppliers' selection process. In addition, in 2018, the Group's Procurement Department, working with three other French banks, completed an initial version of the environmental and social risk mapping by procurement category initiated in 2017, using a common methodology. Since the autumn of 2018, this mapping has been tested in several BNP Paribas entities.

In addition to the risk identification procedures, the Group has tools to prevent and evaluate environmental, social and governance (ESG) risks:

- a new supplier CSR charter developed with the same three French banks was published online.

This text sets out the reciprocal commitments of the Group and its suppliers and subcontractors from an environmental and social standpoint and states in particular the obligations specified in the following reference texts:

  - the Universal Declaration of Human Rights of 1948 and its two additional covenants,
  - the 8 Conventions of the International Labour Organization, in particular regarding the minimum age for employment, child labour and abolition of forced and compulsory labour;

- contractual clauses that require compliance with the conventions of the International Labour Organization were introduced in supplier contract standard templates. These clauses apply in all countries where suppliers are located and are intended to be shared by their own suppliers, subcontractors and distributors;
- calls for tenders include the CSR assessment of suppliers and subcontractors, with the deployment of a sustainability questionnaire that includes specific clauses on environment, ethics and human rights.

OUR BANKING AND FINANCIAL ACTIVITIES

BNP Paribas serves millions of individual customers and professionals, entrepreneurs, small and medium-sized enterprises and large corporate clients in industries with multiple ESG issues, and operates in countries where legal and governance systems are at diverse levels of development. BNP Paribas strives to reduce potential violation of social and environmental rights, including human rights, from its financing and investment activities. Its ESG risk management system[(1)] is Group-wide and based on:

- the respect of the Equator Principles for major industrial and infrastructure projects;
- the integration of ESG criteria in the Know Your Customer ("KYC") process;
- the development of financing and investment policies managing the Group's activities in sectors with significant ESG issues;
- the implementation of a specific ESG risk assessment framework for its products and services.

AWARENESS AND TRAINING

BNP Paribas took part in the development of an awareness-raising e-learning module called "Business and Human Rights" and co-created with the other members of the French association *Entreprises pour les Droits de l'Homme* (Enterprises for Human Rights – EDH). Aimed at employees of EDH member companies, this module is included in the BNP Paribas training catalogue, accessible to all employees. It is mandatory for all employees who directly contribute to the promotion of human rights: Risk people, Procurement business lines, business relations officers in CIB and the CSR network.

This initiative is monitored by one of the thirteen managing indicators of the BNP Paribas' CSR strategy: the "percentage of employees contributing directly to the promotion of human rights who have received a specific training". This indicator is also one of the nine CSR indicators used in calculating the deferred variable compensation of the Group's 6,750 key employees. These nine indicators account for 20% of the conditions for attributing this compensation.

Jean-Laurent BONNAFÉ
Director and Chief Executive Officer

Jean LEMIERRE
Chairman of the Board of Directors

February 28, 2019

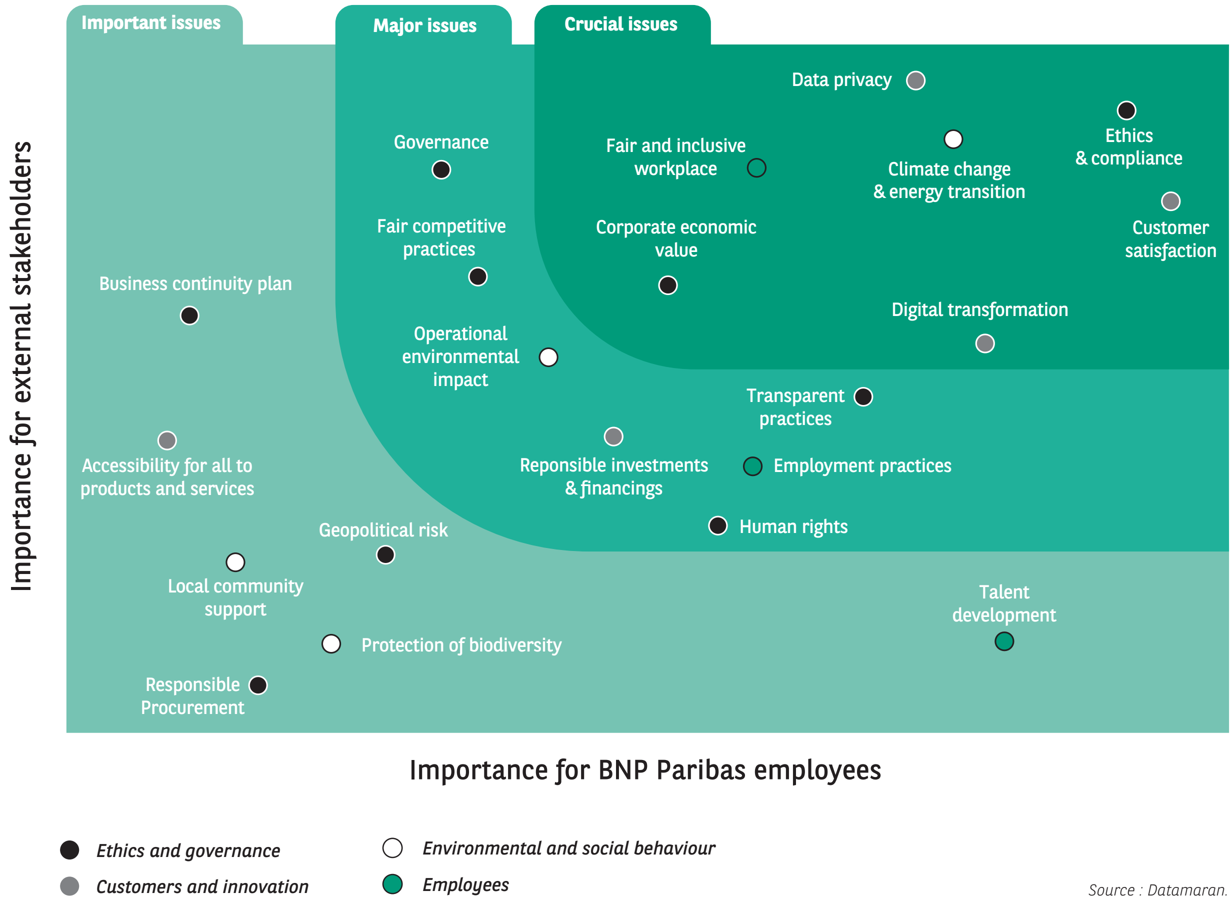
(1) For more information, refer to the Group's 2018 Registration document, Commitment 3, Systematic integration and management of environmental, social and governance risks; Commitment 8, Combat social exclusion and promote respect for human rights; and chapter 7.6, Duty of care: 2018 BNP Paribas' vigilance plan.

7.7 Extra-financial performance statement

Information requested pursuant to article R.225-105-1 of the French Commercial Code and Ordinance No. 2017-1180 respecting the publication of non-financial information.

The Company's business model is integrated in the *Presentation of the BNP Paribas Group*, section 1.4.

In order to perform this exercise, BNP Paribas relied on an assessment of materiality criteria to classify a hundred of extra-financial issues based on their relevance to BNP Paribas stakeholders and their impact on the Group's performance. Various sources were used: a comparative study of the publications of 59 banks, 2,070 regulations, nearly 15,000 articles from the sectorial press, 128 million tweets, and finally 28% of top management employees attested to the importance of these issues for BNP Paribas. The results of this study are presented below and are classified into three types of issues: important, major and crucial.



Source : Datamaran.

Following this materiality analysis, 21 issues were selected. The risks and opportunities identified by a joint piece of work carried out by Financial communication, Risks, Human Resources and CSR related to each of these issues are listed in the table below. These issues are listed according to the four categories of information appearing in Ordinance 2017-1180: social and environmental consequences, respect for human rights, fight against corruption and tax evasion, to which economic and governance issues were added. The indicators, policies and associated due diligence are then further developed in dedicated chapters.

Area	Issue	Risks/Opportunities	Paragraph	Indicator	Pages (Paragraph/ Indicator)
Social	Fair and inclusive workplace	Discrimination risks	Promotion of diversity and inclusion in the workplace	Percentage of women among the members of cross-functional Executive Committees across business lines and/or countries	532 ; 513
	Employment practices	Risks of low employee motivation, increase in absenteeism, psychosocial risks	A "Good place to work" and responsible employment management	Percentage of employees having at least 14 weeks of paid maternity leave and/or six days of paid paternity leave	535 ; 513
	Talent development	Risks of loss of talents and career and skill stagnation Opportunities: for economic performance	A learning company supporting dynamic career management	Percentage of employees reporting having been trained (any format, including e-learning) over the past 12 months	543 ; 513
Civic	Fair competitive practices	Legal risks	Protecting clients' interests	Percentage of employees trained on “competition law and you” e-learning training	523 ; 522
	Transparent practices	Risks of discrimination for some customers and lack of sales information	Protecting clients' interests	Percentage of employees trained on “MiFID II Awareness” e-learning training	523 ; 523
	Data privacy	Reputational and operational Risks: leaking, alteration or loss of data	Protecting clients' interests	Percentage of employees trained on “Know Your Data” and “Personal Data Protection” e-learning training.	523 ; 522
	Local community support	Reputational risks and opportunities to fight against discrimination	*Projet Banlieues*: an initiative to foster social inclusion in disadvantaged urban areas	Amount of Group solidarity sponsorship	548 ; 513
Civic/ Environmental	Responsible investment and financing	Reputational Risks and opportunity to limit social and environmental risks	Contributing to the United Nations Sustainable Development Goals	Share of loans to companies contributing strictly to the achievement of UN Sustainable Development Goals	518 ; 513
Environment	Climate change and energy transition	Transition, physical, pollution, biodiversity, reputational, legal liability risks	Systematic integration and management of Environmental, Social and Governance risks (ESG) Partnering with our clients in the transition to a low-carbon economy	Financing for renewable energies	526, 551 ; 513
	Protection of biodiversity	Risks of damage to biodiversity, limitation of services rendered by type	A new global commitment to biodiversity	Indicators under development with *CDC Biodiversité*	554 ; 554
	Operational environmental impacts	Operational risks and opportunities to optimise energy-related costs	Reduce the environmental impacts of our operations	GHG emissions assessment	554 ; 555

Area	Issue	Risks/Opportunities	Paragraph	Indicator	Pages (Paragraph/ Indicator)
Economic	Customer satisfaction	Operational risks	Monitoring customer satisfaction	Average customer satisfaction scores in 4 Domestic Markets (France, Luxembourg, Belgium, Italy)	524 ; 524
	Digital transformation	Risks related to the implementation of the Bank's strategic plans	Cyber security and technology risk	Cumulative transformation costs	285 ; 137
	Accessibility for all to products and services	Risk of discrimination for some customers	Products and services that are widely accessible (microfinance, vulnerable customer support, financial education)	Annual number of beneficiaries of microloans distributed by microfinance institutions financed by BNP Paribas (on a *prorata basis* of the financing issued by BNP Paribas)	546 ; 513
	Responsible Procurement	Environmental impact and negative social risks	Integration of ESG criteria into supply chain management	Number of supplier ESG evaluations completed	530 ; 530
	Geopolitical risk	Geopolitical risk	Areas of special interests in 2018	Outside the BNP Paribas area of responsibility	286 ; NA
	Corporate economic value	Operational Risks	Calculating return on equity	Return on equity	136, 137 ; 148
Human rights	Human rights	Discrimination, reputational, legal risks	Combat social exclusion and support human rights	Percentage of employees contributing directly to the promotion of human rights who have received specific training	548 ; 513
		Risks of violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment	Duty of care and Modern Slavery Act and human trafficking statement		557 ; 513
Fight against corruption and tax evasion	Ethics and compliance	Financial Risks	Ethics of the highest standard	Percentage of employees trained on an ethics-related issue	521 ; 513
Governance	Business continuity plan	Operational Risks	Key players and governance	Percentage coverage of the Group's business plans	428 ; 555
	Governance	Operational, legal and reputational risks	Membership of the Board – Directors' independence	Number of independent members of the Board of directors	49 ; 49

Animal welfare, food waste and the promotion of a responsible, fair and sustainable food system were not identified as material issues in the Group's materiality analysis.

7.8 Table of concordance with GRI, ISO 26000, UNEP FI, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD

2018 Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	UNEP FI (**)	Principles of the UN Global Compact	UN Sustainable Development Goals (SDGs)	UN Principles for Responsible Banking (***)	TCFD (****)
OUR STRATEGY								
Introduction	510	G4-103	5.2.2, 5.2.3, 6.2	1.1			1, 5	
2020 engagement manifesto	511	G4-103	5.2.2, 6.2	1.1, 1.4			1, 2, 3, 4, 5, 6	1a, 1b
Our Corporate Social Responsibility strategy (CSR)								
A bank committed to a better future	512	G4-102	5.2.1, 5.2.2, 6.6.3, 6.6.4, 6.6.6	1.1, 2.6, 3.1	1-10	1-17	1, 2, 3, 4, 5, 6	1a, 1b
The CSR management indicators	513	G4-102	4.3, 7.7.2, 7.7.3	2.6, 3.1	1, 6, 7, 8	1-17	2, 5, 6	4a, 4b, 4c
BNP Paribas' public positions	514	G4-102	6.8.9, 7.3.3	3.6	1, 3, 6, 8, 10	1-17	1, 3, 4, 6	
Progress acknowledged by extra-financial rating agencies	515	G4-102	7.6.2				4	
CSR taken to the highest level in the organisation	515	G4-102	6.2.2	1.2			5	1a, 1b
Fostering dialogue with stakeholders	516	G4-102	5.3.3, 7.5.4	3.3, 3.5	1, 3, 9	17	4	
OUR ECONOMIC RESPONSIBILITY: FINANCING THE ECONOMY IN AN ETHICAL MANNER								
Commitment 1 – Investments and financing with a positive impact								
Supporting SMEs and boosting employment	517	FS7, FS14, G4-202, G4-203	6.8.7	1.3, 1.4		8, 10	2, 3	
Contributing to the United Nations Sustainable Development Goals (SDGs)	518	G4-DMA, FS14, FS16, G4-203		1.3, 1.5, 3.3	1-10	17	1, 2	2a

2018 Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	UNEP FI (**)	Principles of the UN Global Compact	UN Sustainable Development Goals (SDGs)	UN Principles for Responsible Banking (***)	TCFD (****)
Financing Social Entrepreneurship	519	FS14, G4-203	6.8.7, 6.7.9	2.7		8, 10, 11	2, 3, 4	
Social impact bonds (SIBs): BNP Paribas is leader in France and a significant player in the United States	519	FS7, G4-203	6.8.7, 7.3.1	1.3, 1.4, 2.3, 2.6		8, 10, 11, 17	2, 3, 4	
Designing and promoting Socially Responsible Investment (SRI) funds	520	G4-DMA, FS11, G4-203	6.7.3, 6.7.9	2.7	1, 9	6, 7, 10, 11, 13, 14, 15, 17	1, 2, 3	2a
Tailored advice and support	521	FS14	6.3.7, 6.7.3, 6.7.9	3.3	6	5, 9	3, 4	
Commitment 2 – Ethics of the highest standard								
Ethics of the highest standard	521	G4-205, G4-206, G4-103	4.7, 6.6.3, 6.6.4, 6.6.6, 6.6.7	1.2, 1.4, 1.5	10	10, 16	2, 5, 6	
Protecting clients' interests	523	G4-DMA, G4-418	6.6.7, 6.7.3, 6.7.4, 6.7.6, 6.7.7	3.2	10	10	3, 4, 5	
Ethics at the heart of supplier relations	525	G4-204, G4-308, G4-414	5.2.1, 6.6.3, 6.7.3	3.3	10	12, 16	4, 5	
Commitment 3 – Systematic integration and management of Environmental, Social and Governance risks (ESG)								
Financing and investment policies for the Group's activities in sectors with significant ESG issues	526	G4-DMA, G4-411, G4-412, G4-413	4.4, 4.6, 6.2, 6.3.4, 6.3.5, 6.6.3, 6.8.7	1.3, 2.1, 2.2, 2.3, 2.4, 2.7, 3.2, 3.3	1-10	3, 5, 6, 8, 13, 14, 15, 16	1, 2, 3, 4	3a, 3b, 3c
Upholding the Equator Principles on project financing	528	G4-DMA, G4-411, G4-412, G4-413	6.6.7	2.2, 2.3, 2.6, 2.7	1-10	3, 5, 6, 8, 13, 14, 15, 16	1, 2, 3, 4, 5, 6	3a, 3b, 3c
A comprehensive system of ESG risk assessment of the products and services provided by the Group	529	G4-DMA, G4-203	6.3.5, 6.7.4, 6.7.5	2.3	1-10	16	1, 2, 3, 5, 6	3b, 3c
Management and monitoring tools for our ESG risks	530	G4-DMA, FS11	6.3.5, 6.4.7, 6.7.4, 6.7.5	2.3	1-10	16	1, 2, 3, 5, 6	3c

2018 Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	UNEP FI (**)	Principles of the UN Global Compact	UN Sustainable Development Goals (SDGs)	UN Principles for Responsible Banking (***)	TCFD (****)
OUR SOCIAL RESPONSIBILITY: DEVELOPING AND ENGAGING OUR PEOPLE RESPONSIBLY								
Promoting employees' fundamental rights and equal opportunities wherever the Group operates	531		6.4.7	3.3		5, 8	1	
Consolidating the 2020 HR strategy	531	G4-103	6.4.7	3.3		3, 4, 5, 8	1	
Commitment 4 – Promotion of diversity and inclusion in the workplace								
Well-established diversity and inclusion policies	532	G4-103, G4-405, G4-406	6.3.7, 6.4.3, 6.4.7	1.4, 3.3	1, 6	5, 8, 10	5	
Continued initiatives to raise awareness and provide training to promote a culture of inclusiveness	532	G4-405, G4-406	5.5.5, 6.6.6	1.4, 3.3	1, 6	5, 8, 10, 16	4, 5	
Outstanding initiatives	532	G4-405, G4-406	6.3.7, 6.3.10, 6.4.3, 6.6.6	3.3	1, 6	5, 8, 10, 16	5, 6	
Strong results	534	G4-405, G4-406	5.3.3		1, 6	5, 8, 10, 17	5, 6	
Commitment 5 – A "Good place to work" and responsible employment management								
Recruitment, changes in headcount, organisation of working hours	535	G4-401, G4-402	6.4.3, 6.4.4			5, 8	6	
Quality social dialogue	538	G4-407	5.3.3, 6.4.3, 6.3.10, 6.4.5	3.3	3	3, 5, 8, 17	1, 4, 5	
Listening to employees through the Global People Survey (GPS)	539		5.3.3			5, 8	4, 5	
A competitive compensation policy	539	G4-401	6.4.3, 6.4.4			5, 8	4, 6	
Focus on people (working conditions, health and safety, risk prevention)	541	G4-403	6.4.3, 6.4.4, 6.4.6	1.4	6	3, 5, 8	1, 5, 6	
Commitment 6 – A learning company supporting dynamic career management								
Managing career paths	543	G4-404	6.4.7		6	4, 5, 8, 10	1, 4	
Training policy	543	G4-404	6.4.7, 6.8.5		1, 8	4, 5, 8, 17	1, 4	
Mobility	545		6.4.3, 6.4.7			4, 5, 8, 10	1, 4, 5	

2018 Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	UNEP FI (**)	Principles of the UN Global Compact	UN Sustainable Development Goals (SDGs)	UN Principles for Responsible Banking (***)	TCFD (****)
OUR CIVIC RESPONSIBILITY: BEING A POSITIVE AGENT FOR CHANGE								
Commitment 7 – Products and services that are widely accessible								
Group support for microfinance	546	FS14	6.8.9	2.7		1, 8, 10, 17	1, 2, 3	
Providing assistance to customers at risk	547	FS14	6.7.4, 6.7.8, 6.8.6	2.7		8, 10	1, 2, 3, 4	
Commitment 8 – Combat social exclusion and support human rights								
Combat social exclusion	548	G4-413	6.8.3, 6.8.4, 6.8.5		6	8, 10, 11	1, 2, 4	
BNP Paribas is committed to respecting human rights	548	G4-407, G4-408, G4-409, G4-410, G4-411, G4-412	6.3.3, 6.3.4, 6.3.5	1.5, 2.3, 2.7	1, 2, 3, 4, 5, 6	1, 2, 8, 16	1, 2, 4, 5, 6	
Commitment 9 – Corporate philanthropy policy focused on the arts, solidarity and the environment								
Solidarity	549	G4-413	6.4.7, 6.8.3	1.4, 3.3		3, 4, 6, 7, 13, 14, 15	1, 2, 4	
Arts	550		6.8.4				4	
OUR ENVIRONMENTAL RESPONSIBILITY: COMBATING CLIMATE CHANGE								
Commitment 10 – Partnering with our clients in the transition to a low-carbon economy								
Supporting the energy transition	551	G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	2.4	7, 8, 9	7, 9, 11, 13	1, 2, 3, 4, 5, 6	2a, 2b
Helping companies to improve their energy efficiency	552	G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	2.4, 3.2	7, 8, 9	7, 9, 11, 13	1, 3, 4	2a, 2b
Helping private consumers to reduce their energy consumption	553	G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	2.4, 3.2	7, 8, 9	7, 11, 13	1, 3, 4	2a, 2b
Third-party asset management supporting the energy transition	553	FS11, G4-302	6.5.4, 6.5.5, 6.6.6, 6.7.5	2.4, 2.5, 3.2	7, 8, 9	6, 7, 8, 9, 11, 13, 14, 15	1, 2, 3, 4, 5	2a, 2b
Support for the circular economy	553	G4-301, G4-302, G4-305	6.5.3, 6.5.4, 6.7.5, 6.8.6	2.4	7, 8, 9	12	1, 2, 3, 4, 5	2a, 2b
A new global commitment to biodiversity	554	G4-304	6.5.6				1, 2, 5	
Innovative financing tools to promote agro-ecology and agro-forestry in emerging countries	554	G4-304	6.5.5				1, 2, 4, 5	2a, 2b

2018 Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	UNEP FI (**)	Principles of the UN Global Compact	UN Sustainable Development Goals (SDGs)	UN Principles for Responsible Banking (***)	TCFD (****)
Commitment 11 – Reduce the environmental impacts of our operations								
A carbon neutral bank across its operational scope (emissions by scope)	554	FS1, FS2, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	2.4, 2.6, 3.1	7, 9	12, 13	1, 2, 5, 6	4a, 4b, 4c
Consuming less paper and using responsibly sourced paper	555	FS1, FS2, G4-301	6.5.3, 6.5.4, 6.5.5	2.4, 2.6, 3.1	7, 9	12, 15	1, 5, 6	
Reducing waste and recycling it wherever possible	556	FS1, FS2, G4-306	6.5.3, 6.5.4, 6.5.5	2.4, 2.6, 3.1	7, 9	12	1, 5, 6	
Combating loss of biodiversity and managing water consumption	556	FS1, FS2, G4-303, G4-304	6.5.4, 6.5.5, 6.5.6	2.4, 2.6, 3.1	7, 9	6, 12, 15	1, 5, 6	
Commitment 12 – Advance awareness and sharing of best environmental practices								
Support research and develop knowledge on climate change	556		6.5.5, 6.6.6, 6.8.6, 6.8.9	2.1, 2.5	8, 9	13, 14, 17	4, 5	3a
COP24: Promoting Group actions in the fight against climate change	557		6.5.5, 6.6.6, 6.8.6, 6.8.9	2.1, 2.5	9	17	4, 5	
2018: international year of the coral reef	557		6.5.5	2.1, 2.5			4	3a
APPENDICES								
Duty of care: 2018 BNP Paribas' vigilance plan	557	G4-DMA, G4-102, G4-103, G4-205, G4-412, G4-416, G4-418	5.2.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.5.3, 6.5.5, 6.5.6, 6.6.7, 6.7.7	2.2, 2.3, 2.6, 3.1	1, 2, 3, 4, 5, 6, 7	3, 5, 6, 8, 13, 15, 16	1, 2, 3, 4, 5, 6	1a, 1b, 2a, 2b, 3a, 3b, 3c
Modern slavery and human trafficking statement	561	G4-DMA, 4-408, G4-409	6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.10		1, 2, 4, 5	8, 16	1, 2, 3, 4, 5, 6	

2018 Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	UNEP FI (**)	Principles of the UN Global Compact	UN Sustainable Development Goals (SDGs)	UN Principles for Responsible Banking (***)	TCFD (****)
Extra-financial performance statement	563	G4-DMA, G4-102, G4-103, G4-205, G4-412, G4-416, G4-418	5.2.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.5.3, 6.5.5, 6.5.6, 6.6.7, 6.7.7	1.5, 2.3, 2, 7	1, 2, 3, 4, 5, 6, 7	3, 5, 6, 8, 13, 15, 16	1, 2, 3, 4, 5, 6	1a, 1b, 2a, 2b, 3a, 3b, 3c, 4a, 4b, 4c
Statutory Auditors' report	572							

(*) Managerial approach defined in the GRI G4 guidelines (financial sector); EC: Economy; EN: Environment; PR: Product responsibility; LA: Labour practices; HR: Human rights; SO: Society; FS: Impact of products and services
(**) Statement by Financial Institutions on the Environment and Sustainable Development, May 1997
(***) United Nations Principles for Responsible Banking
(****) Task force on Climate-related Financial Disclosures

7.9 Report by one of the Statutory Auditors, appointed as an independent third party, on the consolidated non-financial information statement included in the group management report

For the year ended 31 December 2018

This is a free translation into English of the Statutory Auditor's report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditor of BNP Paribas (hereinafter the "entity"), appointed as an independent third party and certified by COFRAC under number 3-1060 rév.2 (whose scope is available at www.cofrac.fr), we hereby report to you on the consolidated non financial information statement for the year ended 31 December 2018 (hereinafter the "Statement"), included in the group management report pursuant to the legal and regulatory provisions of articles L.225-102-1, R.225-105 and R.225-105-1 of the French Commercial Code (*Code de commerce*).

THE ENTITY'S RESPONSIBILITY

Pursuant to legal and regulatory requirements, the Board of Directors is responsible for preparing the Statement, which must include a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented in light of those risks and the outcome of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are presented in the Statement and available on request from the entity's head office.

INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by the provisions of article L.822-11-3 of the French Commercial Code and the French Code of Ethics (*Code de déontologie*) of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, French professional standards and applicable legal and regulatory requirements.

7

RESPONSIBILITY OF THE STATUTORY AUDITOR, APPOINTED AS AN INDEPENDENT THIRD PARTY

On the basis of our work, our responsibility is to provide a reasoned opinion expressing a limited assurance conclusion on:

- the consistency of the Statement with the provisions of article R.225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with article R.225 105 I, 3 and II of the French Commercial Code, i.e., the outcome of the policies, including key performance indicators, and the measures implemented in light of the principal risks (hereinafter the "Information").

However, it is not our responsibility to comment on:

- the entity's compliance with other applicable legal and regulatory provisions, in particular the French duty of care law and anti-corruption and tax evasion legislation;
- the consistency of products and services with the applicable regulations.

Nature and scope of our work

The work described below was performed in accordance with the provisions of articles A.225-1 et *seq.* of the French Commercial Code determining the conditions in which the independent third party performs its engagement and with the professional standards applicable in France to such engagements, as well as with ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

Our procedures allowed us to assess the consistency of the Statement with regulatory provisions and the fairness of the Information:

- we obtained an understanding of all the consolidated entities' activities, the description of the human resources and environmental risks associated with their activities, and the impact of those risks on compliance with human rights and anti-corruption and tax evasion legislation, as well as the resulting policies and their outcomes;
- we assessed the appropriateness of the Guidelines with respect to their relevance, completeness, reliability, objectivity and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of human resources and environmental information set out in article L.225 102 1 III, as well as information regarding compliance with human rights and anti corruption and tax evasion legislation;
- we verified that the Statement includes an explanation for the absence of the information required under article L.225-102-1 III, 2;
- we verified that the Statement presents the business model and the principal risks associated with all the consolidated entities' activities, including where relevant and proportionate, the risks associated with their business relationships and products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators;
- we verified, where relevant with respect to the principal risks or the policies presented, that the Statement provides the information required under article R. 225-105 II;
- we assessed the process used to identify and confirm the principal risks;
- we asked what internal control and risk management procedures the entity has put in place;
- we assessed the consistency of the outcomes and the key performance indicators used with respect to the principal risks and the policies presented;
- we verified that the Statement includes a clear and reasoned explanation for the absence of policies concerning one or more of the risks;
- we verified that the Statement covers the scope of consolidation, i.e., all the companies included in the scope of consolidation in accordance with article L.233-16, within the limitations set out in the Statement;
- we assessed the data collection process implemented by the entity to ensure the completeness and fairness of the Information;
  - for the key performance indicators and other quantitative results that we considered to be the most important (see the list provided in the appendix), we implemented:
    - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
    - tests of details, using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities, i.e., BNP Paribas SA (France), including the DRSE entities, Group HR, IMEX and ITP, UkrSibBank (Ukraine), BNL, Findomestic, Arval Italy (Italy), BNP Paribas CIB, BP2S and Personal Investors Deutschland (Germany), and covers between 29% and 100% of the consolidated data relating to the key performance indicators and outcomes selected for these tests;
  - we referred to documentary sources and conducted interviews to corroborate the qualitative information (measures and outcomes) that we considered to be the most important (see the list provided in the appendix);
  - we assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

We believe that the work carried out, based on our professional judgement, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures.

Means and resources

Our work was carried out by a team of seven people between October 2018 and March 2019 and took a total of eight weeks.

We were assisted in our work by our specialists in sustainable development and corporate social responsibility. We conducted some ten interviews with the people responsible for preparing the Statement, representing the Corporate Social Responsibility (CSR) Department and the Human Resources Department.

Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the non-financial information statement is not in accordance with the applicable regulatory provisions and that the Information, taken as a whole, is not presented fairly and in accordance with the Guidelines.

7

Neuilly-sur-Seine, 5 March 2019

One of the Statutory Auditors

PricewaterhouseCoopers Audit

Patrice Morot	Sylvain Lambert
Partner	Partner in charge of the Sustainable Development Department

APPENDIX: LIST OF INFORMATION THAT WE CONSIDERED TO BE THE MOST IMPORTANT

Key performance indicators and other quantitative results:

- Headcount at 31 December 2018, employee turnover over the year
- Rate of absenteeism
- Proportion of women among the members of cross-business line and/or cross-country Executive Committees
- Proportion of employees who have received at least 14 weeks of paid maternity leave and/or 6 days of paid paternity leave
- Proportion of employees who state they have received training (in all forms, including e-learning) during the previous 12 months
- Number of disabled employees
- Proportion of total employees who have taken part in the "Competition law and you" training course
- Proportion who have taken part in the "MiFID II Awareness" e-learning course
- Proportion of total employees who have taken part in the "Know Your Data" training course
- Amount of the group's philanthropic and sponsorship contributions
- Share of loans to companies contributing to the achievement of the SDGs
- Amount of funding devoted to renewable energies
- Amount of assets under SRI management at BNP Paribas Asset Management at 31 December 2018
- Energy consumption and business travel (group-wide)
- Assessment of GHG emissions (scopes I, II and III)
- Average customer satisfaction score of the four domestic markets (France, Luxembourg, Belgium, Italy)
- Digital transformation costs related to the digital transformation plan
- Annual number of recipients of microloans distributed by microloan institutions funded by BNP Paribas (prorated to BNP Paribas funding)
- Number of ESG supplier evaluations performed
- Return on equity
- Proportion of total employees contributing directly to promoting human rights who have received dedicated training
- Proportion of total employees who have received training on ethics
- Percentage of coverage of group business plans
- Number of independent members of the Board of Directors

Qualitative information (actions and outcomes)

- Employee development programmes: "Active Inclusion", "#WomengotTalent " and "Women in Business"
- Internal campaigns on positive management
- Training digitalisation initiatives in Asia in 2018 (webinars, online platforms, virtual reality)
- Organisation of Customer advisory committees (BNP Paribas Fortis)
- Indexing a part of the variable remuneration to responsibility criteria specifically related to customer satisfaction (BNP Paribas Fortis)
- Simplification of BNP Paribas Cardif's commercial and administrative documents to draft them in language accessible to a certified level B1, according to the Common European Framework of Reference
- Development of *Odyssée Jeunes* and *Projet Banlieues* community projects
- WaterLink funding
- Measurement of progress in integrating ESG in BNP Paribas Asset Management by setting up ESG key performance indicators at the level of the portfolios and the management company
- BNP Paribas Asset Management's voting policy in line with its strategy concerning climate change, implemented in 2018
- Positioning of the Group on the global market in euros for sustainable bonds
- Climate indexes launched by BNP Paribas, which have raised more than two billion euros (including EUR 750 million in 2018)
- Participation in the Tropical Landscape Finance Facility (TLFF) and the Act4Nature programme on biodiversity, Call for Action Make our Planet Great Again commitment with the International Biodiversity & Property Council
- Launch of ClimateSeed (platform for voluntary carbon offsetting) by BNP Paribas Securities Services
- Green Company for Employees programme
- Involvement of the Group's Leaders for Tomorrow in technical assistance programmes for MFIs to raise awareness of microfinance, missions carried out in 15 countries including South Africa, India, China and Morocco
- Completion of an impact study in December 2018 for Permicro, the first Italian MFI, in which the Group holds a 20% share and is its largest source of funding
- Discontinuation of financing and investment activities related to manufacturers of tobacco products as well as producers, wholesalers and retailers whose income is derived mainly from tobacco
- Actions by BNP Paribas Wealth Management to document customers' tax compliance declarations

8 GENERAL INFORMATION

8.1 Documents on display

This document is available on the BNP Paribas website, www.invest.bnpparibas.com, and the Autorité des Marchés Financiers (AMF) website, www.amf-france.org.

Any person wishing to receive additional information about the BNP Paribas Group can request documents, without commitment, as follows:

- by writing to:

  BNP Paribas – Group Finance
  Investor Relations and Financial Information
  3, rue d'Antin – CAA01B1
  75002 Paris

- by calling: +33 (0)1 40 14 63 58

BNP Paribas' regulatory information (in French) can be viewed at: https://invest.bnpparibas.com/information-reglementee.

8.2 Material contracts

To date, BNP Paribas has not entered into any material contracts – other than those entered into during the normal course of business – that create an obligation or commitment for the entire Group.

8.3 Dependence on external parties

In April 2004, BNP Paribas SA began outsourcing IT Infrastructure Management Services to the BNP Paribas Partners for Innovation (BP²I) joint venture set up with IBM France at the end of 2003. BP²I provides IT Infrastructure Management Services for BNP Paribas SA and several BNP Paribas subsidiaries in France (including BNP Paribas Personal Finance, BP2S, and BNP Paribas Cardif), Switzerland, and Italy. The contractual arrangement with IBM France was successively extended from year to year until the end of 2021, and then extended for a period of 5 years, i.e. by the end of 2026, in particular to integrate the IBM cloud services.

BP²I is under the operational control of IBM France. BNP Paribas has a strong influence over this entity, which is 50/50 owned with IBM France.

The BNP Paribas staff made available to BP²I make up half of that entity's permanent staff, its buildings and processing centres are the property of the Group, and the governance in place provides BNP Paribas with the contractual right to monitor the entity and bring it back into the Group if necessary.

IBM Luxembourg is responsible for infrastructure and data production services for some of BNP Paribas Luxembourg entities.

BancWest's data processing operations are outsourced to Fidelity Information Services. Cofinoga France's data processing operation is outsourced to IBM Services.

8.4 Significant changes

There have been no significant changes in the Group's financial or business situation since the end of the last financial year for which audited financial statements were published, and in particular since the signature of the Statutory Auditors' report on the consolidated financial statements on 5 March 2019.

8.5 Investments

The following table lists the Group's investments since 1 January 2016 that are individually valued at over EUR 500 million and are considered material at a Group level:

Country	Announcement date	Transaction	Transaction amount	Comments
Poland	31 October 2018	Acquisition by BGZ BNP Paribas of the core banking operations of Raiffeisen Bank Polska	EUR 756 million	The transaction price is the equivalent in euro of the price paid (PLN 3.25 billion) on the basis of a €/PLN exchange rate of ~4.30 as at 30/10/18

8.6 Information on locations and businesses in 2018

In accordance with article L.511-45 of the French Monetary and Financial Code and Decree No. 2014-1657 of 29 December 2014, credit institutions, financial holding companies, mixed financial holding companies and investment firms are obliged to disclose information about their locations and activities, included in their scope of consolidation, in each State or territory.

I. LOCATIONS BY COUNTRY

Locations	Business
European Union member States	
Austria	
All In One Vermietung GmbH	Leasing Solutions
Arval Austria GmbH	Arval
BNPP Asset Management France (Austria branch)	Asset Management
BNPP Lease Group GmbH & Co KG	Leasing Solutions
BNPP Personal Finance (Austria branch)	Personal Finance
BNPP SA (Austria branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Austria branch)	Insurance
Cardif Assurances Risques Divers (Austria branch)	Insurance
CNH Industrial Capital Europe GmbH	Leasing Solutions
Opel Leasing GmbH (Austria branch)	Personal Finance
Belgium	
AG Insurance	Insurance
Alpha Crédit SA	Personal Finance
Arval Belgium NV SA	Arval
B Carat	Personal Finance
Bancontact Payconiq	Retail Banking
Banking Funding Company SA	Retail Banking
BASS Master Issuer NV	Retail Banking
Belgian Mobile ID	Retail Banking
BNPP Asset Management Be Holding	Asset Management
BNPP Asset Management Belgium	Asset Management
BNPP B Institutional II	Investment companies and other subsidiaries
BNPP B Institutional II Treasury 17	Leasing Solutions
BNPP Fortis	Retail Banking
BNPP Fortis Factor NV	Retail Banking
BNPP Fortis Film Finance	Retail Banking
BNPP FPE Belgium	Retail Banking
BNPP FPE Expansion	Retail Banking
BNPP FPE Management	Retail Banking
BNPP Lease Group Belgium	Leasing Solutions
BNPP Real Estate Advisory Belgium SA	Real Estate Services
BNPP Real Estate Holding Benelux SA	Real Estate Services
BNPP Real Estate Investment Management Belgium	Real Estate Services
BNPP Real Estate Property Management Belgium	Real Estate Services
BNPP SA (Belgium branch)	Corporate and Institutional Banking
BNPP Securities Services (Belgium branch)	Securities Services
Bpost Banque	Retail Banking
Cardif Assurance Vie (Belgium branch)	Insurance
Cardif Assurances Risques Divers (Belgium branch)	Insurance
CNH Industrial Capital Europe (Belgium branch)	Leasing Solutions
Cobema	Investment companies and other subsidiaries
Credissimo	Retail Banking
Credissimo Hainaut SA	Retail Banking
Crédit pour Habitations Sociales	Retail Banking
Demetris NV	Retail Banking
Eos Aremas Belgium SA NV	Personal Finance
Epimede	Retail Banking
ES-Finance	Leasing Solutions
Esmee Master Issuer	Retail Banking
Favor Finance	Retail Banking
FL Zeebrugge	Leasing Solutions
Fortis Lease Belgium	Leasing Solutions
FScholen	Corporate and Institutional Banking
Gambit Financial Solutions	Asset Management
Gemma Frisius Fonds KU Leuven	Retail Banking
Het Anker NV	Retail Banking
Holding PCS	Retail Banking
Immo Beaulieu	Retail Banking
Immobilière Sauveniere SA	Retail Banking
Isabel SA NV	Retail Banking
Locadif	Arval
Microstart	Retail Banking
Novy Invest	Retail Banking
Omega Invest	Retail Banking
Opel Finance BVBA	Personal Finance
Opel Finance NV (Belgium branch)	Personal Finance
Penne International	Retail Banking
Sagip	Investment companies and other subsidiaries
Sowo Invest SA NV	Retail Banking
Studio 100	Retail Banking
Bulgaria	
BNPP Personal Finance (Bulgaria branch)	Personal Finance
BNPP Personal Finance EAD	Personal Finance
BNPP SA (Bulgaria branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Bulgaria branch)	Insurance
Cardif Assurances Risques Divers (Bulgaria branch)	Insurance
Czech Republic	
Arval CZ SRO	Arval
BNPP Cardif Pojistovna AS	Insurance
BNPP Fortis (Czech Republic branch)	Corporate and Institutional Banking
BNPP Personal Finance (Czech Republic branch)	Personal Finance
BNPP Real Estate APM CR SRO	Real Estate Services
BNPP SA (Czech Republic branch)	Corporate and Institutional Banking
Denmark	
Arval AS	Arval
BNPP Factor AS	Retail Banking
BNPP Fortis (Denmark branch)	Corporate and Institutional Banking
BNPP SA (Denmark branch)	Corporate and Institutional Banking
Cardif Forsakring AB (Denmark branch)	Insurance
Cardif Livforsakring AB (Denmark branch)	Insurance
Ekspres Bank AS	Personal Finance
Finland	
Arval OY	Arval
BNPP SA (Finland branch)	Corporate and Institutional Banking
Elite Asset Management PLC	Asset Management
France	
AEW Immocommercial	Insurance
Agathe Retail France	Insurance
Ambrosia Avril 2025	Insurance
Antin Participation 5	Investment companies and other subsidiaries
Aprolis Finance	Leasing Solutions
Arius	Leasing Solutions
Artegy	Leasing Solutions
Artel	Arval
Arval Fleet Services	Arval
Arval Service Lease	Arval
Arval Trading	Arval
Atargatis	Corporate and Institutional Banking
Auguste Thouard Expertise	Real Estate Services
Austin Finance	Corporate and Institutional Banking
Autop Ocean Indien	Personal Finance
Axa Banque Financement	Personal Finance
B*Capital	Retail Banking
Banque de Wallis et Futuna	Retail Banking
Banque Solfea	Personal Finance
BNPPARIBAS SA	Banking
BNPP ABS Europe AAA	Insurance
BNPP ABS Europe IG	Insurance
BNPP ABS Opportunities	Insurance
BNPP Actions Entrepreneurs (Ex- Camgestion Euro Mid Cap)	Insurance
BNPP Actions Euroland	Insurance
BNPP Actions Monde	Insurance
BNPP Actions PME	Insurance
BNPP Antilles Guyane	Retail Banking
BNPP Aqua	Insurance
BNPP Arbitrage	Corporate and Institutional Banking

Locations	Business
BNPP Asset Management France	Asset Management
BNPP Asset Management Holding	Asset Management
BNPP Asset Management Services Grouping	Asset Management
BNPP Capital Partners	Asset Management
BNPP Cardif	Insurance
BNPP Convictions	Insurance
BNPP CP Cardif Alternative	Insurance
BNPP CP Cardif Private Debt	Insurance
BNPP Dealing Services	Asset Management
BNPP Développement	Retail Banking
BNPP Développement Humain	Insurance
BNPP Développement Oblig	Retail Banking
BNPP Diversipierre	Insurance
BNPP Euro Valeurs Durables	Insurance
BNPP Factor	Retail Banking
BNPP France Crédit	Insurance
BNPP Global Senior Corporate Loans	Insurance
BNPP Home Loan SFH	Investment companies and other subsidiaries
BNPP Immobilier Promotion Immobilier d'Entreprise	Real Estate Services
BNPP Immobilier Promotion Résidentiel	Real Estate Services
BNPP Immobilier Résidences Services	Real Estate Services
BNPP Immobilier Résidentiel	Real Estate Services
BNPP Immobilier Résidentiel Service Clients	Real Estate Services
BNPP Indice Amérique du Nord	Insurance
BNPP Indice Euro	Insurance
BNPP IRB Participations	Europe-Mediterranean
BNPP Lease Group	Leasing Solutions
BNPP Midcap France	Insurance
BNPP Monétaire Assurance	Insurance
BNPP Nouvelle Calédonie	Retail Banking
BNPP Partners for Innovation	Investment companies and other subsidiaries
BNPP Personal Finance	Personal Finance
BNPP Perspectives	Insurance
BNPP Procurement Tech	Investment companies and other subsidiaries
BNPP Protection Monde	Insurance
BNPP Public Sector SCF	Investment companies and other subsidiaries
BNPP Real Estate	Real Estate Services
BNPP Real Estate Conseil Habitation & Hospitality (Ex- BNPP Immobilier Résidentiel Transaction & Conseil)	Real Estate Services
BNPP Real Estate Consult France	Real Estate Services
BNPP Real Estate Financial Partner	Real Estate Services
BNPP Real Estate Investment Management France	Real Estate Services
BNPP Real Estate Investment Services	Real Estate Services
BNPP Real Estate Property Management France SAS	Real Estate Services
BNPP Real Estate Transaction France	Real Estate Services
BNPP Real Estate Valuation France	Real Estate Services
BNPP Réunion	Retail Banking
BNPP Securities Services	Securities Services
BNPP Sélection Dynamique Monde	Insurance
BNPP Sélection Flexible	Insurance
C Santé	Insurance
Cafineo	Personal Finance
Camgestion Actions Croissance	Insurance
Camgestion Actions Euro	Insurance
Camgestion Obliflexible	Insurance
Camgestion Rendactis	Insurance
Capital France Hotel	Insurance
Cardif Alternatives Part I	Insurance
Cardif Assurance Vie	Insurance
Cardif Assurances Risques Divers	Insurance
Cardif BNPP IP Convertibles World	Insurance
Cardif BNPP IP Equity Frontier Markets	Insurance
Cardif BNPP IP Signatures	Insurance
Cardif BNPP IP Smid Cap Euro	Insurance
Cardif BNPP IP Smid Cap Europe	Insurance
Cardif CPR Global Return (Ex- Cardif CPR Base Credit)	Insurance
Cardif Edrim Signatures	Insurance
Cardif IARD	Insurance
Cardif Vita Convex Fund Eur	Insurance
Cardimmo	Insurance
Carma Grand Horizon SARL	Insurance
Carrefour Banque	Personal Finance
Cedrus Carbon Initiative Trends	Insurance
Cetelem Renting	Arval
CFH Bercy	Insurance
CFH Bercy Hotel	Insurance
CFH Bercy Intermédiaire	Insurance
CFH Boulogne	Insurance
CFH Cap d'Ail	Insurance
CFH Montmartre	Insurance
CFH Montparnasse	Insurance
Claas Financial Services	Leasing Solutions

Locations	Business
CMV Mediforce	Leasing Solutions
CNH Industrial Capital Europe	Leasing Solutions
Cofica Bail	Personal Finance
Cofiparc	Arval
Cofiplan	Personal Finance
Compagnie d'Investissement Italiens	Corporate and Institutional Banking
Compagnie d'Investissement Opéra	Corporate and Institutional Banking
Compagnie pour le Financement des Loisirs	Retail Banking
Construction-Sale Companies (Real Estate programmes)	Real Estate Services
Copartis	Retail Banking
Corosa	Insurance
Crédit Moderne Antilles Guyane	Personal Finance
Crédit Moderne Océan Indien	Personal Finance
Défense CB3 SAS	Insurance
Domofinance	Personal Finance
Effico	Personal Finance
EMZ Partners	Asset Management
EP L	Insurance
Esomet	Corporate and Institutional Banking
Euro Secured Notes Issuer (Ex- BNPP SME-1)	Investment companies and other subsidiaries
Euro Securities Partners	Retail Banking
Eurotitrisation	Corporate and Institutional Banking
FCT F Carat	Personal Finance
FCT Juice	Corporate and Institutional Banking
FCT Laffitte 2016	Investment companies and other subsidiaries
FCT Opéra 2014	Investment companies and other subsidiaries
Financière des Italiens	Corporate and Institutional Banking
Financière des Paiements Electroniques	New Digital Businesses
Financière du Marché Saint Honoré	Corporate and Institutional Banking
Financière Paris Haussmann	Corporate and Institutional Banking
Financière Taitbout	Corporate and Institutional Banking
Fleur SAS	Insurance
Foncière Partenaires	Insurance
Fonds d'Investissements Immobiliers pour le Commerce et la Distribution	Insurance
Fortis Lease	Leasing Solutions
FP Cardif Convex Fund USD	Insurance
Fundquest	Insurance
Fundquest Advisor	Asset Management
GIE BNPP Cardif	Insurance
GIE Groupement Auxiliaire de Moyens	Investment companies and other subsidiaries
GIE Groupement d'Études et de Prestations	Investment companies and other subsidiaries
GIE Siège Issy	Real Estate Services
Hibernia France	Insurance
Icare	Insurance
Icare Assurance	Insurance
JCB Finance	Leasing Solutions
Laffitte Participation 22	Corporate and Institutional Banking
Leval 20	Personal Finance
Lifizz	Real Estate Services
Loisirs Finance	Personal Finance
Louveo	Arval
Lyf SA	New Digital Businesses
Lyf SAS	New Digital Businesses
Mediterranea	Corporate and Institutional Banking
MFF	Leasing Solutions
Natio Assurance	Insurance
Natio Energie 2	Leasing Solutions
Natio Fonds Ampère 1	Insurance
Natio Fonds Athenes Investissement N 5	Insurance
Natio Fonds Colline International	Insurance
Natio Fonds Collines Investissement N 1	Insurance
Natio Fonds Collines Investissement N 3	Insurance
Natiocredibail	Leasing Solutions
Neuilly Contentieux	Personal Finance
New Alpha Cardif Incubator Fund	Insurance
Noria 2018-1	Personal Finance
Norrsken Finance	Personal Finance
Olympia SAS	Personal Finance
Opel Bank	Personal Finance
Opéra Rendement	Insurance
Opéra Trading Capital	Corporate and Institutional Banking
Optichamps	Corporate and Institutional Banking
Parilease	Corporate and Institutional Banking
Partecis	Retail Banking
Participations Opéra	Corporate and Institutional Banking
Partner's & Services	Real Estate Services
Permal Cardif Co Investment Fund	Insurance
Portzamparc Société de Bourse	Retail Banking
Preim Healthcare SAS	Insurance
Projeo	Personal Finance
Protection 24	Retail Banking
Public Location Longue Durée	Arval

Locations	Business
PWH	Insurance
Reumal Investissements	Insurance
Rueil Ariane	Insurance
Same Deutz Fahr Finance	Leasing Solutions
SAS HVP	Insurance
SCI 68/70 rue de Lagny - Montreuil	Insurance
SCI Alpha Park	Insurance
SCI BNPP Pierre I	Insurance
SCI BNPP Pierre II	Insurance
SCI Bobigny Jean Rostand	Insurance
SCI Bouleragny	Insurance
SCI Cardif Logement	Insurance
SCI Citylight Boulogne	Insurance
SCI Clichy Nuovo	Insurance
SCI Défense Étoile	Insurance
SCI Défense Vendôme	Insurance
SCI Étoile du Nord	Insurance
SCI Fontenay Plaisance	Insurance
SCI Imefa Velizy	Insurance
SCI Le Mans Gare	Insurance
SCI Liberté	Insurance
SCI Nanterre Guilleraies	Insurance
SCI Nantes Carnot	Insurance
SCI Odyssée	Insurance
SCI Pantin Les Moulins	Insurance
SCI Paris Batignolles	Insurance
SCI Paris Cours de Vincennes	Insurance
SCI Portes de Claye	Insurance
SCI Rue Moussorgski	Insurance
SCI Rueil Caudron	Insurance
SCI Saint Denis Landy	Insurance
SCI Saint Denis Mitterrand	Insurance
SCI Saint-Denis Jade (Ex- SCI Porte d'Asnières)	Insurance
SCI SCOO	Insurance
SCI Vendôme Athènes	Insurance
SCI Villeurbanne Stalingrad	Insurance
Secar	Insurance
Securitisation funds Autonoria	Personal Finance
Securitisation funds Domos	Personal Finance
Services Épargne Entreprise	Asset Management
Services Logiciels d'Intégration Boursière	Securities Services
SNC Natiocredimurs	Leasing Solutions
SNC Taitbout Participation 3	Corporate and Institutional Banking
Société Auxiliaire de Construction Immobilière	Real Estate Services
Société Francaise d'Assurances sur la Vie	Insurance
Société Immobilière du Marché Saint-Honoré	Investment companies and other subsidiaries
Société Lairoise de Participations	Retail Banking
Société Orbaisienne de Participations	Investment companies and other subsidiaries
Symag	Personal Finance
Tikehau Cardif Loan Europe	Insurance
UCB Bail 2	Leasing Solutions
United Partnership	Personal Finance
Valeur Pierre Epargne	Insurance
Valtitres FCP	Insurance
Velizy SAS	Insurance
Verner Investissements	Corporate and Institutional Banking
Germany	
99 West Tower GmbH & Co KG	Real Estate Services
99 West Tower GP GmbH	Real Estate Services
Arval Deutschland GmbH	Arval
BGL BNPP (Germany branch)	Retail Banking
BNPP Asset Management Belgium (Germany branch)	Asset Management
BNPP Emissions - Und Handels - GmbH	Corporate and Institutional Banking
BNPP Factor GmbH	Retail Banking
BNPP Lease Group (Germany branch)	Leasing Solutions
BNPP Real Estate Consult GmbH	Real Estate Services
BNPP Real Estate GmbH	Real Estate Services
BNPP Real Estate Holding GmbH	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH	Real Estate Services
BNPP Real Estate Investment Management International GmbH	Real Estate Services
BNPP Real Estate Property Management GmbH	Real Estate Services
BNPP SA (Germany branch)	Corporate and Institutional Banking
BNPP Securities Services (Germany branch)	Securities Services
Cardif Assurance Vie (Germany branch)	Insurance
Cardif Assurances Risques Divers (Germany branch)	Insurance
Claas Financial Services (Germany branch)	Leasing Solutions
CNH Industrial Capital Europe (Germany branch)	Leasing Solutions
Folea Grundstucksverwaltungs und Vermietungs GmbH & Co	Leasing Solutions
Fortis Lease Deutschland GmbH	Leasing Solutions
Gesellschaft für Capital & Vermögensverwaltung GmbH	Personal Finance
Inkasso Kodat GmbH & Co KG	Personal Finance
JCB Finance (Germany branch)	Leasing Solutions

Locations	Business
Opel Bank GmbH	Personal Finance
Opel Finance Germany Holdings GmbH	Personal Finance
Opel Leasing GmbH	Personal Finance
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Insurance
Seniorenzentrum Butzbach Objekt GmbH	Insurance
Seniorenzentrum Heilbronn Objekt GmbH	Insurance
Seniorenzentrum Kassel Objekt GmbH	Insurance
Seniorenzentrum Wolfratshausen Objekt GmbH	Insurance
Von Essen Bank GmbH	Personal Finance
Greece	
Arval Hellas Car Rental SA	Arval
BNPP Securities Services (Greece branch)	Securities Services
Opel Bank GmbH (Greece branch)	Personal Finance
Hungary	
Arval Magyarorszag KFT	Arval
BNPP Real Estate Magyarorszag Tanacsado Es Ingatlankezelo ZRT	Real Estate Services
BNPP SA (Hungary branch)	Corporate and Institutional Banking
BNPP Securities Services (Hungary branch)	Securities Services
Cardif Biztosito Magyarorszag ZRT	Insurance
Magyar Cetelem Bank ZRT	Personal Finance
Oney Magyarorszag ZRT	Personal Finance
UCB Ingatlanhitel ZRT	Personal Finance
Ireland	
Alectra Finance PLC	Corporate and Institutional Banking
Aquarius + Investments PLC	Corporate and Institutional Banking
Aries Capital DAC	Corporate and Institutional Banking
BGZ Poland ABS1 DAC	Europe-Mediterranean
BNPP Fund Administration Services Ireland Ltd	Securities Services
BNPP International Finance Dublin Unlimited Company	Corporate and Institutional Banking
BNPP Ireland Unlimited Co	Corporate and Institutional Banking
BNPP Prime Brokerage International Ltd	Corporate and Institutional Banking
BNPP Real Estate Advisory and Property Management Ireland Ltd	Real Estate Services
BNPP SA (Ireland branch)	Corporate and Institutional Banking
BNPP Securities Services (Ireland branch)	Securities Services
BNPP Vartry Reinsurance DAC	Corporate and Institutional Banking
Darnell DAC	Insurance
G C Thematic Opportunities II	Insurance
Greenval Insurance DAC	Arval
Madison Arbor Ltd	Corporate and Institutional Banking
Matchpoint Finance PLC	Corporate and Institutional Banking
Opel Bank GmbH (Ireland branch)	Personal Finance
SME Alternative Financing DAC	Asset Management
Utexam Logistics Ltd	Corporate and Institutional Banking
Utexam Solutions Ltd	Corporate and Institutional Banking
Italy	
Artigiancassa SPA	Retail Banking
Arval Service Lease Italia SPA	Arval
Axepta SPA (Ex- BNL Positivity SRL)	Retail Banking
Banca Nazionale Del Lavoro SPA	Retail Banking
BNL Finance SPA	Retail Banking
BNPP Asset Management France (Italy branch)	Asset Management
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Insurance
BNPP Investment Partners SGR SPA	Asset Management
BNPP Lease Group (Italy branch)	Leasing Solutions
BNPP Lease Group Leasing Solutions SPA	Leasing Solutions
BNPP Real Estate Advisory Italy SPA	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Real Estate Services
BNPP Real Estate Investment Management Italy SPA	Real Estate Services
BNPP Real Estate Italy SRL	Real Estate Services
BNPP Real Estate Property Developpement Italy SPA	Real Estate Services
BNPP Real Estate Property Management Italy SRL	Real Estate Services
BNPP Rental Solutions SPA	Leasing Solutions
BNPP SA (Italy branch)	Corporate and Institutional Banking
BNPP Securities Services (Italy branch)	Securities Services
Business Partner Italia SCPA	Retail Banking
Cardif Assurance Vie (Italy branch)	Insurance
Cardif Assurances Risques Divers (Italy branch)	Insurance
Cargeas Assicurazioni SPA	Insurance
Cartolarizzazione Auto Receivable's SRL	Personal Finance
CFH Algonquin Management Partners France Italia	Insurance
CFH Milan Holdco SRL	Insurance
Claas Financial Services (Italy branch)	Leasing Solutions
CNH Industrial Capital Europe (Italy branch)	Leasing Solutions
Diamante Re SRL	Corporate and Institutional Banking
EMF IT 2008 1 SRL	Retail Banking
Findomestic Banca SPA	Personal Finance
Florence 1 SRL	Personal Finance
Florence SPV SRL	Personal Finance
Fundamenta	Insurance
Horti Milano SRL	Real Estate Services
I Carat SRL	Personal Finance
International Factors Italia SPA	Retail Banking

Locations	Business
JCB Finance (Italy branch)	Leasing Solutions
Locchi SRL	Real Estate Services
Opel Finance SPA	Personal Finance
Permicro SPA	Retail Banking
Serfactoring SPA	Retail Banking
Servizio Italia SPA	Retail Banking
Sviluppo HQ Tiburtina SRL	Retail Banking
Sviluppo Residenziale Italia SRL	Real Estate Services
Tierre Securitisation SRL	Retail Banking
Vela ABS SRL	Retail Banking
Vela Consumer 2 SRL	Retail Banking
Vela Consumer SRL	Retail Banking
Vela Home SRL	Retail Banking
Vela Mortgages SRL	Retail Banking
Vela OBG SRL	Retail Banking
Vela RMBS SRL	Retail Banking
Luxembourg	
Arval Luxembourg SA	Arval
Auseter Real Estate Opportunities SARL	Corporate and Institutional Banking
Batipart Participations SAS	Insurance
BGL BNPP	Retail Banking
BNPP Asset Management Luxembourg	Asset Management
BNPP Fortis Funding SA	Retail Banking
BNPP L1	Insurance
BNPP Lease Group Luxembourg SA	Retail Banking
BNPP Leasing Solutions	Leasing Solutions
BNPP Real Estate Advisory & Property Management Luxembourg SA	Real Estate Services
BNPP Real Estate Investment Management Luxembourg SA	Real Estate Services
BNPP SA (Luxembourg branch)	Corporate and Institutional Banking
BNPP SB Re	Investment companies and other subsidiaries
BNPP Securities Services (Luxembourg branch)	Securities Services
Cardif Assurances Risques Divers (Luxembourg branch)	Insurance
Cardif Life	Insurance
Cardif Lux Vie	Insurance
Cofhylux SA	Retail Banking
Compagnie Financière Ottomane SA	Investment companies and other subsidiaries
Ecarat SA	Personal Finance
Elimmo	Retail Banking
Financière Hime SA	Corporate and Institutional Banking
Fund Channel	Asset Management
Greenstars BNPP	Corporate and Institutional Banking
Hime Holding 1 SA	Corporate and Institutional Banking
Hime Holding 2 SA	Corporate and Institutional Banking
Hime Holding 3 SA	Corporate and Institutional Banking
Le Sphinx Assurances Luxembourg SA	Investment companies and other subsidiaries
Lion International Investments SA	Investment companies and other subsidiaries
Parvest	Insurance
Parworld	Insurance
Plagefin SA	Investment companies and other subsidiaries
Pyrotex GB 1 SA	Real Estate Services
Pyrotex SARL	Real Estate Services
Rubin SARL	Insurance
Securely Transferred Auto Receivables II SA	Personal Finance
Seniorenzentren Deutschland Holding SARL	Insurance
Société Immobilière du Royal Building SA	Insurance
Theam Quant	Insurance
Visalux	Retail Banking
Netherlands	
Alpha Murcia Holding BV	Corporate and Institutional Banking
Arval Benelux BV	Arval
Arval BV	Arval
BNPP Asset Management Nederland NV	Asset Management
BNPP Asset Management Netherlands NV	Asset Management
BNPP Asset Management NL Holding NV	Asset Management
BNPP Cardif BV	Insurance
BNPP Cardif Levensverzekeringen NV	Insurance
BNPP Cardif Schadeverzekeringen NV	Insurance
BNPP Factor Deutschland BV	Retail Banking
BNPP Factor NV	Retail Banking
BNPP Factoring Support (Ex- BNPP Factoring Coverage Europe Holding NV)	Retail Banking
BNPP Invest Holdings BV	Corporate and Institutional Banking
BNPP Islamic Issuance BV	Corporate and Institutional Banking
BNPP Issuance BV	Corporate and Institutional Banking
BNPP Leasing Solutions NV	Leasing Solutions
BNPP Personal Finance BV	Personal Finance
BNPP Real Estate Advisory Netherlands BV	Real Estate Services
BNPP Real Estate Holding Netherlands BV	Real Estate Services
BNPP SA (Netherlands branch)	Corporate and Institutional Banking
BNPP Securities Services (Netherlands branch)	Securities Services
Boug BV	Corporate and Institutional Banking
CNH Industrial Capital Europe BV	Leasing Solutions
Fortis Vastgoedlease BV	Leasing Solutions

Locations	Business
Groeivermogen NV	Asset Management
Heffiq Heftruck Verhuur BV	Leasing Solutions
Opel Finance International BV	Personal Finance
Opel Finance NV	Personal Finance
Phedina Hypotheken 2010 BV	Personal Finance
Phedina Hypotheken 2013 I BV	Personal Finance
Poland	
Arval Service Lease Polska SP ZOO	Arval
Bank BGZ BNPP SA	Europe-Mediterranean
BGZ BNPP Faktoring Spolka ZOO	Europe-Mediterranean
BNPP Lease Group SP ZOO	Leasing Solutions
BNPP Leasing Services	Leasing Solutions
BNPP Real Estate Poland SP ZOO	Real Estate Services
BNPP SA (Poland branch)	Corporate and Institutional Banking
BNPP Securities Services (Poland branch)	Securities Services
BNPP Solutions Spolka ZOO	Europe-Mediterranean
Cardif Assurances Risques Divers (Poland branch)	Insurance
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Insurance
Claas Financial Services (Poland branch)	Leasing Solutions
CNH Industrial Capital Europe (Poland branch)	Leasing Solutions
Portugal	
Arval Service Lease Aluger Operational Automoveis SA	Arval
Banco BNPP Personal Finance SA	Personal Finance
BNPP Factor Sociedade Financeira de Credito SA	Retail Banking
BNPP Lease Group (Portugal branch)	Leasing Solutions
BNPP SA (Portugal branch)	Corporate and Institutional Banking
BNPP Securities Services (Portugal branch)	Securities Services
Cardif Assurance Vie (Portugal branch)	Insurance
Cardif Assurances Risques Divers (Portugal branch)	Insurance
Fortis Lease Portugal	Leasing Solutions
Romania	
Arval Service Lease Romania SRL	Arval
BNPP Fortis (Romania branch)	Corporate and Institutional Banking
BNPP Leasing Solutions IFN SA	Leasing Solutions
BNPP Personal Finance (Romania branch)	Personal Finance
BNPP Real Estate Advisory SA	Real Estate Services
BNPP SA (Romania branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Romania branch)	Insurance
Cardif Assurances Risques Divers (Romania branch)	Insurance
Cetelem IFN	Personal Finance
RD Leasing IFN SA	Leasing Solutions
Slovakia	
Arval Slovakia SRO	Arval
BNPP Personal Finance (Slovakia branch)	Personal Finance
Poistovna Cardif Slovakia AS	Insurance
Spain	
Arval Service Lease SA	Arval
Banco Cetelem SAU	Personal Finance
BNPP Espana SA	Wealth Management
BNPP Factor (Spain branch)	Retail Banking
BNPP Fortis (Spain branch)	Corporate and Institutional Banking
BNPP Lease Group (Spain branch)	Leasing Solutions
BNPP Real Estate Advisory Spain SA	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Real Estate Services
BNPP Real Estate Investment Management Spain SA	Real Estate Services
BNPP Real Estate Property Management Spain SA	Real Estate Services
BNPP SA (Spain branch)	Corporate and Institutional Banking
BNPP Securities Services (Spain branch)	Securities Services
Cardif Assurance Vie (Spain branch)	Insurance
Cardif Assurances Risques Divers (Spain branch)	Insurance
Cetelem Gestion AIE	Personal Finance
Cetelem Servicios Informaticos AIE	Personal Finance
Claas Financial Services (Spain branch)	Leasing Solutions
CNH Industrial Capital Europe (Spain branch)	Leasing Solutions
Ejesur SA	Investment companies and other subsidiaries
Fortis Lease Iberia SA	Leasing Solutions
GCC Consumo Establecimiento Financiero de Credito SA	Personal Finance
International Development Resources AS Services SA	Personal Finance
Opel Bank GmbH (Spain branch)	Personal Finance
Ribera Del Loira Arbitrage	Corporate and Institutional Banking
Securitisation funds UCI and Prado	Personal Finance
Servicios Financieros Carrefour EFC SA	Personal Finance
Union de Creditos Inmobiliarios SA	Personal Finance
Sweden	
Alfred Berg Asset Management AB	Asset Management
Alfred Berg Kapitalforvaltning AB	Asset Management
Arval AB	Arval
BNPP Factor AB	Retail Banking
BNPP SA (Sweden branch)	Corporate and Institutional Banking
Cardif Forsakring AB	Insurance
Cardif Livforsakring AB	Insurance
Cardif Nordic AB	Insurance

Locations	Business
Ekspres Bank AS (Sweden branch)	Personal Finance
Opel Finance AB	Personal Finance
Sevenday Finans AB	Personal Finance
UK	
Albury Asset Rentals Ltd	Leasing Solutions
Arval UK Group Ltd	Arval
Arval UK Leasing Services Ltd	Arval
Arval UK Ltd	Arval
BNP PUK Holding Ltd	Corporate and Institutional Banking
BNPP Arbitrage (United Kingdom branch)	Corporate and Institutional Banking
BNPP Asset Management UK Ltd	Asset Management
BNPP Commercial Finance Ltd	Retail Banking
BNPP Commodity Futures Ltd	Corporate and Institutional Banking
BNPP Dealing Services (United Kingdom branch)	Asset Management
BNPP Fleet Holdings Ltd	Arval
BNPP Investments N 1 Ltd	Corporate and Institutional Banking
BNPP Investments N 2 Ltd	Corporate and Institutional Banking
BNPP Lease Group PLC	Leasing Solutions
BNPP Lease Group Rentals Ltd	Leasing Solutions
BNPP Leasing Solutions Ltd	Leasing Solutions
BNPP Net Ltd	Corporate and Institutional Banking
BNPP Real Estate Advisory & Property Management UK Ltd	Real Estate Services
BNPP Real Estate Facilities Management Ltd	Real Estate Services
BNPP Real Estate Investment Management Ltd	Real Estate Services
BNPP Real Estate Investment Management UK Ltd	Real Estate Services
BNPP Real Estate Property Development UK Ltd	Real Estate Services
BNPP Rental Solutions Ltd	Leasing Solutions
BNPP SA (United Kingdom branch)	Corporate and Institutional Banking
BNPP Securities Services (United Kingdom branch)	Securities Services
BNPP UK Holdings Ltd	Corporate and Institutional Banking
BNPP UK Ltd	Corporate and Institutional Banking
Boug BV (United Kingdom branch)	Corporate and Institutional Banking
Cardif Pinnacle Insurance Holdings PLC	Insurance
Cardif Pinnacle Insurance Management Services PLC	Insurance
CB UK Ltd	Insurance
Claas Financial Services Ltd	Leasing Solutions
CNH Industrial Capital Europe Ltd	Leasing Solutions
Cofinoga Funding Two LP	Personal Finance
Commercial Vehicle Finance Ltd	Leasing Solutions
Creation Consumer Finance Ltd	Personal Finance
Creation Financial Services Ltd	Personal Finance
Ecarat UK	Personal Finance
Fortis Lease UK Ltd	Leasing Solutions
Fundquest Advisor (United Kingdom branch)	Asset Management
Harewood Helena 1 Ltd	Asset Management
Harewood Helena 2 Ltd	Insurance
Harewood Holdings Ltd	Corporate and Institutional Banking
Humberclyde Commercial Investments Ltd	Leasing Solutions
Impax Asset Management Group PLC	Asset Management
JCB Finance Holdings Ltd	Leasing Solutions
Landspire Ltd	Corporate and Institutional Banking
Laser ABS 2017 Holding Ltd	Personal Finance
Laser ABS 2017 PLC	Personal Finance
Manitou Finance Ltd	Leasing Solutions
Opéra Trading Capital (United Kingdom branch)	Corporate and Institutional Banking
OPVF Europe Holdco Ltd	Personal Finance
OPVF Holdings UK Ltd	Personal Finance
Parker Tower Ltd	Real Estate Services
Pinnacle Insurance PLC	Insurance
REPD Parker Ltd	Real Estate Services
Same Deutz Fahr Finance Ltd	Leasing Solutions
Sygma Funding Two Ltd	Personal Finance
Vault Funding Ltd	Personal Finance
Vauxhall Finance PLC	Personal Finance
Warf 2012 Ltd	Personal Finance
Other European countries	
Guernsey	
BNPP Securities Services (Guernsey branch)	Securities Services
BNPP Suisse SA (Guernsey branch)	Banking
Jersey	
BNPP SA (Jersey branch)	Corporate and Institutional Banking
BNPP Securities Services (Jersey branch)	Securities Services
Scaldis Capital Ltd	Corporate and Institutional Banking
Monaco	
BNPP SA (Monaco branch)	Retail Banking
BNPP Wealth Management Monaco	Wealth Management
Norway	
Alfred Berg Kapitalforvaltning AS	Asset Management
BNPP Leasing Solution AS	Leasing Solutions
BNPP SA (Norway branch)	Corporate and Institutional Banking

Locations	Business
Cardif Forsakring AB (Norway branch)	Insurance
Cardif Livforsakring AB (Norway branch)	Insurance
Ekspres Bank AS (Norway branch)	Personal Finance
Russia	
Arval LLC	Arval
BNPP Bank JSC	Corporate and Institutional Banking
Cardif Insurance Co LLC	Insurance
Cetelem Bank LLC	Personal Finance
Serbia	
TEB SH A	Europe-Mediterranean
Switzerland	
Arval Schweiz AG	Arval
BNPP Leasing Solutions Suisse SA	Leasing Solutions
BNPP Securities Services (Switzerland branch)	Securities Services
BNPP Suisse SA	Banking
Cardif Assurance Vie (Switzerland branch)	Insurance
Cardif Assurances Risques Divers (Switzerland branch)	Insurance
Opel Finance SA	Personal Finance
Ukraine	
IC Axa Insurance JSC	Europe-Mediterranean
UkrSibbank Public JSC	Europe-Mediterranean
Africa & Mediterranean basin	
Algeria	
BNPP El Djazair	Europe-Mediterranean
Cardif El Djazair	Insurance
Cetelem Algérie	Personal Finance
Bahrain	
BNPP SA (Bahrain branch)	Corporate and Institutional Banking
Burkina Faso	
Banque Internationale pour le Commerce et l'Industrie du Burkina Faso	Europe-Mediterranean
Comoros	
Banque pour l'Industrie et le Commerce des Comores	Europe-Mediterranean
Gabon	
Banque Internationale pour le Commerce et l'Industrie du Gabon	Europe-Mediterranean
Guinea	
Banque Internationale pour le Commerce et l'Industrie de la Guinée	Europe-Mediterranean
Ivory Coast	
Banque Internationale pour le Commerce et l'Industrie de la Côte d'Ivoire	Europe-Mediterranean
BICI Bourse	Europe-Mediterranean
Kuwait	
BNPP SA (Kuwait branch)	Corporate and Institutional Banking
Mali	
Banque Internationale pour le Commerce et l'Industrie du Mali	Europe-Mediterranean
Morocco	
Arval Maroc SA	Arval
Banque Marocaine pour le Commerce et l'Industrie	Europe-Mediterranean
Banque Marocaine pour le Commerce et l'Industrie Banque Offshore	Europe-Mediterranean
BMCI Leasing	Europe-Mediterranean
Qatar	
BNPP SA (Qatar branch)	Corporate and Institutional Banking
Saudi Arabia	
BNPP Investment Co KSA	Corporate and Institutional Banking
BNPP SA (Saudi Arabia branch)	Corporate and Institutional Banking
Senegal	
Banque Internationale pour le Commerce et l'Industrie du Sénégal	Europe-Mediterranean
South Africa	
BNPP Personal Finance South Africa Ltd	Personal Finance
BNPP SA (South Africa branch)	Corporate and Institutional Banking
RCS Cards Pty Ltd	Personal Finance
Tunisia	
Union Bancaire pour le Commerce et l'Industrie	Europe-Mediterranean
Turkey	
Bantas Nakit AS	Europe-Mediterranean
BNPP Cardif Emeklilik AS	Insurance
BNPP Cardif Hayat Sigorta AS	Insurance
BNPP Cardif Sigorta AS	Insurance
BNPP Finansal Kiralama AS	Leasing Solutions
BNPP Fortis Yatirimlar Holding AS	Europe-Mediterranean
BNPP Yatirimlar Holding AS	Europe-Mediterranean
TEB Arval Arac Filo Kiralama AS	Arval
TEB Faktoring AS	Europe-Mediterranean
TEB Finansman AS	Personal Finance
TEB Holding AS	Europe-Mediterranean
TEB Portfoy Yonetimi AS	Europe-Mediterranean
TEB Yatirim Menkul Degerler AS	Europe-Mediterranean
Turk Ekonomi Bankasi AS	Europe-Mediterranean
United Arab Emirates	
BNPP SA (United Arab Emirates branch)	Corporate and Institutional Banking
BNPPRE APM INTERNATIONAL (United Arab Emirates branch)	Real Estate Services

Locations	Business
Americas	
Argentina	
Banco Cetelem Argentina SA	Personal Finance
Banco de Servicios Financieros SA	Personal Finance
BNPP SA (Argentina branch)	Corporate and Institutional Banking
Cardif Seguros SA	Insurance
Cardif Servicios SA	Insurance
Bermuda	
Decart Re Ltd	Corporate and Institutional Banking
Brazil	
Arval Brasil Ltda	Arval
Banco BNPP Brasil SA	Corporate and Institutional Banking
Banco Cetelem SA	Personal Finance
BGN Mercantil E Servicos Ltda	Personal Finance
BNPP Asset Management Brasil Ltda	Asset Management
BNPP EQD Brazil Fund Fundo de Investmento Multimercado	Corporate and Institutional Banking
BNPP Proprietario Fundo de Investimento Multimercado	Corporate and Institutional Banking
Cardif do Brasil Seguros e Garantias SA	Insurance
Cardif do Brasil Vida e Previdencia SA	Insurance
Cardif Ltda	Insurance
Cetelem America Ltda	Personal Finance
Cetelem Servicos Ltda	Personal Finance
Luizaseg	Insurance
NCVP Participacoes Societarias SA	Insurance
Canada	
BNPP Canada Corp	Corporate and Institutional Banking
BNPP IT Solutions Canada Inc	Corporate and Institutional Banking
BNPP Leasing Solutions Canada Inc	Retail Banking
BNPP SA (Canada branch)	Corporate and Institutional Banking
Cayman Islands	
BNPP SA (Cayman Islands branch)	Corporate and Institutional Banking
Chile	
Arval Relsa SPA	Arval
Bancoestado Administradora General de Fondos SA	Asset Management
BNPP Cardif Seguros de Vida SA	Insurance
BNPP Cardif Seguros Generales SA	Insurance
BNPP Cardif Servicios y Asistencia Ltda	Insurance
Colombia	
BNPP Colombia Corporacion Financiera SA	Corporate and Institutional Banking
Cardif Colombia Seguros Generales SA	Insurance
Mexico	
Cardif Mexico Seguros de Vida SA de CV	Insurance
Cardif Mexico Seguros Generales SA de CV	Insurance
Cetelem SA de CV (Ex- BNPP Personal Finance SA de CV)	Personal Finance
Panama[1]	
BNPP SA (Panama branch)	Corporate and Institutional Banking
Peru	
BNPP Cardif Compania de Seguros y Reaseguros SA	Insurance
Cardif Servicios SAC	Insurance
USA	
1897 Services Corp	Retail Banking
BancWest Corp	Retail Banking
BancWest Holding Inc	Retail Banking
BancWest Investment Services Inc	Retail Banking
Banexi Holding Corp	Corporate and Institutional Banking
Bank of the West	Retail Banking
Bank of the West Auto Trust 2014-1	Retail Banking
Bank of the West Auto Trust 2015-1	Retail Banking
Bank of the West Auto Trust 2017-1	Retail Banking
Bank of the West Auto Trust 2018-1 (Ex- Bank of the West Auto Trust 2016-2)	Retail Banking
Bank of the West Auto Trust 2018-2	Retail Banking
Bishop Street Capital Management Corp	Retail Banking
BNPP Asset Management USA Holdings Inc	Asset Management
BNPP Asset Management USA Inc	Asset Management
BNPP Capital Services Inc	Corporate and Institutional Banking
BNPP CC Inc	Corporate and Institutional Banking
BNPP Energy Trading GP	Corporate and Institutional Banking
BNPP Energy Trading Holdings Inc	Corporate and Institutional Banking
BNPP Energy Trading LLC	Corporate and Institutional Banking
BNPP Financial Services LLC	Securities Services
BNPP Fortis (United States branch)	Corporate and Institutional Banking
BNPP FS LLC	Corporate and Institutional Banking
BNPP Prime Brokerage Inc	Corporate and Institutional Banking
BNPP RCC Inc	Corporate and Institutional Banking
BNPP SA (United States branch)	Corporate and Institutional Banking
BNPP Securities Corp	Corporate and Institutional Banking
BNPP US Wholesale Holdings Corp	Corporate and Institutional Banking
BNPP USA Inc	Corporate and Institutional Banking
BNPP VPG Adonis LLC	Corporate and Institutional Banking
BNPP VPG Brookfin LLC	Corporate and Institutional Banking
BNPP VPG Brookline Cre LLC	Corporate and Institutional Banking
BNPP VPG CT Holdings LLC	Corporate and Institutional Banking
BNPP VPG EDMC Holdings LLC	Corporate and Institutional Banking
BNPP VPG Express LLC	Corporate and Institutional Banking
BNPP VPG Freedom Communications LLC	Corporate and Institutional Banking
BNPP VPG Legacy Cabinets LLC	Corporate and Institutional Banking
BNPP VPG Mark IV LLC	Corporate and Institutional Banking
BNPP VPG Master LLC	Corporate and Institutional Banking
BNPP VPG Medianews Group LLC	Corporate and Institutional Banking
BNPP VPG Northstar LLC	Corporate and Institutional Banking
BNPP VPG Pacex LLC	Corporate and Institutional Banking
BNPP VPG PCMC LLC	Corporate and Institutional Banking
BNPP VPG SBX Holdings LLC	Corporate and Institutional Banking
BOW Auto Receivables LLC	Retail Banking
BWC Opportunity Fund Inc	Retail Banking
Center Club Inc	Retail Banking
CFB Community Development Corp	Retail Banking
Claas Financial Services LLC	Retail Banking
Commercial Federal Affordable Housing Inc	Retail Banking
Commercial Federal Community Development Corp	Retail Banking
Commercial Federal Insurance Corp	Retail Banking
Commercial Federal Investment Service Inc	Retail Banking
Dale Bakken Partners 2012 LLC	Corporate and Institutional Banking
FHL SPC One Inc	Retail Banking
First Bancorp	Retail Banking
First Hawaiian Inc	Retail Banking
First Hawaiian Leasing Inc	Retail Banking
First National Bancorporation	Retail Banking
First Santa Clara Corp	Retail Banking
FSI Holdings Inc	Corporate and Institutional Banking
Glendale Corporate Center Acquisition LLC	Retail Banking
LACMTA Rail Statutory Trust FH1	Retail Banking
Liberty Leasing Co	Retail Banking
Mountain Falls Acquisition Corp	Retail Banking
Real Estate Delivery 2 Inc	Retail Banking
ST 2001 FH 1 Statutory Trust	Retail Banking
Starbird Funding Corp	Corporate and Institutional Banking
The Bankers Club Inc	Retail Banking
Ursus Real Estate Inc	Retail Banking
Via North America Inc	Corporate and Institutional Banking
VTA 1998 FH	Retail Banking
Asia & Pacific	
Australia	
BNP Pacific Australia Ltd	Corporate and Institutional Banking
BNPP Amber Holdings Pty Ltd	Corporate and Institutional Banking
BNPP Fund Services Australasia Pty Ltd	Securities Services
BNPP SA (Australia branch)	Corporate and Institutional Banking
BNPP Securities Services (Australia branch)	Securities Services
China	
Annuo Jiutong (Ex- Arval Jiutong Co Ltd)	Arval
Bank of Nanjing	Europe-Mediterranean
BNPP China Ltd	Corporate and Institutional Banking
BNPP Commodities Trading Shanghai Co Ltd	Corporate and Institutional Banking
BOB Cardif Life Insurance Co Ltd	Insurance
Genius Auto Finance Co Ltd	Personal Finance
Haitong Fortis Private Equity Fund Management Co Ltd	Asset Management
HFT Investment Management Co Ltd	Asset Management
Suning Consumer Finance Co Ltd	Personal Finance
Hong Kong	
BNPP Arbitrage Hong Kong Ltd	Corporate and Institutional Banking
BNPP Asset Management Asia Ltd	Asset Management
BNPP Finance Hong Kong Ltd	Corporate and Institutional Banking
BNPP SA (Hong Kong branch)	Corporate and Institutional Banking
BNPP Securities Asia Ltd	Corporate and Institutional Banking
BNPP Securities Services (Hong kong branch)	Securities Services
Opéra Trading Capital (Hong Kong branch)	Corporate and Institutional Banking
India	
Arval India Private Ltd	Arval
BNPP Asset Management India Private Ltd	Asset Management
BNPP Global Securities Operations Private Ltd	Securities Services
BNPP India Holding Private Ltd	Corporate and Institutional Banking
BNPP India Solutions Private Ltd	Corporate and Institutional Banking
BNPP SA (India branch)	Corporate and Institutional Banking
BNPP Securities India Private Ltd	Corporate and Institutional Banking
Geojit Technologies Private Ltd	Personal Investors
Human Value Developers Private Ltd	Personal Investors
Sharekhan BNPP Financial Services Private Ltd	Personal Investors
Sharekhan Commodities Private Ltd	Personal Investors
Sharekhan Ltd	Personal Investors
State Bank of India Life Insurance Co Ltd	Insurance
Sundaram BNPP Home Finance Ltd	Personal Finance

Locations	Business
Indonesia	
Bank BNPP Indonesia PT	Corporate and Institutional Banking
BNPP Investment Partners PT	Asset Management
BNPP Sekuritas Indonesia PT	Corporate and Institutional Banking
Japan	
BNPP Asset Management Japan Ltd	Asset Management
BNPP SA (Japan branch)	Corporate and Institutional Banking
BNPP Securities Japan Ltd	Corporate and Institutional Banking
Cardif Assurance Vie (Japan branch)	Insurance
Cardif Assurances Risques Divers (Japan branch)	Insurance
Cardif Life Insurance Japan	Insurance
Cardif Non Life Insurance Japan	Insurance
Malaysia	
BNPP Malaysia Berhad	Corporate and Institutional Banking
BNPP SA (Malaysia branch)	Corporate and Institutional Banking
New Zealand	
BNPP Fund Services Australasia Pty Ltd (New zealand branch)	Securities Services
Philippines	
BNPP SA (Philippines branch)	Corporate and Institutional Banking
Rep. of Korea	
BNPP Cardif General Insurance Co Ltd	Insurance
BNPP SA (Republic of Korea branch)	Corporate and Institutional Banking
BNPP Securities Korea Co Ltd	Corporate and Institutional Banking
Cardif Life Insurance Co Ltd	Insurance
Shinhan BNPP Asset Management Co Ltd	Asset Management
Singapore	
BNPP SA (Singapore branch)	Corporate and Institutional Banking
BNPP Securities Services (Singapore branch)	Securities Services
BNPP Securities Singapore Pte Ltd	Corporate and Institutional Banking
BPP Holdings Pte Ltd	Corporate and Institutional Banking
Taiwan	
BNPP Cardif TCB Life Insurance Co Ltd	Insurance
BNPP SA (Taiwan branch)	Corporate and Institutional Banking
BNPP Securities Taiwan Co Ltd	Corporate and Institutional Banking
Cardif Assurance Vie (Taiwan branch)	Insurance
Cardif Assurances Risques Divers (Taiwan branch)	Insurance
Thailand	
BNPP SA (Thailand branch)	Corporate and Institutional Banking
Viet Nam	
BNPP SA (Viet Nam branch)	Corporate and Institutional Banking
Vietcombank Cardif Life Insurance Co Ltd	Insurance

(1) *The liquidation process of the entity located in Panama, initiated in July2010, is pending approval from the local regulator.*

II. PROFIT AND LOSS ACCOUNT ITEMS AND HEADCOUNT BY COUNTRY

	FY 2018[*] *(in EUR million)*						Financial headcount[**] as at 31 December 2018
	Revenues	Public subsidies received	Income before Tax	Current tax expense	Defered tax	Corporate income tax	
European Union member States							
Austria	66	0	(3)	(3)	(2)	(5)	292
Belgium	4,512	0	1,524	(164)	(252)	(416)	14,443
Bulgaria	68	0	27	(3)	0	(3)	945
Czech Republic	107	0	37	(6)	(3)	(8)	775
Denmark	76	0	15	(3)	(1)	(4)	246
Finland	3	0	(1)	0	0	0	27
France	13,643	0	1,250	(81)	(106)	(187)	57,644
Germany	1,678	0	413	(89)	(49)	(139)	5,342
Greece	7	0	1	0	0	0	54
Hungary	82	0	43	(6)	0	(7)	517
Ireland	218	0	104	(14)	(1)	(15)	611
Italy	5,000	0	1,327	(319)	(50)	(367)	19,023
Luxembourg	1,176	0	464	(166)	66	(100)	3,662
Netherlands	272	0	53	(25)	16	(10)	962
Portugal	201	0	83	(31)	3	(29)	4,931
Poland	769	0	121	(60)	33	(27)	11,375
Romania	79	0	18	(5)	0	(5)	931
Slovakia	28	0	3	2	(3)	(1)	317
Spain	1,001	0	513	(110)	(39)	(148)	3,537
Sweden	52	0	(4)	(3)	(1)	(4)	255
United Kingdom	2,683	0	580	(26)	(39)	(65)	7,917
Other European countries							
Guernsey	9	0	2	0	0	0	23
Jersey	42	0	10	0	0	0	221
Monaco	72	0	33	(2)	(1)	(2)	206
Norway	45	0	0	0	(1)	(1)	130
Russia	62	0	32	(6)	(2)	(10)	364
Serbia	34	0	15	(2)	0	(2)	602
Switzerland	455	0	47	(1)	(1)	(2)	1,446
Ukraine	184	0	96	0	(15)	(15)	5,274
Africa & Mediterranean basin							
Algeria	124	0	59	(17)	(1)	(17)	1,351
Bahrain	30	0	(35)	0	0	0	284
Burkina Faso	23	0	11	(2)	1	(1)	256
Comoros	3	0	(2)	0	0	0	59
Guinea	30	0	6	(2)	0	(2)	334
Ivory Coast	73	0	22	(4)	(1)	(5)	679
Kuwait	8	0	3	0	0	0	20
Mali	13	0	3	(1)	0	(1)	79
Morocco	281	0	93	(41)	(8)	(48)	3,151
Qatar	23	0	12	(1)	0	(1)	23
Saudi Arabia	19	0	4	(1)	0	(1)	51
Senegal	53	0	18	(6)	0	(6)	469
South Africa	169	0	55	(15)	0	(15)	1,381
Tunisia	76	0	29	(13)	0	(12)	1,158
Turkey	995	0	298	(43)	(24)	(69)	10,406
United Arab Emirates	41	0	20	(4)	0	(5)	74
Americas							
Argentina	71	0	20	(9)	(1)	(9)	274
Bermuda	0	0	0	0	0	0	0
Brazil	689	0	243	(31)	(57)	(87)	1,523
Canada	51	0	21	(5)	(1)	(7)	707
Cayman Islands[(1)]	35	0	35	0	0	0	0
Chile	83	0	45	(11)	1	(10)	450
Colombia	67	0	33	(15)	0	(15)	357
United States of America	4,258	0	972	(136)	61	(76)	13,744
Mexico	59	0	12	0	1	1	283
Panama[(2)]	0	0	0	0	0	0	0
Asia & Pacific							
Australia	155	0	29	(1)	(9)	(10)	506
China	163	0	87	(34)	14	(20)	435
Hong Kong	720	0	48	(4)	(11)	(17)	2,507
India	259	0	141	(60)	(4)	(64)	10,334
Indonesia	47	0	22	(6)	0	(6)	165
Japan	496	0	280	(77)	(6)	(83)	729
Malaysia	35	0	21	(4)	1	(4)	90
New Zealand	8	0	4	(1)	0	(1)	43
Philippines	1	0	0	0	0	0	14
Republic of Korea	121	0	50	(2)	(10)	(12)	329
Singapore	395	0	7	(7)	(1)	(7)	2,167
Taiwan	178	0	96	(10)	(10)	(19)	499
Thailand	14	0	0	(1)	0	0	81
Viet Nam	26	0	16	(3)	1	(2)	82
GROUP TOTAL	**42,516**	**0**	**9,580**	**(1,690)**	**(512)**	**(2,203)**	**197,162**

(*) *The financial data correspond to the contibution income of fully consolidated entities under exclusive control.*
(**) *Financial headcount: Full-Time Equivalents (FTE) at 31 December 2018 in wholly controlled, fully consolidated entities.*
(1) *The income of the entity in the Cayman Islands is taxed in the United States and its staff is also located in the United States.*
(2) *The liquidation process of the entity located in Panama, initiated in July 2010, is pending approval from the local regulator.*

8.7 Founding documents and Articles of association

This English translation is for the convenience of English-speaking readers. However, only the French text has any legal value. Consequently, the translation may not be relied upon to bring any legal claim, nor should it be used as the basis of any legal opinion. BNP PARIBAS expressly disclaims all liability for any inaccuracy herein.

SECTION I

FORM – NAME – REGISTERED OFFICE – CORPORATE PURPOSE

Article 1

BNP PARIBAS is a French Public Limited Company (*société anonyme)* licensed to conduct banking operations under the French Monetary and Financial Code, Book V, Section 1 (*Code Monétaire et Financier, Livre V, Titre 1er*) governing banking sector institutions.

The Company was founded pursuant to a decree dated 26 May 1966. Its legal life has been extended to 99 years with effect from 17 September 1993.

Apart from the specific rules relating to its status as an establishment in the banking sector (Book V, Section 1 of the French Monetary and Financial Code (*Code Monétaire et Financier, Livre V, Titre 1er*), BNP PARIBAS shall be governed by the provisions of the French Commercial Code (*Code de Commerce*) concerning commercial companies, as well as by these Articles of Association.

Article 2

The registered office of BNP PARIBAS shall be located in Paris (*9th arrondissement*), at 16, Boulevard des Italiens (France).

Article 3

The purpose of BNP PARIBAS shall be to provide and carry out the following services with any individual or legal entity, in France and abroad, subject to compliance with the French laws and regulations applicable to credit institutions licensed by the Credit Institutions and Investment Firms Committee (*Comité des Établissements de Crédit et des Entreprises d'Investissement*):

- any and all investment services,
- any and all services related to investment services,
- any and all banking transactions,
- any and all services related to banking transactions,
- any and all equity investments.

as defined in the French Monetary and Financial Code Book III – Section 1 (*Code Monétaire et Financier, Livre III, Titre 1er*) governing banking transactions and Section II (*Titre II*) governing investment services and related services.

On a regular basis, BNP PARIBAS may also conduct any and all other activities and any and all transactions in addition to those listed above, in particular any and all arbitrage, brokerage and commission transactions, subject to compliance with the regulations applicable to banks.

In general, BNP PARIBAS may, on its own behalf, and on behalf of third parties or jointly therewith, perform any and all financial, commercial, industrial or agricultural, personal property or real estate transactions directly or indirectly related to the activities set out above or which further the accomplishment thereof.

SECTION II

SHARE CAPITAL – SHARES

Article 4

The share capital of BNP PARIBAS shall stand at 2,499,597,122 euros divided into 1,249,798,561 fully paid-up shares with a nominal value of 2 euros each.

Article 5

The fully paid-up shares shall be held in registered or bearer form at the shareholder's discretion, subject to the French laws and regulations in force.

The shares shall be registered in an account in accordance with the terms and conditions set out in the applicable French laws and regulations in force. They shall be assigned by transfer from one account to another.

The Company may request disclosure of information concerning the ownership of its shares in accordance with the provisions of Article L. 228-2 of the French Commercial Code (*Code de Commerce*).

Without prejudice to the legal thresholds set in Article L. 233-7, paragraph 1 of the French Commercial Code (*Code de Commerce*), any shareholder, whether acting alone or in concert, who comes to directly or indirectly hold at least 0.5% of the share capital or voting rights of BNP PARIBAS, or any multiple of that percentage less than 5%, shall be required to notify BNP PARIBAS by registered letter with return receipt within the timeframe set out in Article L. 233-7 of the French Commercial Code (*Code de Commerce*).

Above 5%, the disclosure obligation provided for in the previous paragraph shall apply to 1% increments of the share capital or voting rights.

The disclosures described in the previous two paragraphs shall also apply when the shareholding falls below the above-mentioned thresholds.

Failure to report either legal or statutory thresholds shall result in the loss of voting rights as provided for by Article L. 233-14 of the French Commercial Code (*Code de Commerce*) at the request of one or more shareholders jointly holding at least 2% of the Company's share capital or voting rights.

Article 6

Each share shall grant a right to a part of ownership of the Company's assets and any liquidation surplus that is equal to the proportion of share capital that it represents.

In cases where it is necessary to hold several shares in order to exercise certain rights, and in particular where shares are exchanged, combined or allocated, or following an increase or reduction in share capital, regardless of the terms and conditions thereof, or subsequent to a merger or any other transaction, it shall be the responsibility of those shareholders owning less than the number of shares required to exercise those rights to combine their shares or, if necessary, to purchase or sell the number of shares or voting rights leading to ownership of the required percentage of shares.

SECTION III

GOVERNANCE

Article 7

The Company shall be governed by a Board of Directors composed of:

1/ Directors appointed by the Ordinary General Shareholders' Meeting

There shall be at least nine and no more than eighteen Directors. Directors elected by the employees shall not be included when calculating the minimum and maximum number of Directors.

They shall be appointed for a three-year term.

When a Director is appointed to replace another Director, in accordance with applicable French laws and regulations in force, the new Director's term of office shall be limited to the remainder of the predecessor's term.

A Director's term of office shall end at the close of the Ordinary General Shareholders' Meeting convened to deliberate on the financial statements for the previous financial year and held in the year during which the Director's term of office expires.

Directors may be re-appointed, subject to the provisions of French law, in particular with regard to their age.

Each Director, including Directors elected by employees, must own at least 10 Company shares.

2/ Directors elected by BNP PARIBAS SA employees

The status of these Directors and the related election procedures shall be governed by Articles L. 225-27 to L. 225-34 of the French Commercial Code (*Code de Commerce*) as well as by the provisions of these Articles of Association.

There shall be two such Directors – one representing executive staff and the other representing non-executive staff.

They shall be elected by BNP PARIBAS SA employees.

They shall be elected for a three-year term.

Elections shall be organised by the Executive Management. The timetable and terms and conditions for elections shall be drawn up by the Executive Management in consultation with the national trade union representatives within the Company such that the second round of elections shall be held no later than fifteen days before the end of the term of office of the outgoing Directors.

Each candidate shall be elected on a majority basis after two rounds held in each of the electoral colleges.

Each application submitted during the first round of elections shall include both the candidate's name and the name of a substitute, if any.

Applications may not be amended during the second round of elections.

The candidates shall belong to the electoral college where they stand for election.

Applications other than those presented by a trade union representative within the Company must be submitted together with a document including the names and signatures of one hundred electors belonging to the electoral college where the candidate is presenting for election.

Article 8

The Chairman of the Board of Directors shall be appointed from among the members of the Board of Directors.

Upon proposal from the Chairman, the Board of Directors may appoint one or more Vice-Chairmen.

Article 9

The Board of Directors shall meet as often as necessary in the best interests of the Company. Board meetings shall be convened by the Chairman. Where requested by at least one-third of the Directors, the Chairman may convene a Board meeting with respect to a specific agenda, even if the last Board meeting was held less than two months before. The Chief Executive Officer (CEO) may also request that the Chairman convene a Board meeting to discuss a specific agenda.

Board meetings shall be held either at the Company's registered office, or at any other location specified in the notice of meeting.

Notices of meetings may be communicated by any means, including verbally.

The Board of Directors may meet and make valid decisions at any time, even if no notice of meeting has been communicated, provided all its members are present or represented.

Article 10

Board meetings shall be chaired by the Chairman, by a Director recommended by the Chairman for such purpose or, failing this, by the oldest Director present.

Any Director may attend a Board meeting and take part in its deliberations by videoconference (visioconférence) or all telecommunications and remote transmission means, including Internet, subject to compliance with the conditions set out in applicable legislation at the time of its use.

Any Director who is unable to attend a Board meeting may ask to be represented by a fellow Director, by granting a written proxy, valid for only one specific meeting of the Board. Each Director may represent only one other Director.

At least half of the Board members must be present for decisions taken at Board meetings to be valid.

Should one or both of the offices of Director elected by employees remain vacant, for whatever reason, without the possibility of a replacement as provided for in Article L. 225-34 of the French Commercial Code (*Code de Commerce*), the Board of Directors shall be validly composed of the members elected by the General Shareholders' Meeting and may validly meet and vote.

Members of the Company's Executive Management may, at the request of the Chairman, attend Board meetings in an advisory capacity.

A permanent member of the Company's Central Works Committee, appointed by said Committee, shall attend Board meetings in an advisory capacity, subject to compliance with the provisions of French laws in force.

Decisions shall be made by a majority of Directors present or represented. In the event of a split decision, the Chairman of the meeting shall have the casting vote, except as regards the proposed appointment of the Chairman of the Board of Directors.

The Board of Directors' deliberations shall be recorded in minutes entered in a special register prepared in accordance with French laws in force and signed by the Chairman of the meeting and one of the Directors who attended the meeting.

The Chairman of the meeting shall appoint the Secretary to the Board, who may be chosen from outside the Board's members.

Copies or excerpts of Board minutes may be signed by the Chairman, the Chief Executive Officer, the Chief Operating Officers (COOs) or any representative specifically authorised for such purpose.

Article 11

The Ordinary General Shareholders' Meeting may grant Directors' attendance fees under the conditions provided for by French law.

The Board of Directors shall split these fees among its members as it deems appropriate.

The Board of Directors may grant exceptional compensation for specific assignments or duties performed by the Directors under the conditions applicable to agreements subject to approval, in accordance with the provisions of Articles L. 225-38 to L. 225-43 of the French Commercial Code (*Code de Commerce*). The Board may also authorise the reimbursement of travel and business expenses and any other expenses incurred by the Directors in the interests of the Company.

SECTION IV

DUTIES OF THE BOARD OF DIRECTORS, THE CHAIRMAN, THE EXECUTIVE MANAGEMENT AND THE NON-VOTING DIRECTORS (*CENSEURS*)

Article 12

The Board of Directors shall determine the business strategy of BNP PARIBAS and supervise the implementation thereof. Subject to the powers expressly conferred on the Shareholders' Meetings and within the limit of the corporate purpose, the Board shall handle any issue concerning the smooth running of BNP PARIBAS and settle matters concerning the Company pursuant to its deliberations. The Board of Directors shall receive from the Chairman or the Chief Executive Officer all of the documents and information required to fulfil its duties.

The Board of Directors' decisions shall be carried out either by the Chairman, the Chief Executive Officer or the Chief Operating Officers, or by any special representative appointed by the Board.

Upon proposal from the Chairman, the Board of Directors may decide to set up committees responsible for performing specific tasks.

Article 13

The Chairman shall organise and manage the work of the Board of Directors and report thereon to the General Shareholders' Meeting. The Chairman shall also oversee the smooth running of BNP PARIBAS's management bodies and ensure, in particular, that the Directors are in a position to fulfil their duties.

The remuneration of the Chairman of the Board shall be freely determined by the Board of Directors.

Article 14

The Board of Directors shall decide how to organise the Executive Management of the Company: the Executive Management of the Company shall be conducted, under his responsibility, either by the Chairman of the Board of Directors or by another individual appointed by the Board of Directors and who shall have the title of Chief Executive Officer.

Shareholders and third parties shall be informed of this choice in accordance with the regulatory provisions in force.

The Board of Directors shall have the right to decide that this choice be for a fixed term.

In the event that the Board of Directors decides that the Executive Management shall be conducted by the Chairman of the Board, the provisions of these Articles of Association concerning the Chief Executive Officer shall apply to the Chairman of the Board of Directors who will in such case have the title of Chairman and Chief Executive Officer. He shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-five years of age.

In the event that the Board of Directors decides to dissociate the functions of Chairman and Chief Executive Officer, the Chairman shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches seventy-two years of age. However, the Board may decide to extend the term of office of the Chairman of the Board until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches seventy-three years of age. The Chief Executive Officer shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-five years of age. However, the Board may decide to extend the term of office of the Chief Executive Officer until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-six years of age.

Article 15

The Chief Executive Officer shall be vested with the broadest powers to act in all circumstances in the name of BNP PARIBAS. He shall exercise these powers within the limit of the corporate purpose and subject to those powers expressly granted by French law to Shareholders' Meetings and the Board of Directors.

He shall represent BNP PARIBAS in its dealings with third parties. BNP PARIBAS shall be bound by the actions of the Chief Executive Officer even if such actions are outside the scope of the corporate purpose, unless BNP PARIBAS can prove that the third party knew that the relevant action was outside the scope of the corporate purpose or had constructive knowledge thereof in view of the circumstances. The publication of the Company's Articles of Association alone shall not constitute such proof.

The Chief Executive Officer shall be responsible for the organisation and procedures of internal control and for all information required by French law regarding the internal control report.

The Board of Directors may limit the powers of the Chief Executive Officer, but such limits shall not be binding as against third parties.

The Chief Executive Officer may delegate partial powers, on a temporary or permanent basis, to as many persons as he sees fit, with or without the option of redelegation.

The remuneration of the Chief Executive Officer shall be freely determined by the Board of Directors.

The Chief Executive Officer may be removed from office by the Board of Directors at any time. Damages may be payable to the Chief Executive Officer if he is removed from office without a valid reason, except where the Chief Executive Officer is also the Chairman of the Board of Directors.

In the event that the Chief Executive Officer is a Director, the term of his office as Chief Executive Officer shall not exceed that of his term of office as a Director.

Article 16

Upon proposal from the Chief Executive Officer, the Board of Directors may, within the limits of French law, appoint one or more individuals, who shall have the title of Chief Operating Officer, responsible for assisting the Chief Executive Officer.

In agreement with the Chief Executive Officer, the Board of Directors shall determine the scope and term of the powers granted to the Chief Operating Officers. However, as far as third parties are concerned, the Chief Operating Officers shall have the same powers as the Chief Executive Officer.

When the Chief Executive Officer ceases to perform his duties or is prevented from doing so, the Chief Operating Officers shall, unless the Board of Directors decides otherwise, retain their functions and responsibilities until a new Chief Executive Officer is appointed.

The remuneration of the Chief Operating Officers shall be freely determined by the Board of Directors, at the proposal of the Chief Executive Officer.

The Chief Operating Officers may be removed from office by the Board of Directors at any time, at the proposal of the Chief Executive Officer. Damages may be payable to the Chief Operating Officers if they are removed from office without a valid reason.

Where a Chief Operating Officer is a Director, the term of his office as Chief Operating Officer may not exceed that of his term of office as a Director.

The term of office of the Chief Operating Officers shall expire at the latest at the close of the General Shareholders' Meeting convened to approve the financial statements for the year in which the Chief Operating Officers reach sixty-five years of age. However, the Board may decide to extend the term of office of the Chief Operating Officers until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which they reach sixty-six years of age.

Article 17

Upon proposal from the Chairman, the Board of Directors may appoint one or two non-voting Directors (*censeurs*).

Non-voting Directors shall be convened to and take part in Board meetings in an advisory capacity.

They shall be appointed for six years and may be reappointed for further terms. They may also be removed at any time under similar conditions.

They shall be selected from among the Company's shareholders and may receive a remuneration determined by the Board of Directors.

SECTION V

SHAREHOLDERS' MEETINGS

Article 18

General Shareholders' Meetings shall be composed of all shareholders.

General Shareholders' Meetings shall be convened and deliberate subject to compliance with the provisions of the French Commercial Code (*Code de Commerce*).

As an exception to the last paragraph of article L.225-123 of the French Commercial Code (*Code de Commerce*), each share carries one voting right, and no double voting rights are conferred.

They shall be held either at the registered office or at any other location specified in the notice of meeting.

They shall be chaired by the Chairman of the Board of Directors, or, in his absence, by a Director appointed for this purpose by the Shareholders' Meeting.

Any shareholder may, subject to providing proof of identity, attend a General Shareholders' Meeting, either in person, or by returning a postal vote or by designating a proxy.

Taking part in the meeting is subject to the shares having been entered either in the BNP PARIBAS' registered share accounts in the name of the shareholder, or in the bearer share accounts held by the authorised intermediary, within the timeframes and under the conditions provided for by the French regulations in force. In the case of bearer shares, the authorised intermediary shall provide a certificate of participation for the shareholders concerned.

The deadline for returning postal votes shall be determined by the Board of Directors and stated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires – BALO*).

At all General Shareholders' Meetings, the voting right attached to the shares bearing beneficial rights shall be exercised by the beneficial owner.

If the Board of Directors so decides at the time that the General Shareholders' Meeting is convened, the public broadcasting of the entire General Shareholders' Meeting by videoconference (visioconference) or all telecommunications and remote transmission means, including Internet, shall be authorised. Where applicable, this decision shall be communicated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires – BALO*).

Any shareholder may also, if the Board of Directors so decides at the time of convening the General Shareholders' Meeting, take part in the vote by videoconference (visioconference) or all telecommunications and remote transmission means, including Internet, subject to compliance with the conditions set out in the applicable laws at the time of its use. If an electronic voting form is used, the shareholder's signature may be in the form of a secured digital signature or a reliable identification process safeguarding the link with the document to which it is attached and may consist, in particular, of a user identifier and a password. Where applicable, this decision shall be communicated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires – BALO*).

SECTION VI

STATUTORY AUDITORS

Article 19

At least two principal statutory auditors and at least two substitute statutory auditors shall be appointed by the General Shareholders' Meeting for a term of six financial years. Their term of office shall expire after approval of the financial statements for the sixth financial year.

SECTION VII

ANNUAL FINANCIAL STATEMENTS

Article 20

The Company's financial year shall start on 1st January and end on 31st December.

At the end of each financial year, the Board of Directors shall draw up annual financial statements and write a management report on the Company's financial position and its business activities during the previous year.

Article 21

Net income for the year is composed of income for the year minus costs, depreciation, amortizations and impairment.

The distributable profit is made up of the year's profit, minus previous losses as well as the sums to be allocated to the reserves in accordance with French law, plus the profit carried forward.

The General Shareholders' Meeting is entitled to levy all sums from the distributable profit to allocate them to all optional, ordinary or extraordinary reserves or to carry them forward.

The General Shareholders' Meeting may also decide to distribute sums levied from the reserves at its disposal.

However, except in the event of a capital reduction, no amounts may be distributed to the shareholders if the shareholders' equity is, or would become following such distribution, lower than the amount of capital plus the reserves which is not open to distribution pursuant to French law or these Articles of Association.

In accordance with the provisions of Article L. 232-18 of the French Commercial Code (*Code de Commerce*), a General Shareholders' Meeting may offer to the shareholders an option for the payment, in whole or in part, of dividends or interim dividends through the issuance of new shares in the Company.

SECTION VIII

DISSOLUTION

Article 22

Should BNP PARIBAS be dissolved, the shareholders shall determine the form of liquidation, appoint the liquidators at the proposal of the Board of Directors and, in general, take on all of the duties of the General Shareholders' Meeting of a French Public Limited Company (*société anonyme*) during the liquidation and until such time as it has been completed.

SECTION IX

DISPUTES

Article 23

Any and all disputes that may arise during the life of BNP PARIBAS or during its liquidation, either between the shareholders themselves or between the shareholders and BNP PARIBAS, pursuant to these Articles of Association, shall be ruled on in accordance with French law and submitted to the courts having jurisdiction.

8.8 Statutory Auditors' special report on related party agreements and commitments

Annual General Meeting for the approval of the financial statements for the year ended 31 December 2018

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide 92908 Paris La Défense Cedex	63, rue de Villiers 92208 Neuilly-sur-Seine Cedex	61, rue Henri Regnault 92400 Courbevoie

This is a free translation into English of the Statutory Auditors' special report on related party agreements and commitments issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,
BNP Paribas SA
16 boulevard des Italiens
75009 PARIS

In our capacity as Statutory Auditors of BNP Paribas SA, we hereby report to you on related party agreements and commitments.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms and conditions of, as well as the reasons provided for, the agreements and commitments that have been disclosed to us or that we may have identified as part of our engagement, without commenting on their relevance or substance or identifying any undisclosed agreements or commitments. Under the provisions of article R.225-31 of the French Commercial Code (Code de commerce), it is the responsibility of the shareholders to determine whether the agreements and commitments are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by article R.225-31 of the French Commercial Code in relation to the implementation during the year of agreements and commitments already approved by the Annual General Meeting.

We performed the procedures that we deemed necessary in accordance with professional standards applicable in France to such engagements. These procedures consisted in verifying that the information given to us is consistent with the underlying documents.

AGREEMENTS AND COMMITMENTS TO BE SUBMITTED FOR THE APPROVAL OF THE ANNUAL GENERAL MEETING

We were not informed of any agreement or commitment authorised during the year to be submitted for approval at the Annual General Meeting in accordance with article L.225-38 of the French Commercial Code.

AGREEMENTS AND COMMITMENTS PREVIOUSLY APPROVED BY THE ANNUAL GENERAL MEETING

Agreements and commitments approved in previous years

We have been informed that the following agreement, previously approved by the Annual General Meeting on 26 May 2016, remained in force but was not implemented during the year.

Non-compete agreement between BNP Paribas and Jean-Laurent Bonnafé (authorised by the Board of Directors on 25 February 2016)

Director concerned:

Jean-Laurent Bonnafé, Director

Chief Executive Officer of BNP Paribas

At its meeting on 25 February 2016, the Board of Directors of BNP Paribas authorised the implementation of a non-compete agreement between BNP Paribas and Jean-Laurent Bonnafé.

Under this agreement, in the event that Jean-Laurent Bonnafé ceases to hold a position with BNP Paribas or carry out any work on its behalf, he undertakes not to exercise, directly or indirectly, any professional activity for a period of 12 months on behalf of a banking, investment or insurance firm whose shares are traded on a regulated market in France or abroad, or on behalf of a banking, investment or insurance firm in France whose shares are not traded on a regulated market. As consideration for this non-compete obligation, Jean-Laurent Bonnafé will receive a payment equal to 1.2 times the total of the fixed and variable remuneration (excluding multi-annual variable remuneration) he received during the year preceding his departure. One-twelfth of the indemnity would be paid each month.

This agreement was concluded to protect the interests of BNP Paribas and its shareholders in the event of Jean-Laurent Bonnafé's departure.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 5 March 2019

The Statutory Auditors

Deloitte & Associés	**PricewaterhouseCoopers Audit**	**Mazars**
Laurence Dubois	Patrice Morot	Virginie Chauvin

9 STATUTORY AUDITORS

9.1 Statutory Auditors

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide 92908 Paris-La Défense Cedex	63, rue de Villiers 92208 Neuilly-sur-Seine Cedex	61, rue Henri Regnault 92400 Courbevoie

- Deloitte & Associés was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 23 May 2006.

Deloitte & Associés is represented by Laurence Dubois

Deputy:

Société BEAS, 195, avenue Charles de Gaulle, Neuilly-sur-Seine (92), France, SIREN No. 315 172 445, Nanterre trade and companies register.

- PricewaterhouseCoopers audit was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 26 May 1994.

PricewaterhouseCoopers Audit is represented by Patrice Morot.

Deputy:

Jean-Baptiste Deschryver, 63, rue de Villiers, Neuilly-sur-Seine (92).

- Mazars was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 23 May 2000.

Mazars is represented by Virginie Chauvin.

Deputy:

Charles de Boisriou, 28 rue Fernand Forest, 92150 Suresnes (92).

Deloitte & Associés, PricewaterhouseCoopers and Mazars are registered as Statutory Auditors with the Versailles Regional Association of Statutory Auditors, under the authority of the French National Accounting Oversight Board *(Haut Conseil du Commissariat aux Comptes)*.

10 PERSON RESPONSIBLE FOR THE REGISTRATION DOCUMENT

10.1 Person responsible for the Registration document and the annual financial report

Jean-Laurent Bonnafé, Chief Executive Officer of BNP Paribas.

10.2 Statement by the person responsible for the Registration document

I hereby declare that to the best of my knowledge, and having taken all reasonable precautions, the information contained in the Registration document is in accordance with the facts and contains no omission likely to affect its import.

I further declare that to the best of my knowledge, the financial statements are prepared in accordance with applicable accounting standards and give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Company and all the entities included in the consolidation, and that the information provided in the management report (whose contents are listed in the Table of Concordance on page 599) includes a fair review of the development and performance of the business, profit or loss and financial position of the Company and all the entities included in the consolidation, and that it describes the principal risks and uncertainties that they face.

I obtained a statement from the Statutory Auditors, Deloitte & Associés, PricewaterhouseCoopers Audit, and Mazars, at the end of their assignment, in which they confirm having verified the information regarding the financial position and the accounts contained herewithin, and having examined the entire Registration document.

Paris, 5 March 2019

Chief Executive Officer
Jean-Laurent BONNAFÉ

11 TABLES OF CONCORDANCE

In order to assist readers of the Registration document, the following table of concordance cross-references the main headings required by Annex 1 of European Commission Regulation (EC) No. 809/2004 pursuant to the "Prospectus" directive.

Headings as listed by Annex 1 of European Commission Regulation (EC) No. 809/2004		Page
10.	**Capital resources**	
10.1.	Issuer's capital resources	156-157; 491
10.2.	Sources and amounts of cash flows	155
10.3.	Borrowing requirements and funding structure	138 ; 414-427
10.4.	Information regarding any restrictions on the use of capital resources that have materially affected, or could materially affect, the issuer's operations	N/A
10.5.	Anticipated sources of funds	N/A
11.	**Research and development, patents, and licences**	**N/A**
12.	**Trend information**	**136-138**
13.	**Profit forecasts or estimates**	**N/A**
14.	**Administrative, management, and supervisory bodies, and senior management**	
14.1.	Administrative and management bodies	31-45; 98
14.2.	Administrative and management bodies' conflicts of interest	49-50; 63-64; 74-94
15.	**Remuneration and benefits**	
15.1.	Amount of remuneration paid and benefits in kind granted	74-94; 236-244
15.2.	Total amounts set aside or accrued by the issuer or its subsidiaries to provide pension, retirement, or similar benefits	74-94; 236-244
16.	**Board practices**	
16.1.	Date of expiry of the current terms of office	31-44
16.2.	Information about members of the administrative bodies' service contracts with the issuer	N/A
16.3.	Information about the Audit Committee and Remuneration Committee	53-60
16.4.	Corporate governance regime in force in the issuer's country of incorporation	46
17.	**Employees**	
17.1.	Number of employees	4; 535-536
17.2.	Shareholdings and stock options	74-94; 175-176; 540-542
17.3.	Description of any arrangements for involving the employees in the capital of the issuer	N/A
18.	**Major shareholders**	
18.1.	Shareholders owning more than 5% of the issuer's capital or voting rights	16-17
18.2.	Existence of different voting rights	16
18.3.	Control of the issuer	16-17
18.4.	Description of any arrangements, known to the issuer, the operation of which may at a subsequent date result in a change of Control of the issuer	17
19.	**Related party transactions**	**74-94; 258-259; 590-591**
20.	**Financial information concerning the issuer's assets and liabilities, financial position, and profits and losses**	
20.1.	Historical financial information	4; 20; 113-148; 466-502
20.2.	Pro forma financial information	138 ; 281
20.3.	Financial statements	149-269; 466-502
20.4.	Auditing of historical annual financial information	270-276; 503-508
20.5.	Age of latest financial information	152 ; 466
20.6.	Interim and other financial information	N/A
20.7.	Dividend policy	20; 23-24; 115; 494
20.8.	Legal and arbitration proceedings	248-249
20.9.	Significant change in the issuer's financial or trading position	577

Headings as listed by Annex 1 of European Commission Regulation (EC) No. 809/2004		Page
21.	**Additional information**	
21.1.	Share capital	16; 245-247; 485-487; 585
21.2.	Memorandum and Articles of association	585-589
22.	**Material contracts**	**576**
23.	**Third party information and statement by experts and declarations of interest**	**N/A**
24.	**Documents on display**	**576**
25.	**Information on holdings**	**223-224; 261-268; 496-501; 578-584**

Pursuant to article 28 of European Commission Regulation (EC) no. 809-2004 on prospectuses, the following items are incorporated by reference:

- The consolidated financial statements for the year ended 31 December 2017 and the Statutory Auditors' report on the consolidated financial statements at 31 December 2017, presented respectively on pages 137-236 and 237-242 of Registration Document no. D.18-0101 filed with the AMF on 6 March 2018;
- The consolidated financial statements for the year ended 31 December 2016 and the Statutory Auditors' report on the consolidated financial statements at 31 December 2016, presented respectively on pages 131-231 and 232-233 of Registration Document no. D.17-0132 filed with the AMF on 7 March 2017;
- The chapters of Registration documents nos. D.18-0101 and D.17-0132 not referred to above are either not significant for investors or are covered in another section of this Registration document.

In order to assist readers of the annual financial report, the following table cross-references the information required by article L.451-1-2 of the French Monetary and Financial Code.

Annual financial report	Page
Statement by the person responsible for the Registration document	**596**

Management report

The table of concordance below allows information in this Registration Document to be cross-referenced with the Company's Management report (including the Corporate governance report) and the consolidated Management report, as required by the legal and regulatory provisions.

I. Company and Group Business and Situation

Information (reference texts)	
■ Company and Group position over the past year (L.232-1 II and L.233-26 of the French Commercial Code)	114-138; 152-268; 466-502
■ Objective and comprehensive analysis of business performance, results and the financial position of the Company and Group (L.225-100-1 of the French Commercial Code)	114-138; 152-268; 466-502
■ Key financial and non-financial performance indicators for the Company and Group (L.225-100-1 of the French Commercial Code)	114-148; 513; 518
■ Foreseeable developments of the Company and Group (L.232-1 II and L.233-26 of the French Commercial Code)	136-138
■ Key events occurring since the financial year-end and the preparation date of the Management Report (L.232-1 II and L.233-26 of the French Commercial Code)	577
■ Company and Group research and development activities (L.232-1 II and L.233-26 of the French Commercial Code)	N/A
■ Equity investments in, or takeovers of, companies that have their head office in France (L. 233-6 and L.247-1 of the French Commercial Code)	502
■ Business and results for the Company as a whole, Company subsidiaries and companies it controls by branch of activity (L.233-6 of the French Commercial Code)	6-15; 114-134
■ Existing Company branches (L.232-1 II of the French Commercial Code)	578-584
■ Information on Company locations and businesses (L.511-45 and R.511-16-4 of the French Monetary and Financial Code)	261-268; 578-584

II. Risk factors and characteristics of internal control procedures	
Information (reference texts)	
■ Description of the main risks and contingencies faced by the Company and Group (L.225-100-1 of the French Commercial Code)	283-295
■ Information on the financial risks related to the effects of climate change and measures taken by the Company and Group to reduce these through a low-carbon strategy applicable to all aspects of their business (L.225-100-1 of the French Commercial Code)	106
■ Objectives and policy for hedging each main transaction category by the Company and Group (L.225-100-1 of the French Commercial Code)	410-413
■ Exposure to price, credit, liquidity and cash flow risks of the Company and Group (L.225-100-1 of the French Commercial Code)	331-427
■ Main features of internal control and risk management procedures set up by the Company and Group relating to the preparation and processing of accounting and financial information (L.225-100-1 of the French Commercial Code)	108-112

III. Information on share capital	
Information (reference texts)	
■ Name of individuals or legal entities holding directly or indirectly more than 5% of capital or voting rights and changes arising during the year (L.233-13 of the French Commercial Code)	16-17
■ Name of companies controlled and share of the Company's share capital held by them (L.233-13 of the French Commercial Code)	261-268
■ Employee share ownership status (L.225-102 of the French Commercial Code)	16-17
■ Securities acquired by employees under a corporate takeover transaction (L.225-102 of the French Commercial Code)	N/A
■ Share disposals made to regularise cross shareholdings (L.233-29, R.233-19 of the French Commercial Code)	N/A
■ Information on share buyback transactions undertaken by the Company (L.225-211 of the French Commercial Code)	94-97; 245
■ Any adjustments made to securities giving access to share capital (L.225-181, L.228-99, R225-137, R.228-91 of the French Commercial Code)	N/A
■ Summary of transactions carried out by corporate officers, executives, certain company managers and persons with close connections to them during the past year (223-26 of the AMF General Regulation, L.621-18-2 and R.621-43-1 of the French Monetary and Financial Code)	93

IV. Other accounting, financial and legal information	
Information (reference texts)	
■ Information on payment terms (L.441-6-1 and D. 441-4 of the French Commercial Code)	483
■ Amount of dividends distributed for the prior three years and revenue distributed eligible for the 40% tax reduction (243 bis of the French General Tax Code)	20
■ Injunctions or fines for anti-competitive practices (L.464-2 of the French Commercial Code)	N/A
■ Information on financial instruments with an agricultural commodity as their underlying and measures taken by the Company to prevent this having a significant impact on agricultural commodity prices (L. 511-4-2 of the French Monetary and Financial Code)	529
■ Amount and features of loans financed or distributed by the Company or that they distribute as defined in III of Article 80 of the Planning Act for Social Cohesion Law No. 2005-32 of 18 January 2005 and hence covered by public guarantees. (L.511-4-1 of the French Monetary and Financial Code)	N/A
■ Return on Company assets (R. 511-16-1 of the French Monetary and Financial Code)	322

V. Extra-financial performance statement and vigilance plan

Information (reference texts)	
■ Information on the labour and environmental impact relating to the Company, subsidiaries and controlled companies (L.225-102-1 and R. 225-105 of the French Commercial Code)	510-571
■ Information on the effects of the Company's activity with respect to respect for Human rights and fight against corruption and tax evasion (L.225-102-1 and R. 225-105 of the French Commercial Code)	522; 557-562
■ Information on the Company, subsidiaries and controlled companies, relating to: ▪ the consequences of climate change on the business and the use of goods and services, ▪ social commitments to promote sustainable development, the circular economy, the fight against food waste and food poverty, respect for animal welfare and responsible, fair and sustainable food, ▪ actions to fight against discrimination and promote diversity,	511-574
■ Collective agreements agreed in the Company, subsidiaries and controlled companies and their impacts on the economic performance of the Company, subsidiaries and controlled companies as well as on employee working conditions (L.225-102-1 and R. 225-105 of the French Commercial Code)	531-545
■ Information for companies operating at least one facility listed under article L.515-36 of the French Environmental Code (L.225-102-2 of the French Commercial Code)	N/A
■ Company's business plan (R. 225-105 of the French Commercial Code)	4; 6-15
■ Social, environmental and civic information relevant to the main risks and policies of the company, its subsidiaries and controlled companies (R. 225-105 II of the French Commercial Code)	Chapter 7
■ Vigilance plan (L.225-102-4 of the French Commercial Code)	557-561

VI. Report on corporate governance

Information (reference texts)	
■ Information on the remuneration policy for executive corporate officers (L.225-37-2 of the French Commercial Code)	74-78
■ Total remuneration and benefits in kind paid by the Company, companies controlled by it or the company that controls it to each corporate officer of the Company during the year (L.225-37-3 of the French Commercial Code)	78-93
■ Commitments of any kind made by the Company for the benefit of its corporate officers (L.225-37-3 of the French Commercial Code)	78; 81-93
■ Holding conditions for free shares allocated to executive corporate officers (L.225-197-1 of the French Commercial Code)	N/A
■ Conditions for exercising and holding options granted to corporate officers (L.225-185 of the French Commercial Code)	82
■ List of all directorships and positions held in any company by each corporate officer during the year (L.225-37-4 1° of the French Commercial Code)	31-45
■ Agreements entered into by one of the Company's corporate officers and a subsidiary of the Company (L.225-37-4 2° of the French Commercial Code)	46
■ Summary table of capital increase delegations (L.225-37-4 3° of the French Commercial Code)	94-97
■ Arrangements for exercising general management (L.225-37-4 4° of the French Commercial Code)	48
■ Composition, and conditions governing the preparation and organisation of the work, of the Board of directors (L.225-37-4 5° of the French Commercial Code)	31-44; 53-60
■ Description of the diversity policy applied to the members of the Board of directors, as well as the objectives, how the policy was implemented and results obtained during the past financial year (L.225-37-4 6° of the French Commercial Code)	50-51; 67-73
■ Information on steps to ensure balanced representation of men and women in management bodies and gender balance results in the top 10% of positions of higher levels of responsibility (L.225-37-4 6° of the French Commercial Code)	30; 534; 558

■ Any limits to the powers of the Chief Executive Officer imposed by the Board of directors (L.225-37-4 7° of the French Commercial Code)	48
■ Corporate governance code prepared by corporate representative organisations to which the Company refers (L.225-37-4 8° of the French Commercial Code)	46
■ Arrangements for shareholder participation at the general shareholders' meeting (L.225-37-4 9° of the French Commercial Code)	25-27
■ Items that could have an impact in case of a public tender offer (L.225-37-5° of the French Commercial Code)	97

Annexes	
■ Table summarising Company results over the last 5 years (R.225-102 of the French Commercial Code)	495
■ Opinion of the independent third party tasked with verifying the social and environmental information in the Management report (L. 225-102-1-3 and R.225-105-2 of the French Commercial Code)	572-574
■ Statutory Auditors' report on the Board of directors' report on corporate governance (l. 225-235 of the French Commercial Code)	98

Financial statements	
■ Parent company financial statements	465-502
■ Statutory Auditors' report on the financial statements	503-508
■ Consolidated financial statements	149-269
■ Statutory Auditors' report on the consolidated financial statements	270-276

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