

# *Fixed Income*

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- Overall presentation: J d'Estais
- Focus on Long Term Rate Activity: F Janbon
- Focus on Credit Markets Activity: D Ovenden
- Management of Risks  
within in Credit Market Activities: F Roncey

# *Fixed Income*

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*Jacques d'Estais*  
*Head of Fixed Income Activities*

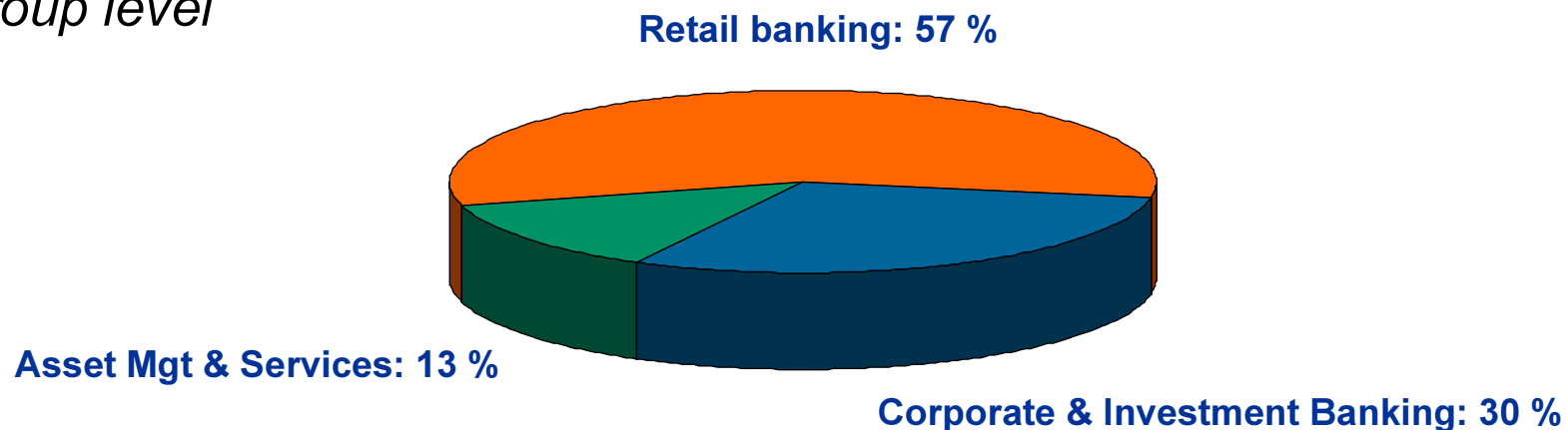
- **The Fixed Income Organisation**
- **Main Achievements**
- **Key Success Factors and Way Forward**

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  - Main Achievements
  - Key Success Factors and Way Forward

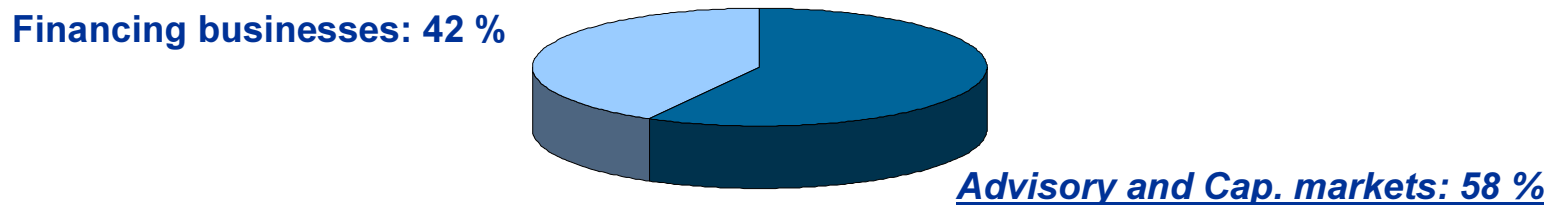
# Corporate and Investment Banking within BNP PARIBAS

## Breakdown of 2002 Net Banking Income

*At group level*



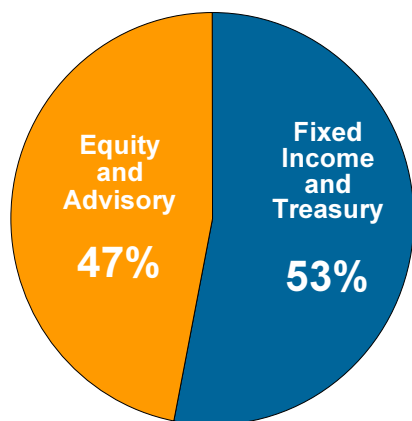
*Within Corp. & Inv. Bkg*



# Fixed Income: a Significant Component of 'Advisory & Capital Markets'

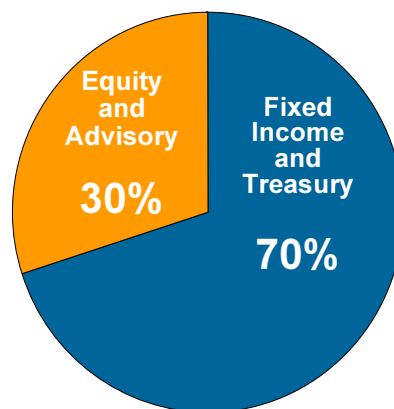
## Breakdown of Net Banking Income « Advisory and capital markets »

**2001 NBI:**  
**€ 3,871 mn**



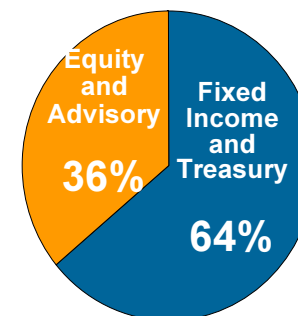
- Excellent performance in interest derivatives and corporate bonds
- Very good performance in equity derivatives

**2002 NBI:**  
**€ 2,965 mn**



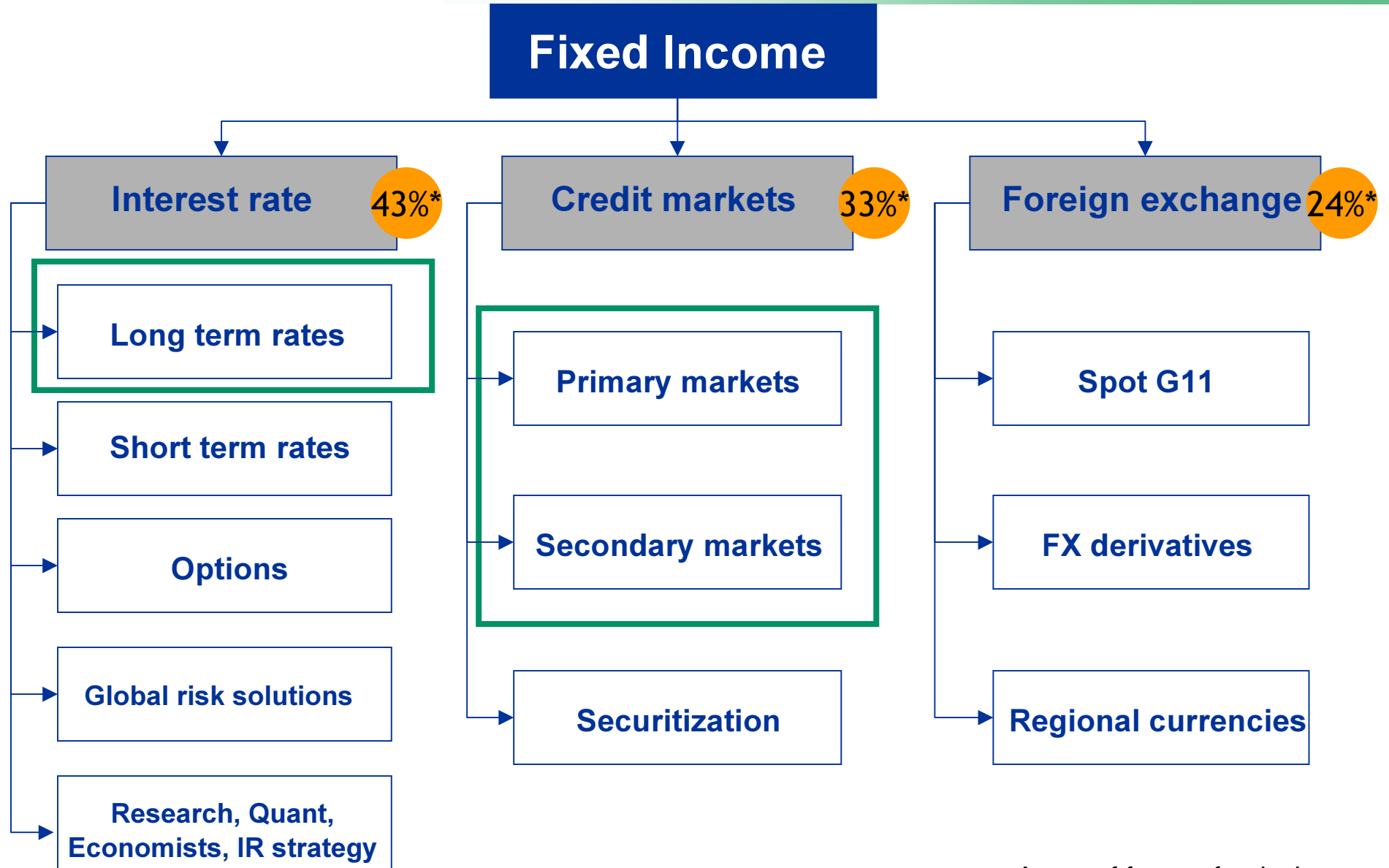
- Good resistance of the fixed income activities in a difficult environment
- Sharp decline in equity derivatives business

**1Q2003 NBI:**  
**€ 1,062 mn**




- Superior performance in all fixed income businesses
- Sharp upswing in equity derivatives business

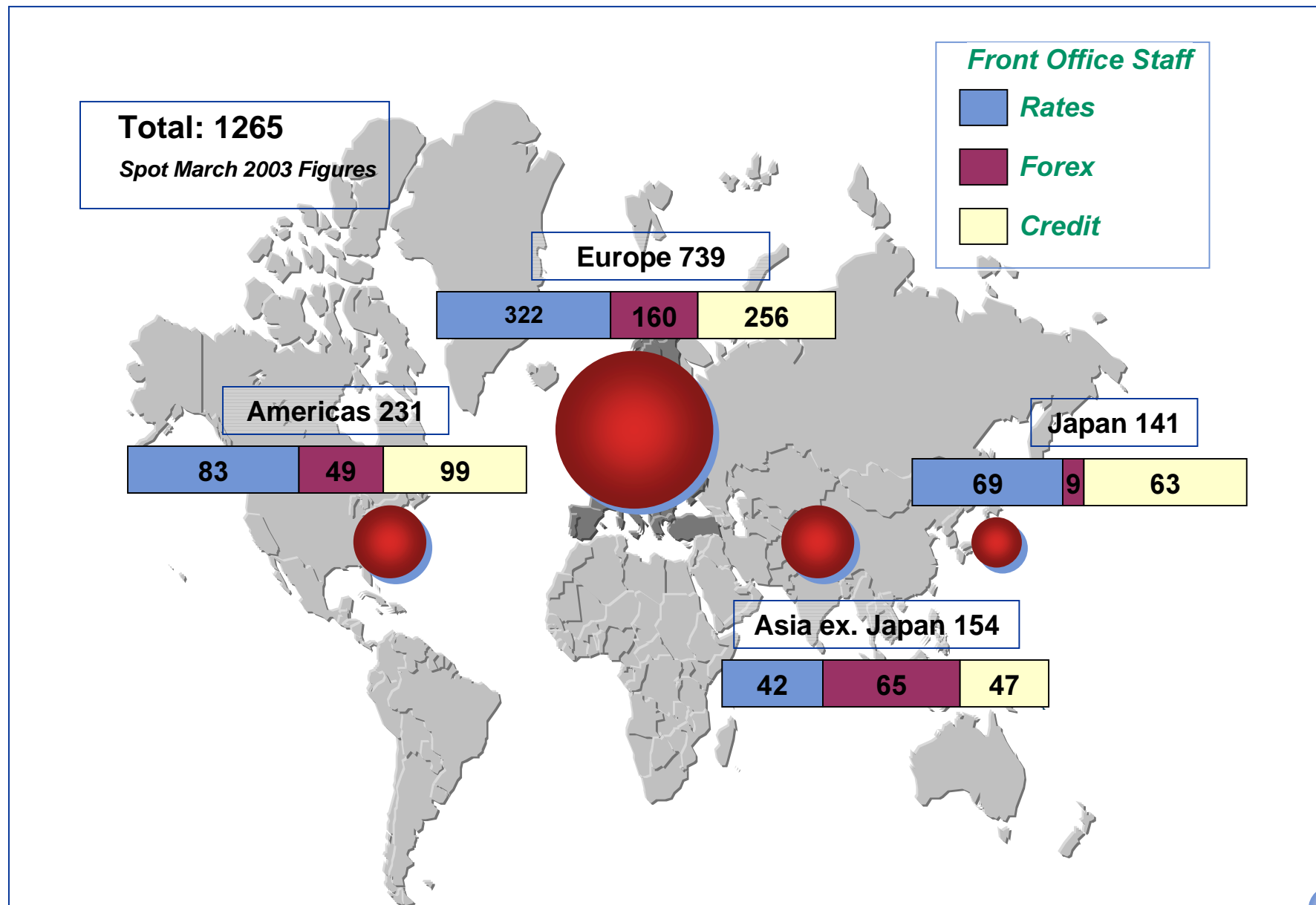
# Fixed Income: a Diversified Business-mix



\*% of 2002 revenues of Fixed Income

 Areas of focus of today's presentation

# A Global Set up With a Focus on Europe





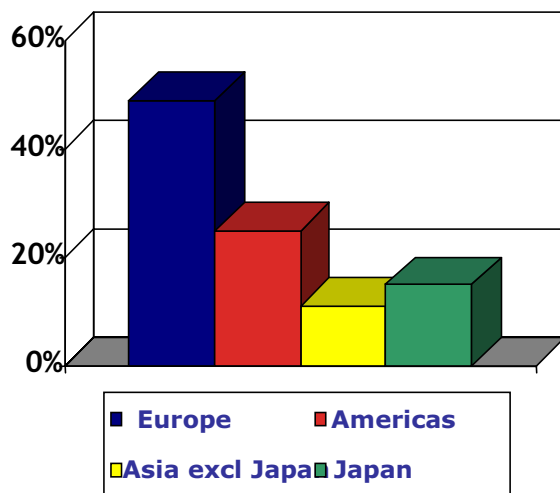
- 
- The Fixed Income Organisation
  - **Main Achievements**
  - Key Success Factors and Way Forward

- Maintained high ratio of client revenues\*/ total revenues

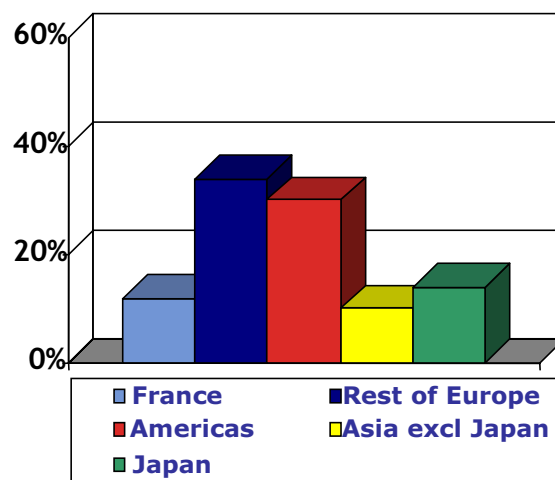
Profitability	2000	2002	2003 Q1
Average Quarterly Revenue	100	127	210
Average Quarterly Client Contribution	100	165	202
Client Contribution / Revenue	70%	91%	67%

\* Year 2000 as base 100

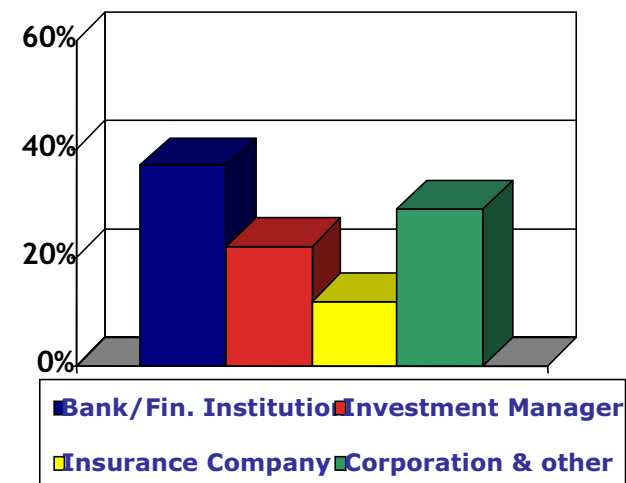
2002 Revenue by Region



2002 Client Contribution by Region



2002 Client Contribution by Client Type



- Improved market shares in all sectors

<b>Rankings</b>	<b>2000</b>	<b>2002/1Q03</b>
All euros international bonds	10	3
All euros corporate bonds	5	2
FX market share general ranking	48	13
FX options	20	9
Credit research	5	3

Source : Euromoney, Thomson Financial

- **With a clear targeting of clients**
  - alignment of priority clients with CFI organisation and Senior bankers
  - implementation of common CRM tool for all FI marketers worldwide
  - simplification of client contribution system in order to mimick closely revenues
  - improved focus on distribution side

<b>Client portfolio</b>	<b>2000</b>	<b>2002</b>
Clients > € 1 mn	100	138
Clients - € 0.5 to 1 mn	100	143

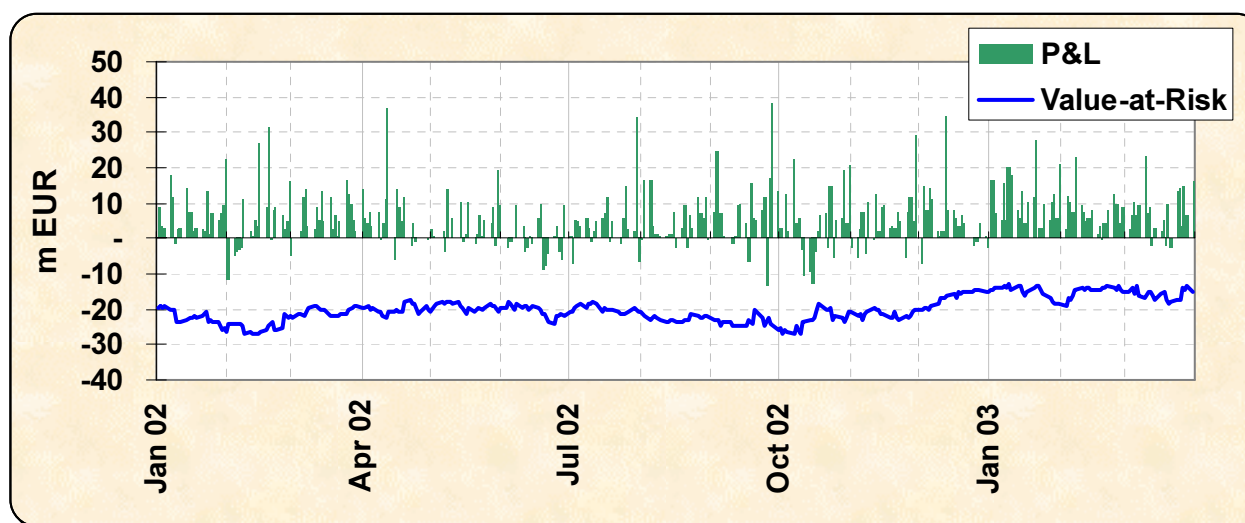
- Streamlined trading platform with the integration of cash and derivatives teams in credit and rates
  - Headcount synergies: 15% of impacted teams
  - Better informed traders
  - Improved service to clients
  - Leading to higher productivity per head
- Rationalisation of FX trading centres
  - Headcount synergies: 30% of impacted teams

Efficiency	2000	2002
Contribution per marketer	100*	175
Direct cost per head**	100*	93

\*Year 2000 as base 100

\*\*In €, excluding bonus

	2002	Q1 2003
Average profit per profit day	7.5m	9.2m
Average loss per loss day	-3.8m	-1.7m
Largest single daily profit	38.3m	27.7m
Largest single daily loss	-13.6m	-2.6m
Loss weeks per period	4	0
Largest single weekly loss	-17.8m	-
Largest single weekly profit	61.4m	63.7m



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- The Fixed Income Organisation
  - Main Achievements
  - **Key Success Factors and Way Forward**

- **Integrated product line on a global basis**
  - Improved risk management
  - Efficient communication on markets
  - Efficient identification of client opportunities worldwide
- **Strict coordination with coverage organisations**
  - Leverage efficiently BNP PARIBAS clients relationships
- **Strong derivative and quantitative culture**
- **Good ratings of the BNP Paribas Group**
- **Thorough control of expenses**
- **Quality risk management and risk control**

- Consolidation of BNP PARIBAS leading position in Europe
- Maintain steady growth of clients revenues
  - Improve market penetration with asset managers and hedge funds
  - Maintain focus on value added services to clients
- Controlled expansion in the US
  - By internal growth
  - By leveraging corporate relationships
- Expansion in a limited number of local markets
  - Central Europe
  - China, Korea, Taiwan, India



# *Interest Rates Group*

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Frederic Janbon

Head of Interest Rate Group

# Outline of the presentation

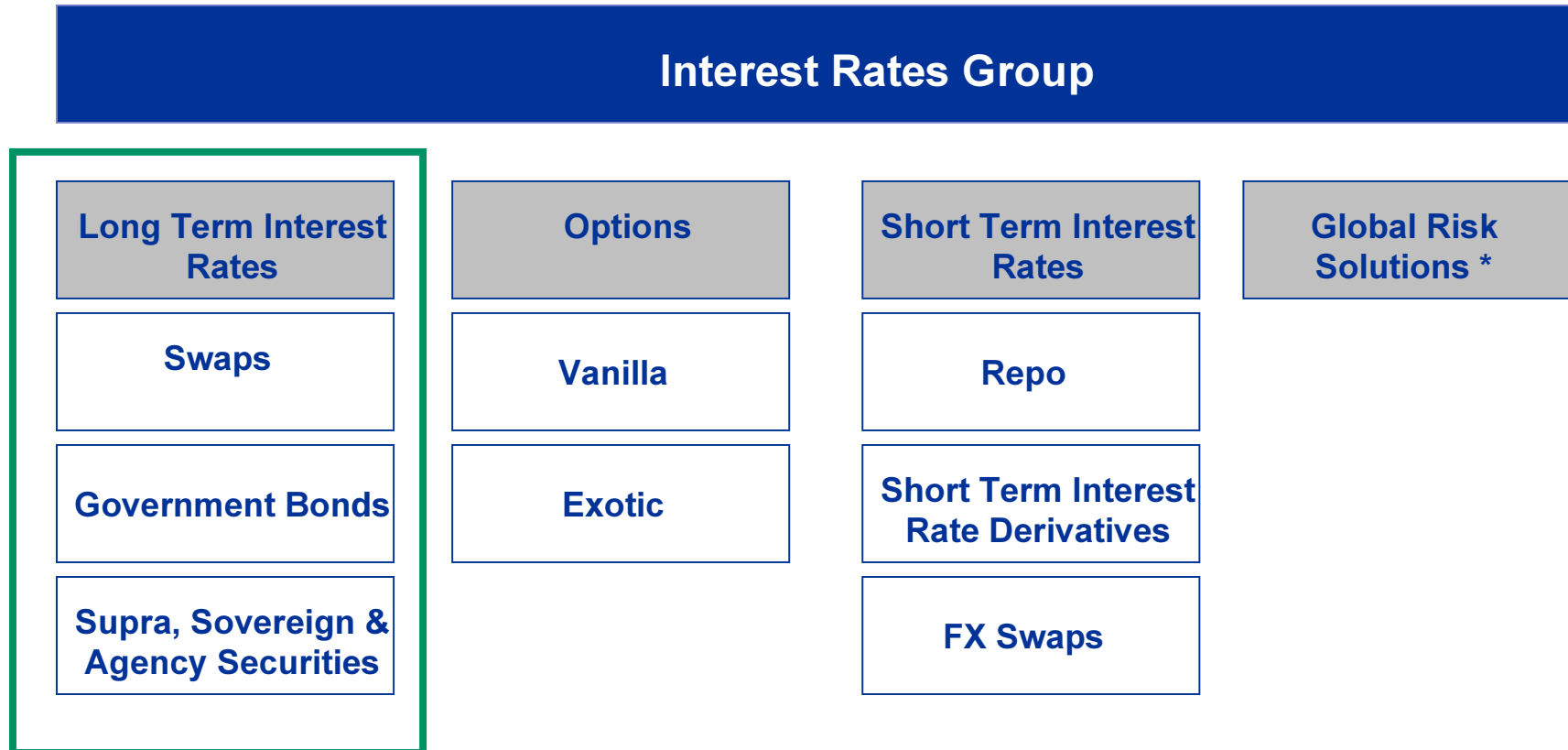
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- The Market for Long Term Interest Rate Products
- BNP Paribas' Competitive Position
- Achievements
- Key Priorities

# Outline of the presentation

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- The Market for Long Term Interest Rate Products
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- Europe - swaps and government trading organised by maturity buckets
- US - Established 4 groups trading global books to maximise competitive advantage - largest being : Libor products (swaps + Supra, Sovereigns & Agencies), Non Libor (Treasuries, Structured Swaps & Inflation)
- Japan- integrated swaps and JGB trading

\* Tax & Accounting, Insurance (Life & Property / Casualty)



# The Market for Long Term Interest Rate Products

- **Market size**

- Interest Rate Derivatives Market: 101.7 trillion USD notional outstanding (Dec 02 BIS Survey).
  - Interest Rate Swaps represents 80% of the total.
- Government securities global revenues: € 7-8 bn

- **Growth**

- Interest Rate Derivatives:
  - established market growing at 10% to 12% per year
- Government securities:
  - growth linked to the size of country budget deficits
  - current outlook positive

# Interest Rate Derivatives Key Growth Drivers

## Corporates

- Long term growth prospects for corporate bonds in Europe and in the US should fuel the demand
- New accounting rules should negatively affect the corporate appetite, particularly in the United States

## Financial Institutions / Investors / Sovereign

- Overall growth of assets under management and recovery of Fixed Income hedge funds
- Active hedging programs from pension funds and life insurance companies
- Mortgage agencies will remain the single largest customers in the United States
- Growing interest from governments to actively manage their debt outstanding

Financial institutions are expected to fuel the growth of the interest rate derivatives business over the coming years.

- **Less clients with bigger needs**
- **Profitable transactions are becoming more strategic (macro-hedging) less tactical due to more rigorous controls and accounting constraints**
- **Counterparty risk management has now become a critical factor for all the leaders in the market**
- **Electronic trading systems capture the majority of dealer and client trades in government securities**

# Outline of the presentation

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# LTIR Group: a Balanced Organisation Which Makes a Global Business



- **Interest Rates Derivatives:**

- One of the 10 largest swap dealers in terms of worldwide revenues
- Top 4 player at swaps in Europe

- **Inflation linked products:**

- **Leading player in Europe**
  - fast growing segment of the European fixed income market linked to strategic asset reallocation in the pension fund sector

- **Government securities\*:**

- Europe : leader in France (overall), top 5 in Germany and Portugal (primary), top 10 in Italy and Greece (primary)
- Japan 10th overall and 3rd non Japanese
- Opportunistic player in the U.S.A.

Source: Government Data

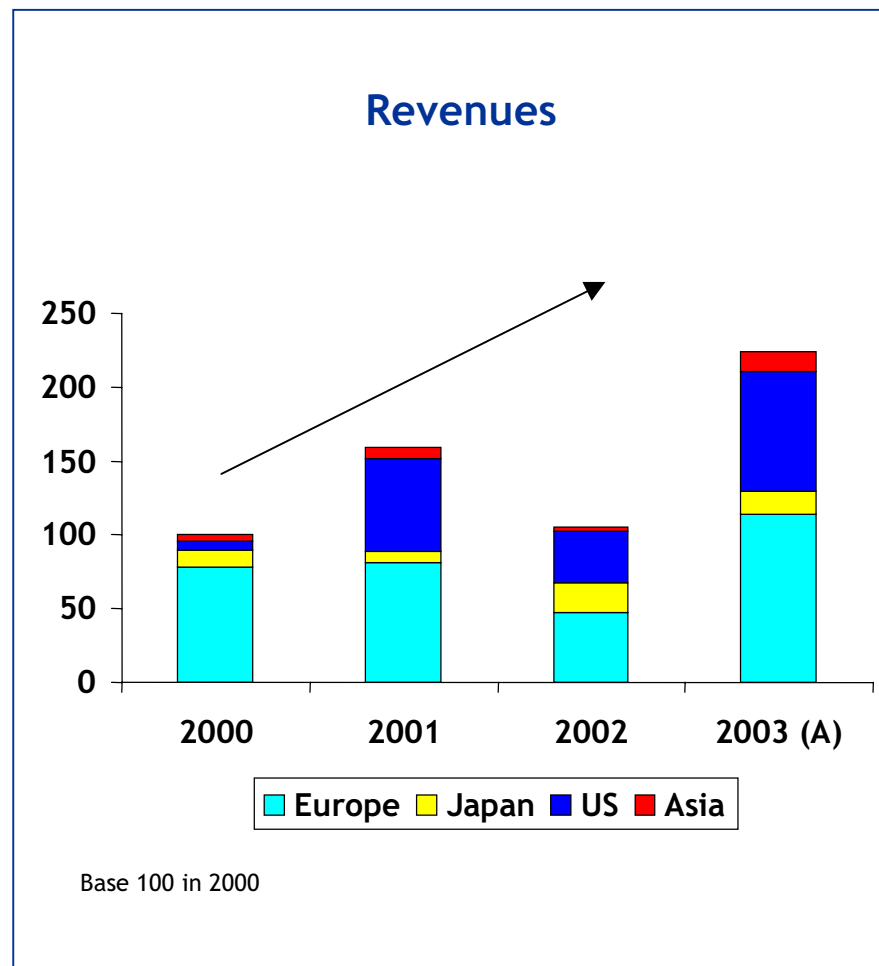
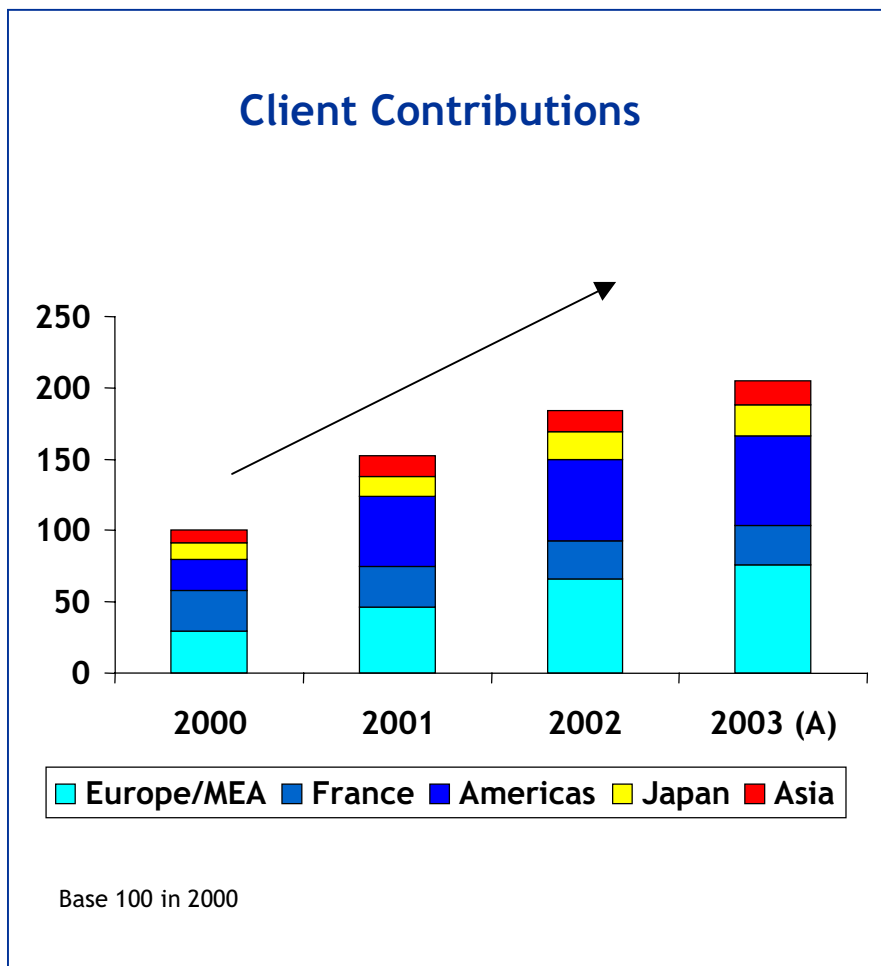
- Trading skills, pricing and risk management systems integrated cross swaps and government bonds
  - Long Term Interest Rates trading headcount: - 8% from 2000 to 2002
    - mostly from the integration of European government trading into 2 centres
  - Research headcount up 25%
- Quantitative research
  - Models defining yield curves by their dynamics rather than by static interpolation
- Marketing approach
  - Leveraging Corporate lending relationships
    - cross selling : +20% per year (2000 to 2002)
  - Sales and marketing headcount: reallocation of resources to derivatives as distribution of securities via electronic platforms has increased
- Best long term ratings amongst derivative global players (AA)

# Outline of the presentation

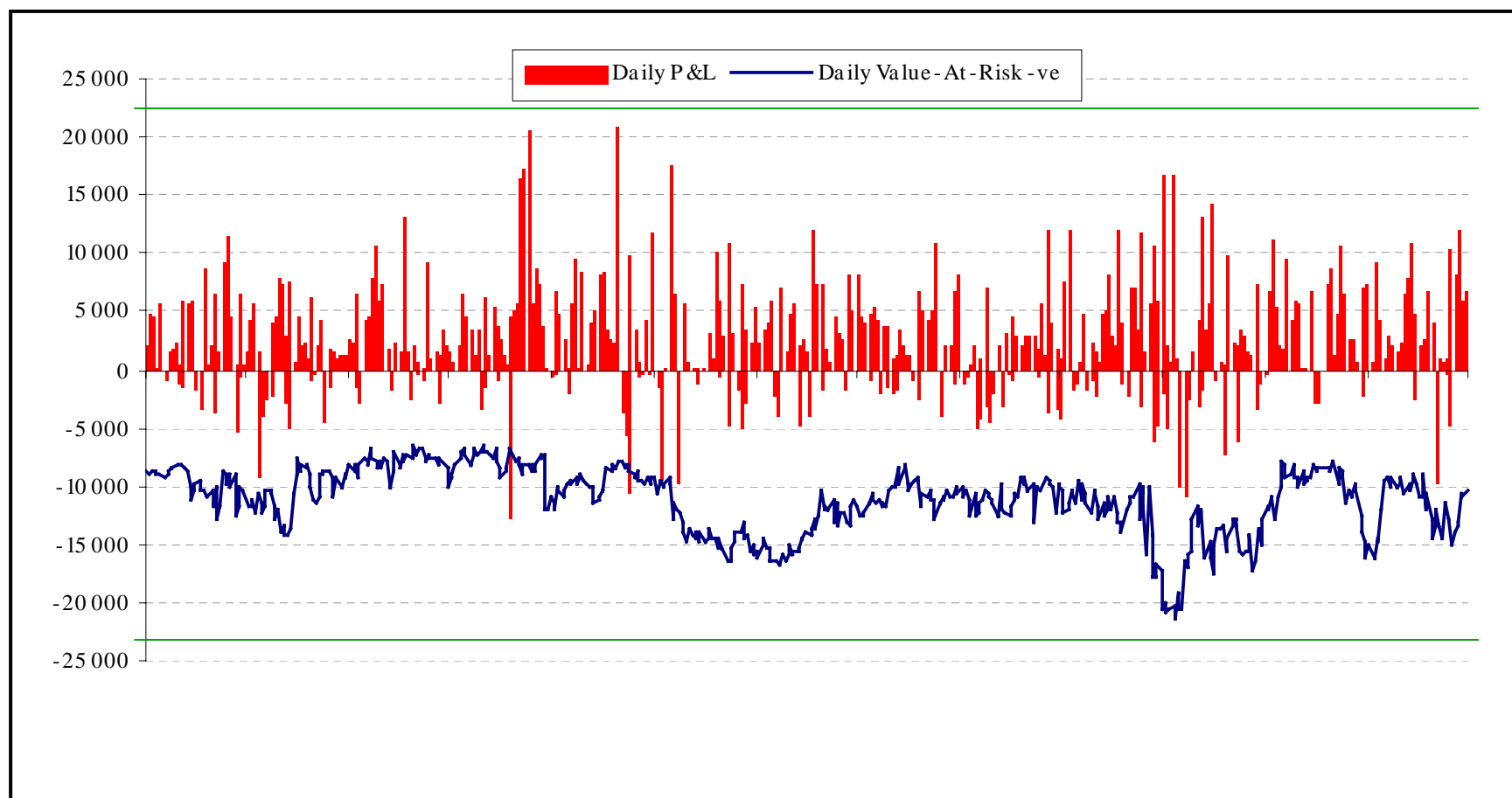
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- The Market for Long Term Interest Rate Products
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- **Achievements**
- Key Priorities

# A Balanced Business with Growing Revenues due to Client Contributions



- Market Risk : IRG VAR usage within limits



- Pricing and Managing Counterparty Risk

- Counterparty Risk (or Credit Risk) is an important part of the risks associated with Interest Rates Derivatives

- BNP Paribas has developed and consistently implemented worldwide a dynamic counterparty risk valuation methodology for Interest Rates Derivatives.

- It provides :

- a way to properly account for Credit Risks in the value of derivatives books
    - an accurate tool to price the “credit component” of new transactions, taking into account the credit worthiness of each counterparty
    - a good understanding of counterparty exposure dynamics

- BNP Paribas actively manages the Credit Risks associated with derivative contracts in a sophisticated and consistent way

# Outline of the presentation

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- The Market for Long Term Interest Rate Products
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- **Products**

- **Leveraging on existing positions in inflation linked product activity**
- **Reallocated trading resources from Treasuries to Agencies in the US and investing in municipal securities and inflation products**
- **Building Long Term Interest Rates activities selectively in local markets**
- **Expanding Tax and Accounting related expertise and products**

- **Client Franchise**

- **Deepen Overall Client Franchise**

- Cross Selling and leveraging Corporate and Fin. Institutions relationships
- Expand the coverage of Pension Funds and Insurance Companies through a dedicated specialist team
- Focus investor coverage on key accounts (“gold accounts”)

- **Increase market share with swaps frequent users**

- **Increase franchise in government, supra, sovereign and agency securities**

- Market share on TradeWeb Europe = 6.2%  
Market share on TradeWeb US = 3%
- Implemented BondVision to enhance coverage of Southern European clients

- **Efficiency: improve the operational process via automation and multi-lateral initiatives**
  - **FpML** - a new financial language that describes the details of derivative transactions and will allow the development of tools such as matching engines to enhance the trade confirmation process



- **Swapswire** - an inter-dealer trade matching system that uses a single trade record, is interfaced to our internal systems and eliminates the need for physical trade confirmations



- **OTCderiv Net** - a consortium of major swap dealers that has invested in / developed the SwapClear system at the London Clearing House which provides central counterparty settlement of derivative transactions



- The business is well established
- The potential for efficiency gains is significant
- Growth will come from:
  - Larger client franchise
  - More diversified product platform through selective investments in new activities
  - Careful building of local market activities

# *Global Credits*

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*David Ovenden*  
*Head of Global Credits*

## Outline of the presentation

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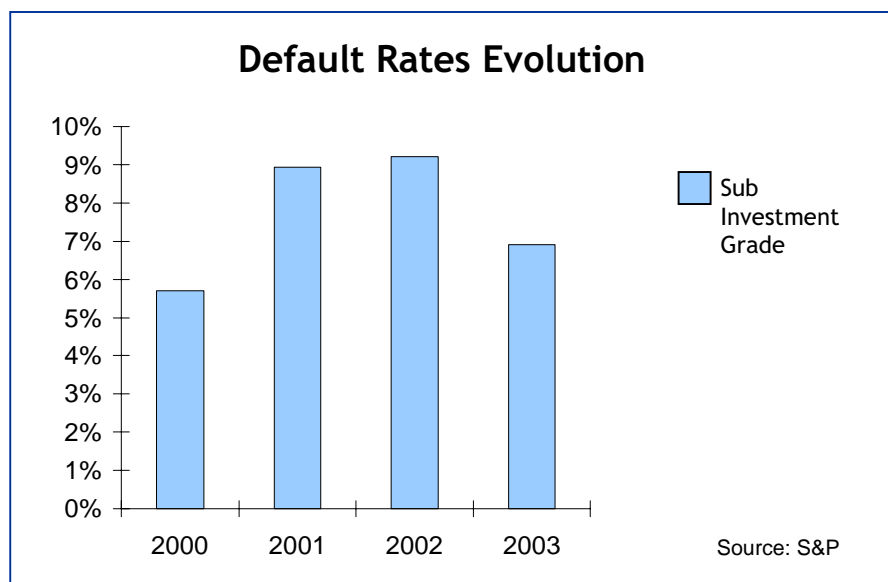
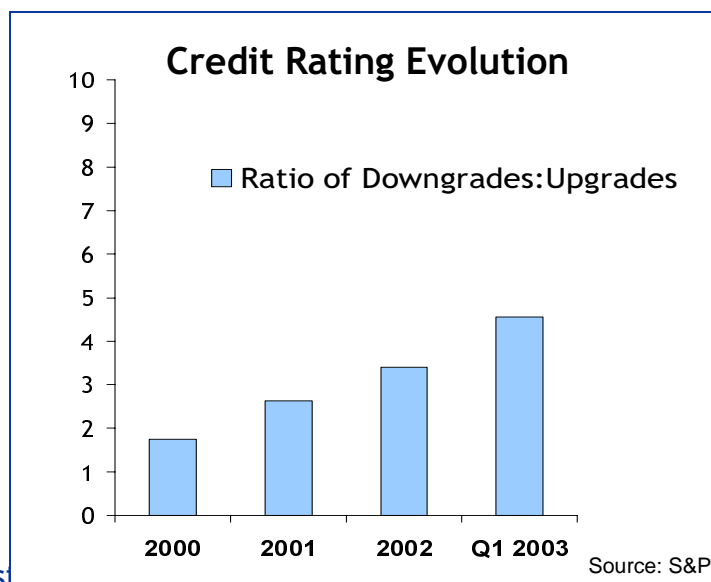
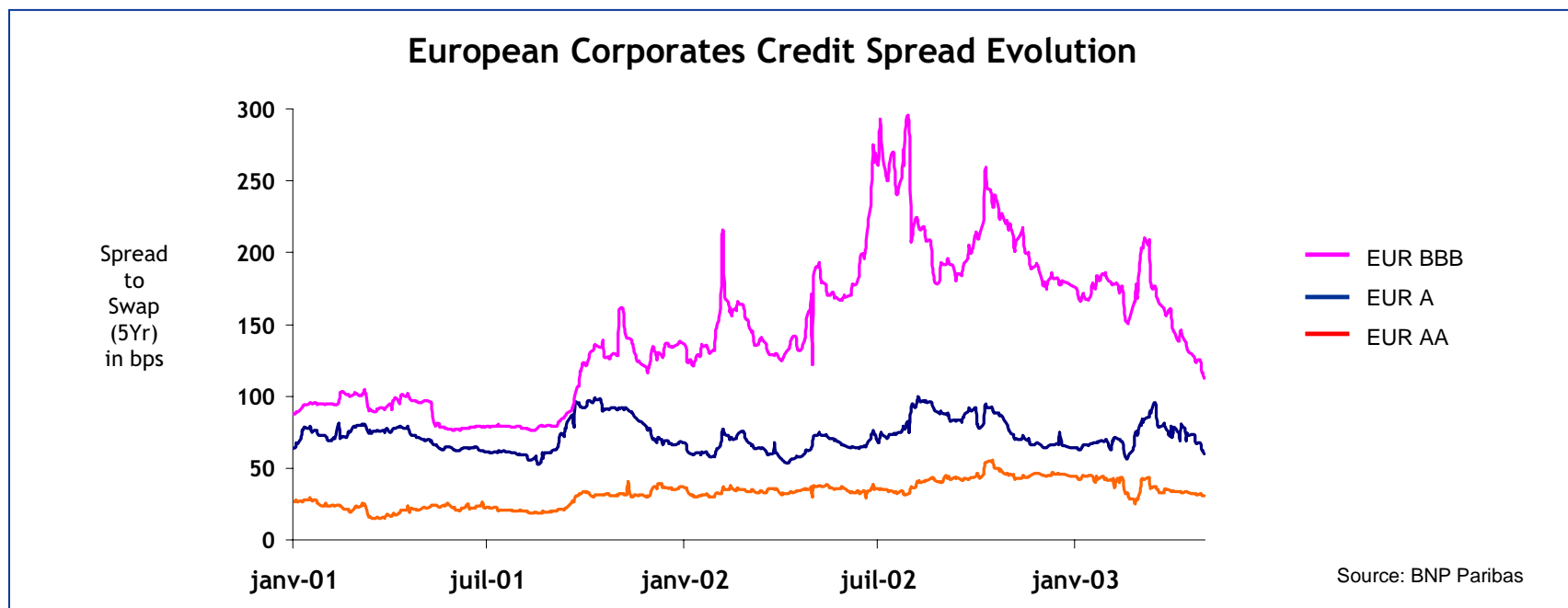
- Credit Markets Dynamic
- Organisation and Approach
- Outlook and Strategy

## Outline of the presentation

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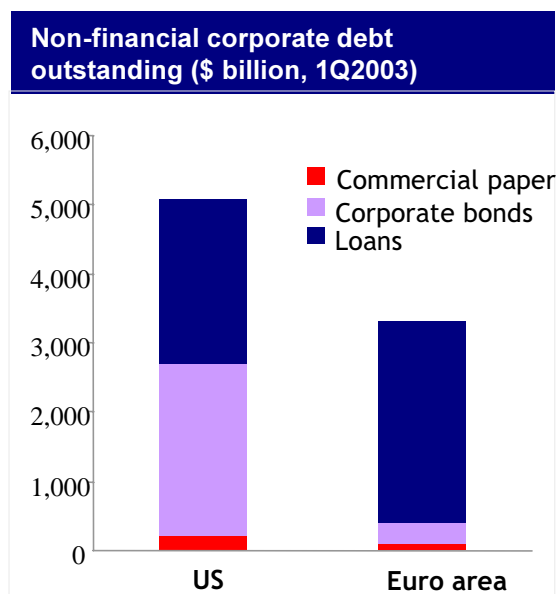
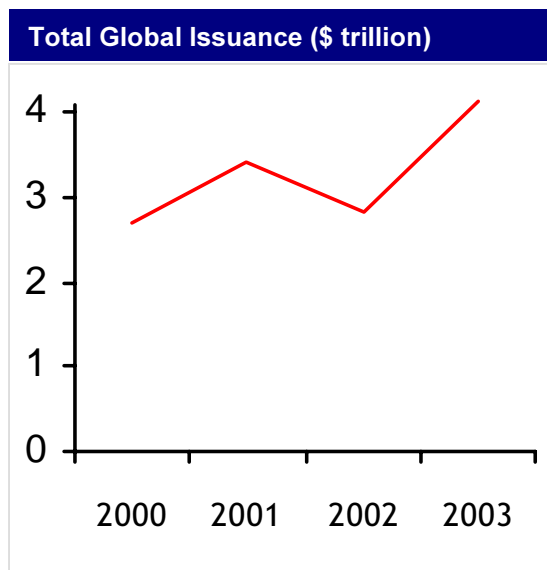
- **Credit Markets Dynamic**
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# Credit Market Dynamics: Recent Significant Changes



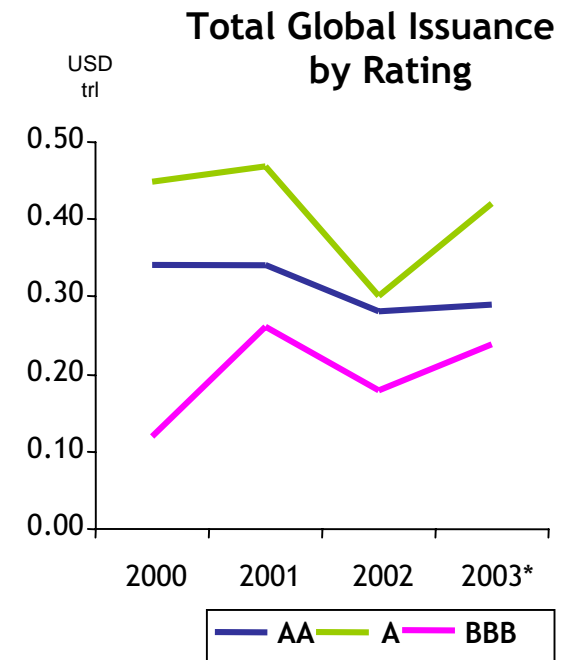
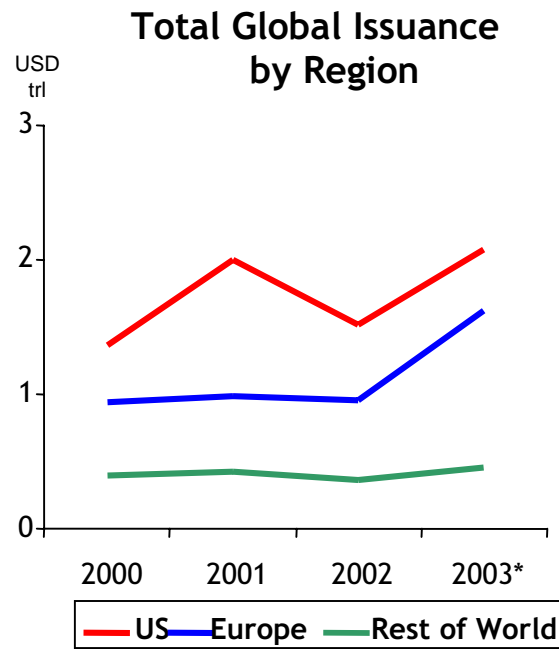
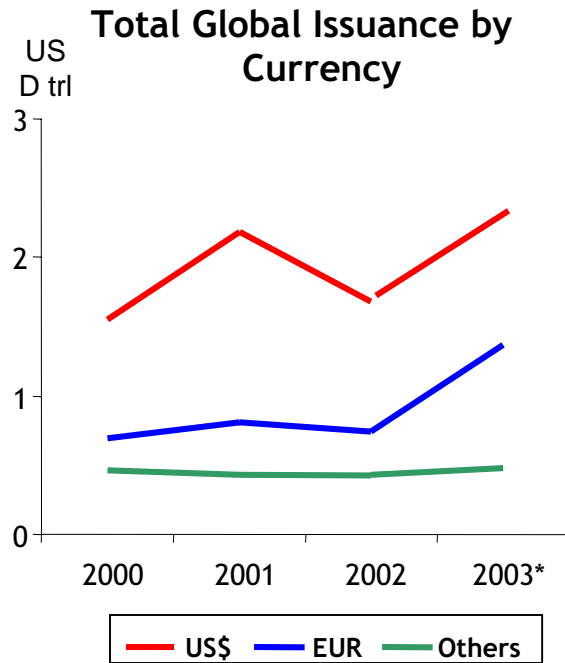


# Credit Market Dynamics: Supply



- Aggressive deleveraging of recently stretched balance sheets has reduced oversupply
- Accelerating disintermediation of bank lending particularly in Europe
- Maturity extension at historically low rates from redemptions and Commercial Paper ('helped' by rating agencies in some cases)
- Increasing reliance and incentives from Governments to use private sector capital (e.g. PFI, ABS)

**Term financing in Capital Markets continues to show healthy growth and is underpinned by ongoing bank credit disintermediation.**

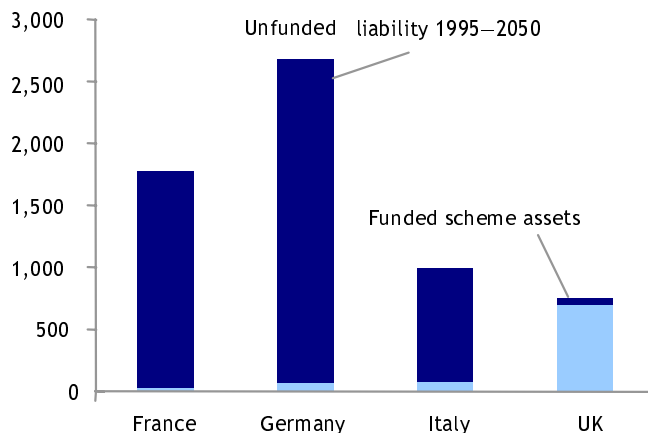


- Euro share of total issuance increasing steadily
- Lower rated (A, BBB) volumes increasing

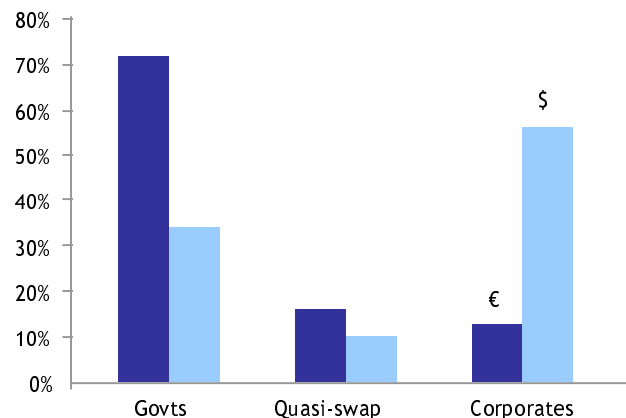
\* annualised  
Source: Bloomberg

# Credit Market Dynamics: Demand

**Funded and unfunded pension liabilities**  
(\$ billion, 1995-2050)



**Average institutional investor bond allocation**  
(est, March 2003)



- Pension system dynamics impacting bond markets increasingly.
- At the macro level, ongoing aversion to equity risk is redirecting assets into Fixed Income - particularly higher yielding credit products
- Credit exposure in Europe still low, underdeveloped and relatively unsophisticated
- Retail investors switching from low yielding money market or Government assets into credit products

**Growing demand for Fixed Income assets from diverse sources will continue.**

## → Credit Derivatives - the driver of asset pricing convergence

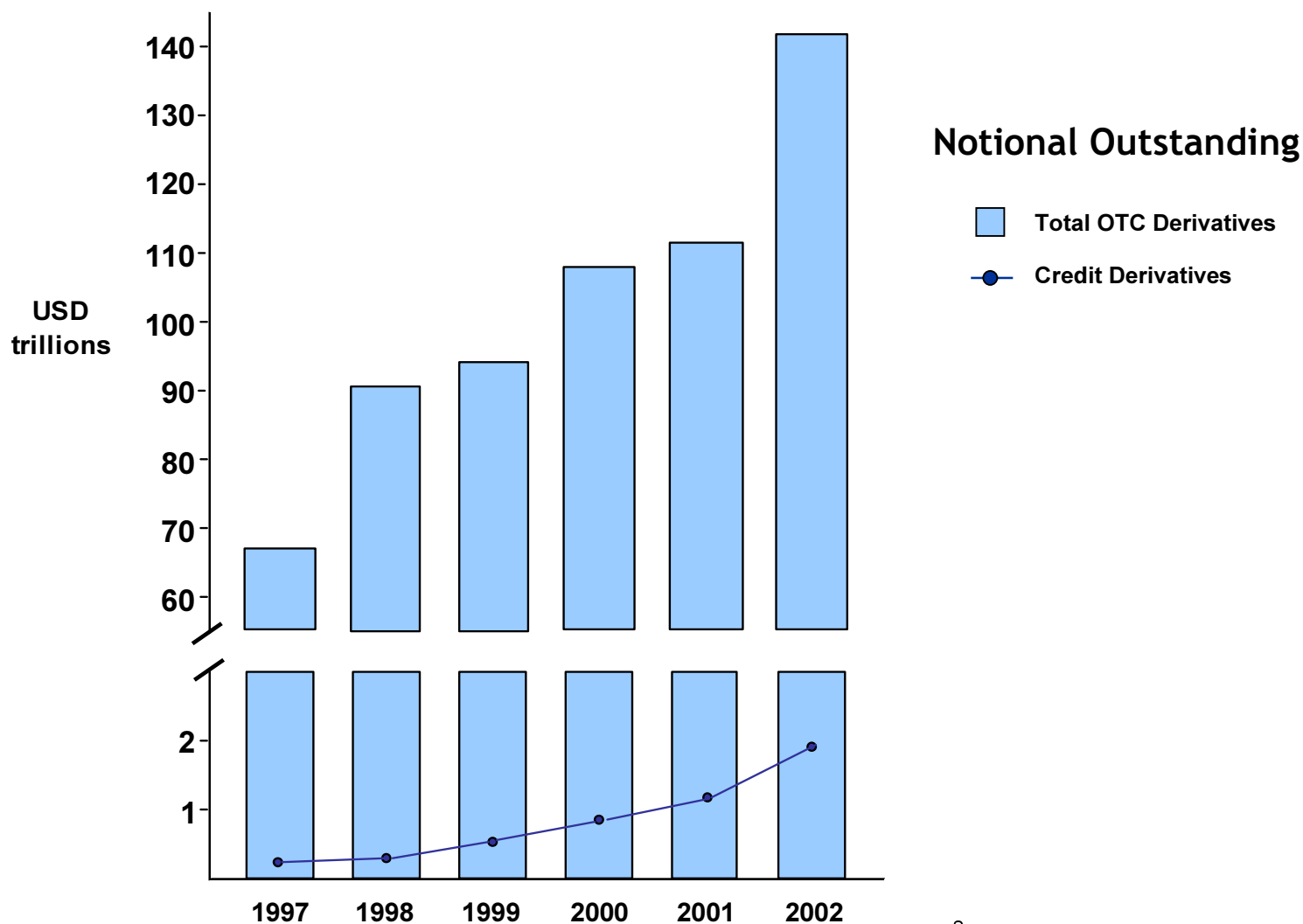
### → Single name credit default swaps

- Increase in number and diversity of participants: any buyers or sellers of credit risk (not reliant on the reference issuer)
- Standardisation of the legal framework
- Expansion of the universe of credits traded in the derivative form
- Integrated into credit trading
- Steady growth
- Move towards industrialisation

### → Correlation Synthetics

- Client solutions business
- Bespoke, efficient, synthetic, instant diversification and leverage
- Significant barriers to entry
- Long term trend growth but with volatile activity levels driven by credit environment and competitive innovation
- Powerful technology catalyst for rapid product development

# Credit Market Dynamics: Credit Derivatives



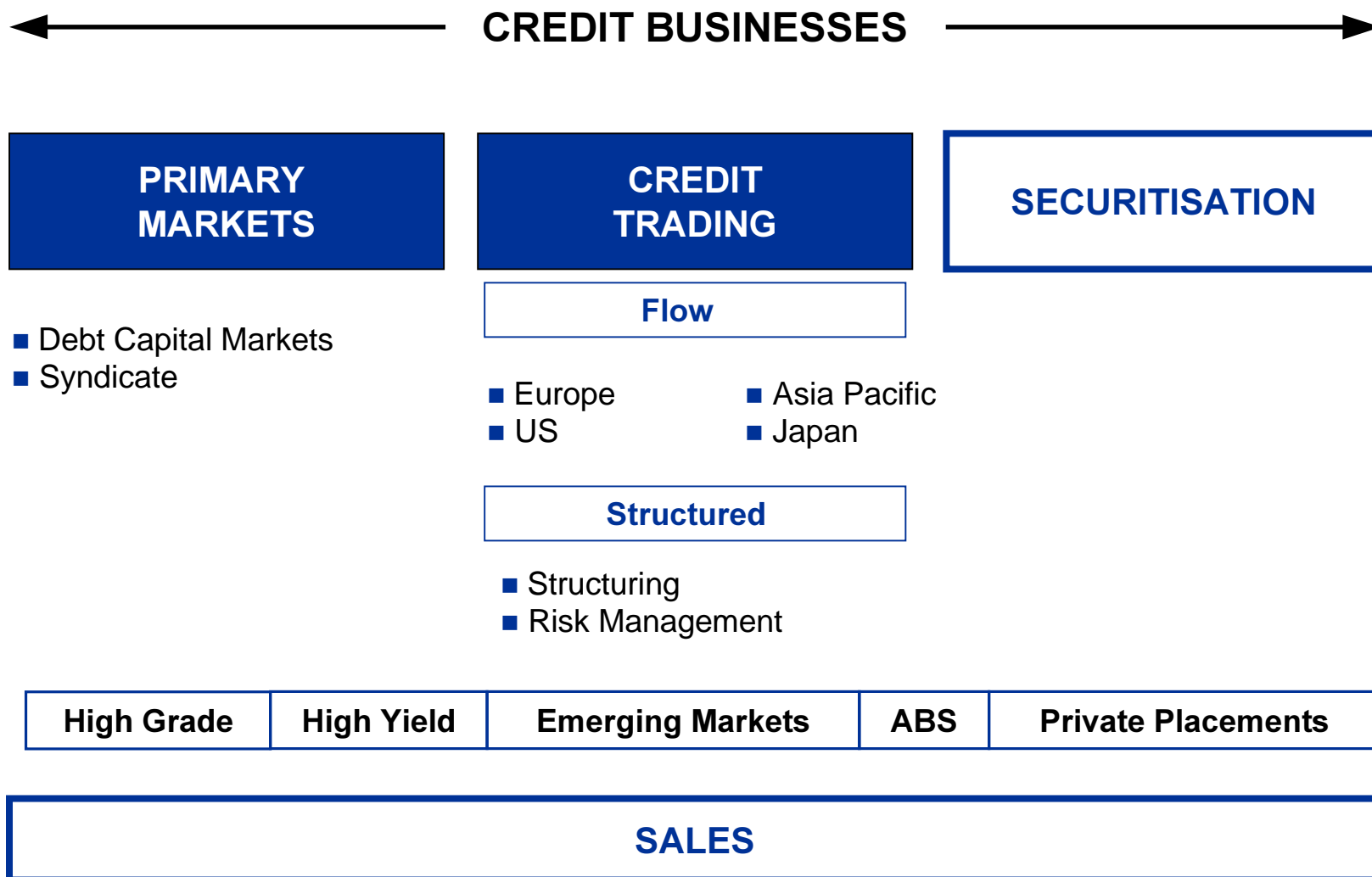
Source:  
BBA report 2001/2002, BIS, Swaps Monitor

- **Continuous spectrum of credit markets now from ' AAA ' to ' B ' rated issuers**
  - Most active and interesting in the ' A ' to ' BB ' ratings ('BBB ', 'Cross Over' and High Yield)
- **Exponential growth from a growing profile of institutions for structured credit product**
- **Lucrative Fixed Income business increasingly awarded to superior 'financing' banks**
- **At last an attractive, viable business model is established in European credit markets**
  - Business now commonly mandated on a negotiated, bookbuilt basis for reasons of proven expertise, relationship and trust in execution
  - Clear evidence of a lucrative bulge bracket emerging in key high margin products

## Outline of the presentation

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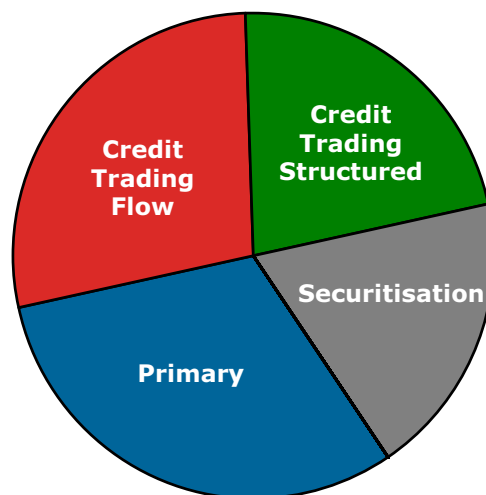
- Credit Markets Dynamic
- **Organisation and Approach**
- Outlook and Strategy





## Credit: Breakdown of Headcount by Business Line

	<u>B2003 Headcount</u>
Primary	31%
Credit Trading Flow	28%
Credit Trading Structured	22%
Securitisation	19%



## Primary: Debt Capital Markets Organisation

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- **Global structure by borrower sector (which mirrors our Corporates and Financial Institutions structure):**
  - **Corporates**
  - **Financial Institutions**
  - **Sovereign, Agency, Supranational**
- **Debt Capital Markets: a full partner in vertical management of client by product neutral relationship managers:**
  - **Working closely with credit and other departments in allocating resources, including capital to target clients**
  - **Full product service, including capital markets financing, liability management, tax optimisation and capital management**
- **Debt Capital Markets represents the client to Syndicate desk but also represents the 'product' to the relationship managers of CFI**
- **Continuous 'debt investment banking' coverage style now differentiating the best firms**
  - **Solutions for issuers not just investors**

## League Table Position

	Q1 2003	2002	2001
<b>All EUR Bonds</b>	3	9	7
<b>EUR Corporate Bonds</b>	2	3	4
<b>EUR Subdebt</b>	4	1	12
<b>EUR Supranationals and Agencies</b>	1	2	3
<b>EUR ABS</b>	3	9	4

Source: IFR, Euroweek



## Primary: BNP Paribas' Performance (1/2)

BNP Paribas in the EUR Corporate Bond Market														
2001					2002					1st Quarter 2003				
#	Bookrunner	EUR m	Issues	%	#	Bookrunner	EUR m	Issues	%	#	Bookrunner	EUR m	Issues	%
1	Deutsche Bank	26,996	56	13.8	1	Deutsche Bank	16,344	54	11.9	1	Deutsche Bank	5,360	15	11.4
2	JP Morgan	19,435	49	10.0	2	Citigroup	11,960	36	8.7	2	<b>BNP Paribas</b>	<b>4,354</b>	<b>13</b>	<b>9.3</b>
3	Citigroup	17,301	47	8.9	3	<b>BNP Paribas</b>	<b>11,222</b>	<b>35</b>	<b>8.2</b>	3	ABN AMRO	3,356	12	7.1
4	<b>BNP Paribas</b>	<b>15,012</b>	<b>32</b>	<b>7.7</b>	4	JP Morgan	8,845	26	6.5	4	Morgan Stanley	2,975	8	6.3
5	Morgan Stanley	12,436	29	6.4	5	HSBC	8,135	36	5.9	5	JP Morgan	2,793	9	5.9
6	CSFB	9,951	31	5.1	6	Barclays Capital	8,044	21	5.9	6	CSFB	2,639	12	5.6
7	HSBC	9,326	22	4.8	7	DrKW	7,873	17	5.7	7	HSBC	2,639	7	5.6
8	ABN AMRO	8,677	24	4.4	8	Societe Generale	7,221	35	5.3	8	Lehman Brothers	2,491	9	5.3
9	Merrill Lynch	8,635	29	4.4	9	ABN AMRO	6,602	25	4.8	9	Citigroup	2,333	7	5.0
10	Barclays Capital	8,626	17	4.4	10	Morgan Stanley	6,137	19	4.5	10	UBS Warburg	2,332	9	5.0

Source: IFR

- Universal banks increasingly dominating negotiated bond business in Europe
- European banks currently top 3

### 2002's Leading EUR Corporate Bookrunner



Reasons cited:

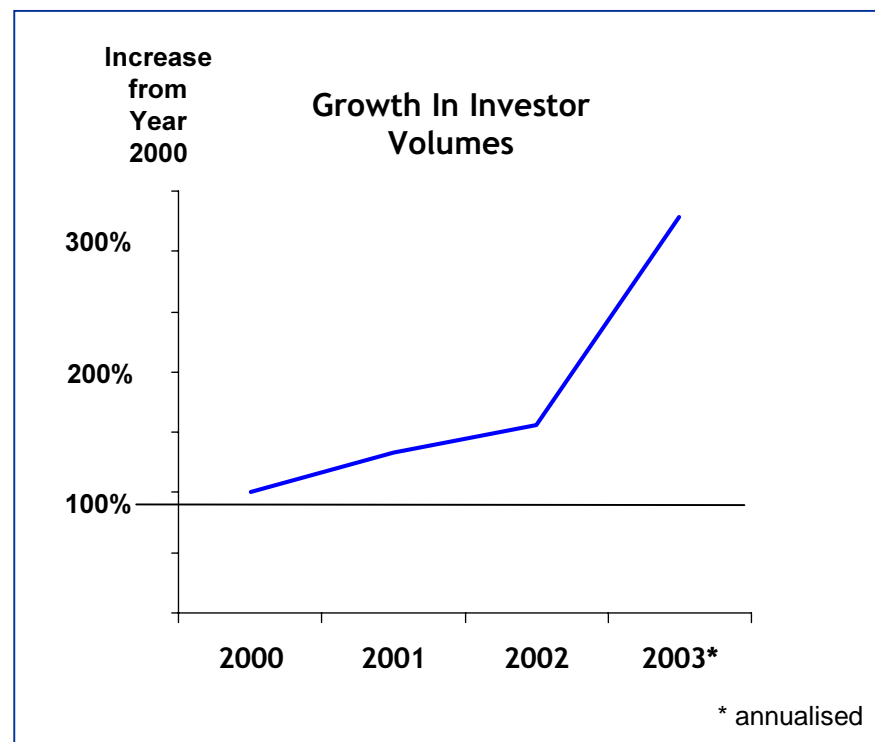
- Distribution
- Trading
- Consistency
- Research
- Innovation
- Multi-currency




## Flow Trading: Significant Streamlining and Consolidation Completed at the end of 2002

- **Merger between credit cash bond and default swap traders:**
  - enhanced integrated risk management
  - optimised margin capture
  - better breadth of vision and understanding of credit dynamics
- **3 trading centres (Europe, US, Asia/Japan), managing inter and intra regional flows**
- **Full integration between High Grade and High Yield activities: creating credit curve continuum that is now critical to operating in the active 'BBB' to 'BB' space**

- Sector based trading teams dealing in all debt instruments across High Grade, High Yield, Emerging Markets and Asset Backed Securities
- Articulate views on credit(s) using the most efficient instrument
- Ongoing secondary market support for new issue business
- Liquidity and advice for internal clients including, but not limited to, our Structured business







# Structured Products: Approach and Objectives

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- **Approach**

- A client driven, 'solutions' business, generally based on correlation of credits and events
- Transformation and customisation of Credit Risk
- Address investors and borrowers optimisation issues (return, capital...)

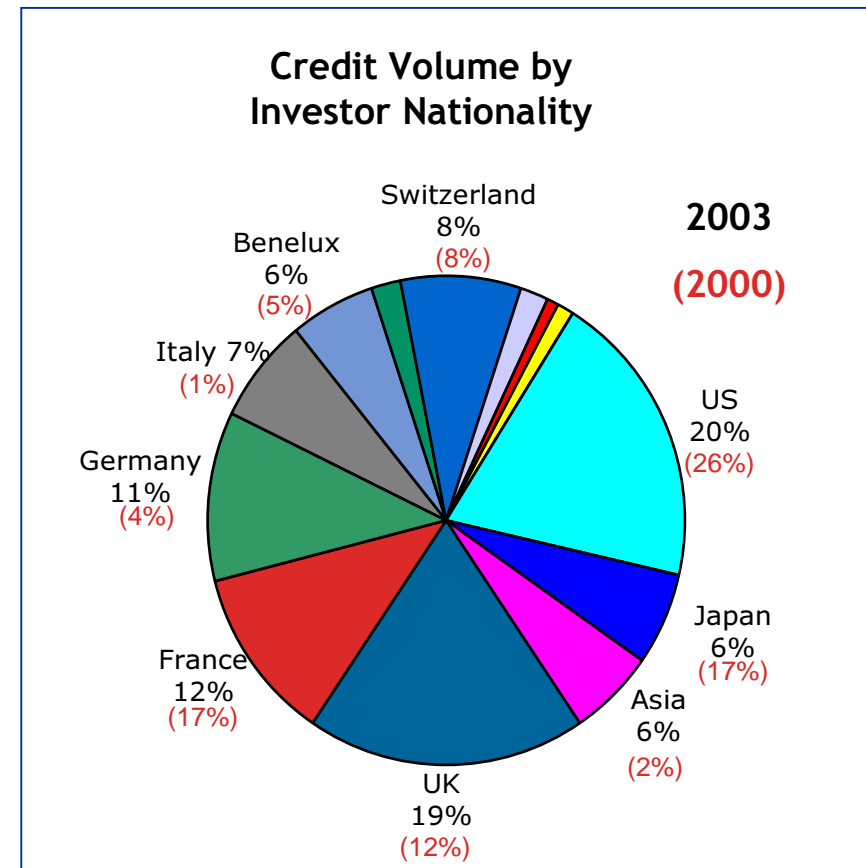
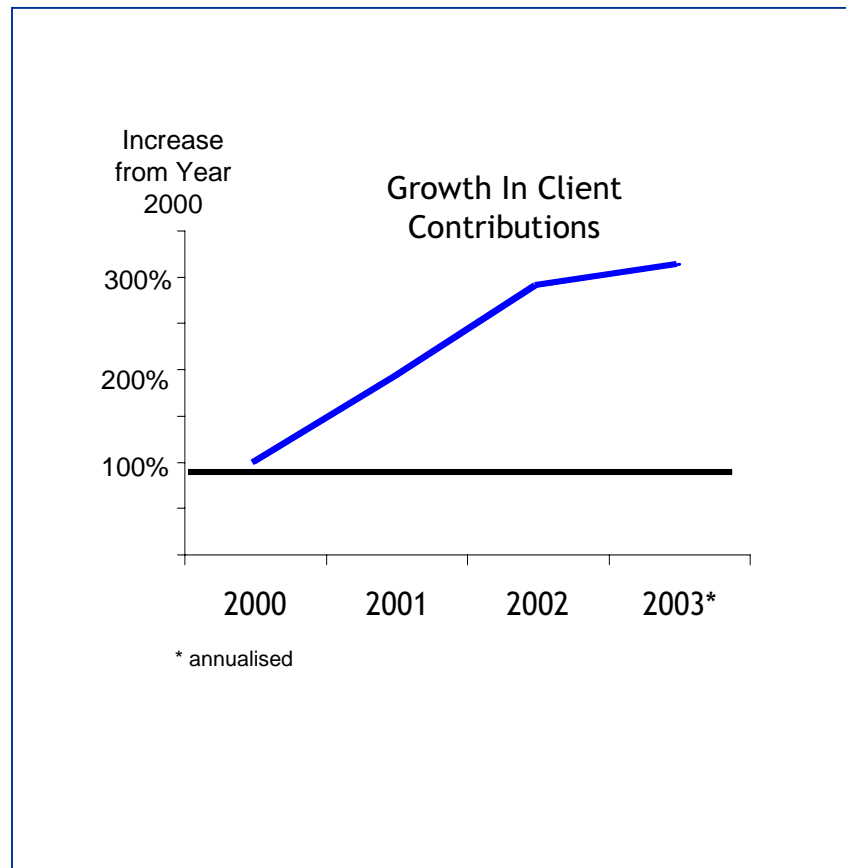
- **Products**

- Credit linked notes, CDO's
- Credit Indices (e.g. Trac-X, iBoxx)
- Regulatory Capital Relief
- Risk Concentration Mitigation
- Capital Guaranteed Insurance products
- Self Managed Portfolios

- Clients are at the centre of our philosophy:
  - Recurring fee income
  - Less volatile revenue streams
  - Scale
  - 80/20 rule
- Careful allocation of finite resources to fit the diverse needs of targeted clients, both issuers and investors
  - Actual revenues
  - Platform 'fit'
  - Wallet size (especially cross selling potential)
- Priority Focus on "Gold Accounts":

	Gold Accounts	Total Number of Accounts
Europe	35	2400
US	30	1000
Asia	30	550
Japan	38	450
<b>TOTAL</b>	<b>133</b>	<b>4400</b>

## Significant growth in client volumes with greater geographical diversity



## Outline of the presentation

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- Credit Markets Dynamic
- Organisation and Approach
- Outlook and Strategy

- **Fundamental conditions have changed permanently making Credit Markets a more complex, important and critical variable for clients who reward firms that help them meet their goals**
- **Technical conditions are currently extremely favourable but will become less so over time - a concern for proprietary revenues but not for diversified client businesses**
- **Use of capital markets products (and therefore revenues), particularly in Europe will continue to grow with growing concentration of the lucrative business in the hands of established market leaders**
- **Current estimate of Global revenue pool still shows the USA up to three times larger but with Europe rapidly narrowing the gap**

*' BNP Paribas Credit: Leadership in Europe and building globally '*

- Asia: a leaner machine
  - Redirection, refocus and integration of marketing teams
  - Priority investment in structured credit
  - Strengthened global trading and distribution of Asian Credit
  - Priority focus on local markets including The People's Republic of China, Hong Kong, Korea, Taiwan
  
- Japan: focused investment starting to pay dividends
  - Established leadership with Government Agency issuers
  - Increased resources in Securitisation
  - Leadership in Structured Credit business

*' BNP Paribas Credit: Leadership in Europe and building globally '*

- **USA: growth opportunities and challenges**
  - Significant growth and investment by BNPP North America in last two years - headcount for front line Credit professionals doubled (from circa 50 to 100)
  - Consistent and improving profitability over last few years
  - Conditions and logic for breaking into the US market now favourable
  - Realistic ambitions, time frame and roadmap for further growth
  
- **Europe: established leadership in high margin and important sectors**
  - Corporate bonds
  - Hybrid capital raising
  - Supranational and Agency borrowers
  - Structured Credit (ABS, CDO's etc) solutions for issuers and investors

# *Risks*

## *The perspective from Risk Department on Global Credits*

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Frank Roncey  
Group Risk Management



# A close but independent and integrated Risk department...



## ... including a strong and sophisticated Market and Liquidity Risk organisation

- 92 people in 13 countries

- Europe 65 people
- Americas 11 people
- Asia-Pacific 11 people
- Japan 5 people

- A unique reporting line world-wide ensuring:

- same working standards
- same methodologies
- same procedures
- one single market risk system gathering all world-wide trading positions and giving consistent daily risk figures

- Resource allocation

- Global Equities: 26 people
  - Equity Derivatives (24)
  - Equity Cash (2)
- Fixed Income: 49 people
  - Interest Rate Group (21)
  - Global Credit Trading (19)
  - Global Forex (9)
- ALM/Treasury: 12 people
- Commodities: 2 people
- Others: 3 people



## Independent high level Market Risk Analysts (1/2)

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- **A fair value of the books for today and tomorrow through**
  - a conservative marking thanks to an independent assessment of market parameters used for revaluation
  - an on-going review of existing pricing models and a compulsory authorisation process for all new pricing models for new products
  - an independent setting of prudent reserving calculation rules for model or illiquidity risk to preserve future value



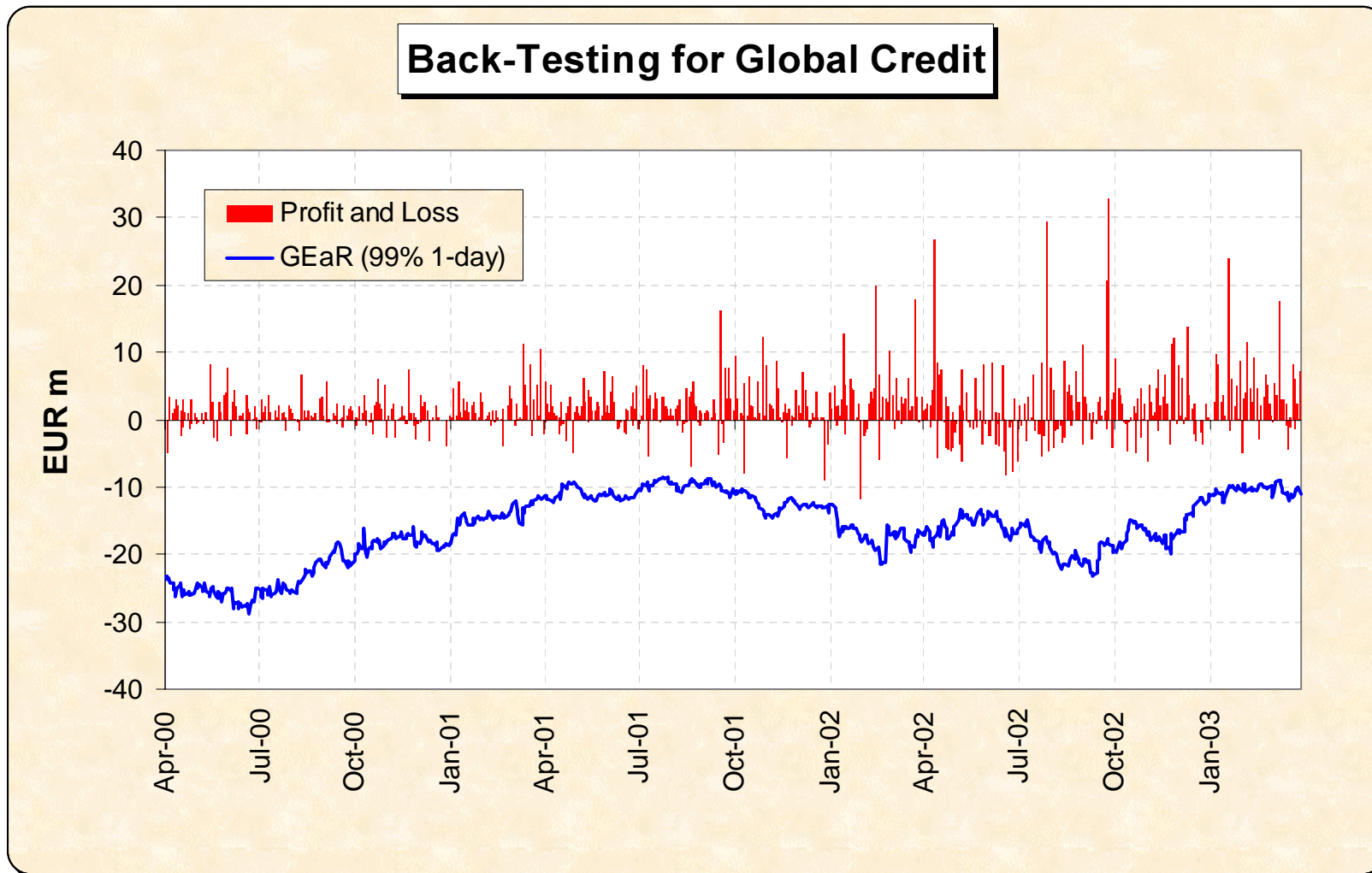
## Independent high level Market Risk Analysts (2/2)

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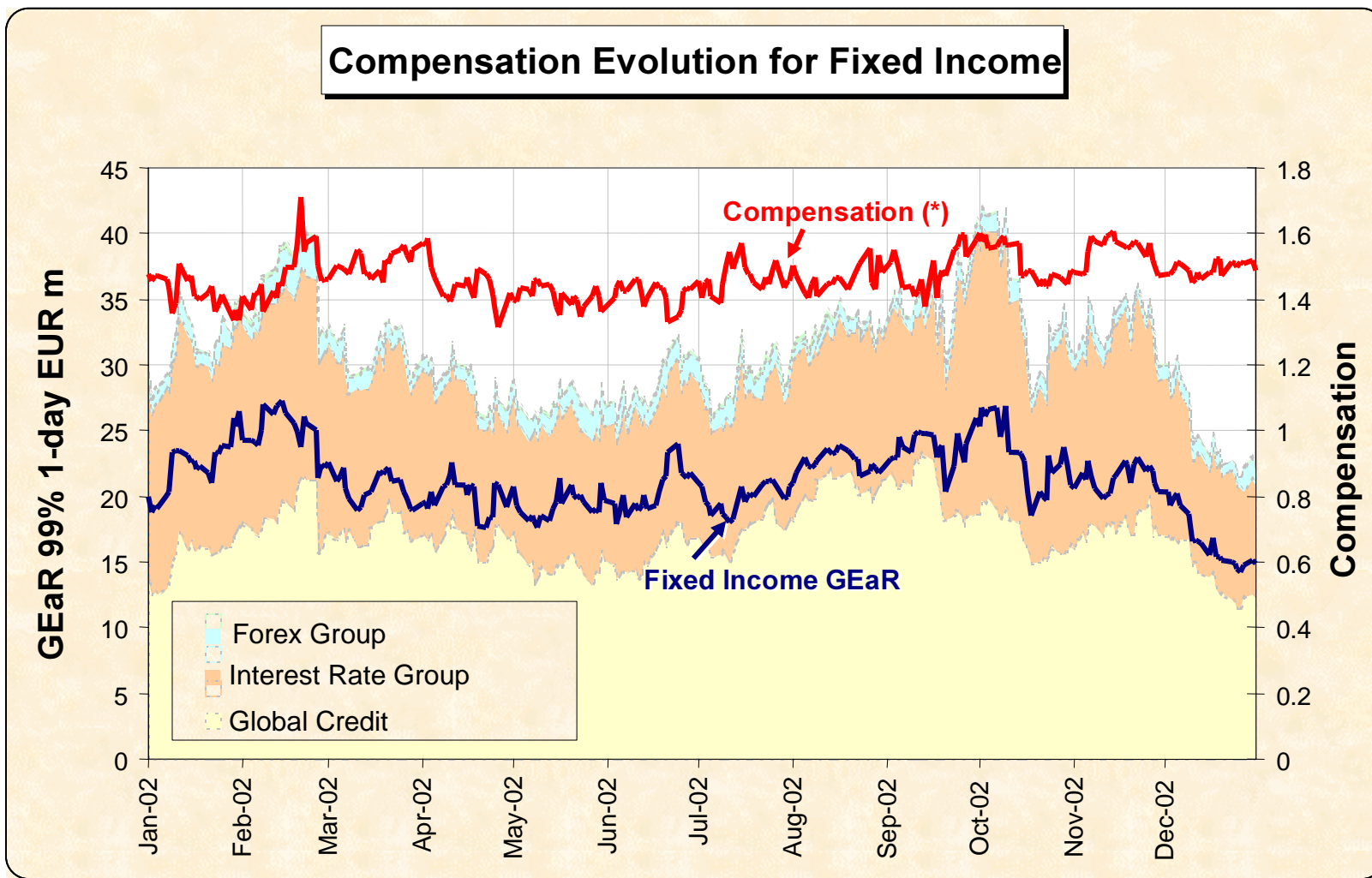
- An independent analysis of all existing positions within the trading books through
  - constant position and trade monitoring
  - responsibility for the full limit process
  - VaR analysis (internal model validated by Commission Bancaire since June 2000) and what-if simulations
  - complex sensitivities measurement and monitoring
  - multi-dimensional stress-testing
- A frequent, synthesised and independent information flow on main market risks to Senior Management
  - coming from all Market Risk Analysts around the world
  - outlining all subjects worth discussing and possibly generating P&L at risk over a certain threshold
  - complemented by special focuses on specific portfolios, markets, concentrations

- Risk taking follows a formalized trading risk authorization process coordinated by GRM and the risk profile is set by the Market Risk Committee
- Strict monitoring review of trading books (eligibility, liquidity and turnover)
- The setting and monitoring of exposure indicators and limits, .e.g:
  - (specific risk) VaR, stress testing results
  - single issuer default risk, asset classes concentration, EMK countries trading exposure
  - spread Risk (SP01, SP50%) per name/sector/spread band/global portfolio
  - liquidity
  - basis risk, correlation risk, recovery risk
- Primary Underwriting procedure
- Transaction Approval Committees for structured transactions

- Very frequent and formalized discussions and forums between GRM and Business trading managers
  - on a name by name basis
    - with the identification of a “sensitive list”
    - to review strategies for problem names
    - to review insufficient turnover
  - on a portfolio basis
    - to review sensitivities, concentrations
    - to discuss limit usage
- Monthly systematic review within the Market Risk Committee which is chaired by one of the two General Managers



# VaR Compensation for Fixed Income



(\*) Compensation = Sum of stand-alone GEaR figures divided by overall GEaR





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# *Fixed Income*

**Well rooted and strongly positioned**

→ leadership positions in bonds in € and derivatives

**Focused on customer driven business**

→ high proportion of client contribution

**With risks under control**

→ sophisticated risk management

### Fixed Income:

**A set of activities which contributes significantly and recurrently to the results of Corporate and Investment Banking of BNP Paribas**