

# Deutsche Börse Group

## An introduction for Warsaw University

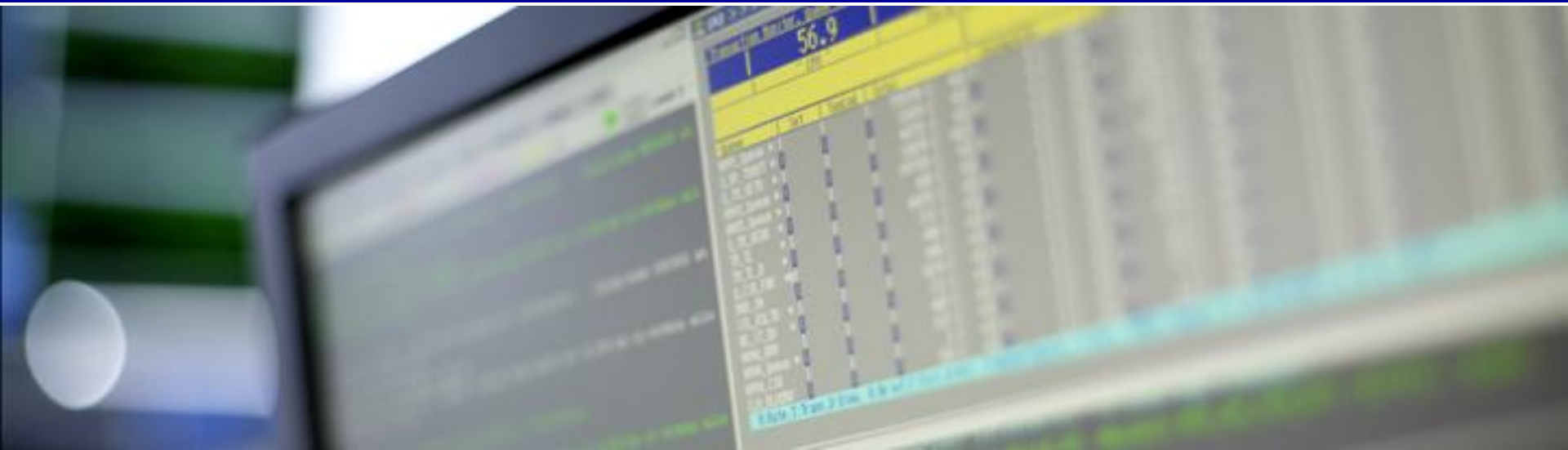
Deepesh Shah

Vice President, Eurex Business Development  
London



# Deutsche Börse Group

Who are we?



## Innovation and growth (I)

- 1585 Beginning of organised exchange trading in Frankfurt/Main
- 1992 Deutsche Börse AG is established**
- 1993 Deutsche Börse AG begins to operate Frankfurter Wertpapierbörse (FWB<sup>®</sup>, the Frankfurt Stock Exchange)
- 1997 Launch of the electronic trading platform Xetra<sup>®</sup>
- 1998 The derivatives exchange Eurex is established on the basis of a merger of DTB Deutsche Terminbörse and Swiss Soffex**
- 2000 Merger of Deutsche Börse Clearing and Cedel to form Clearstream International S.A.
- 2001 IPO of Deutsche Börse AG**
- 2002 Full integration of Clearstream International S.A.; Deutsche Börse AG shares included in the DAX<sup>®</sup> index
- 2003 Introduction of the central counterparty for the stock market
- 2006 Deutsche Börse AG and SIX Group AG found Scoach, a European stock exchange for structured products

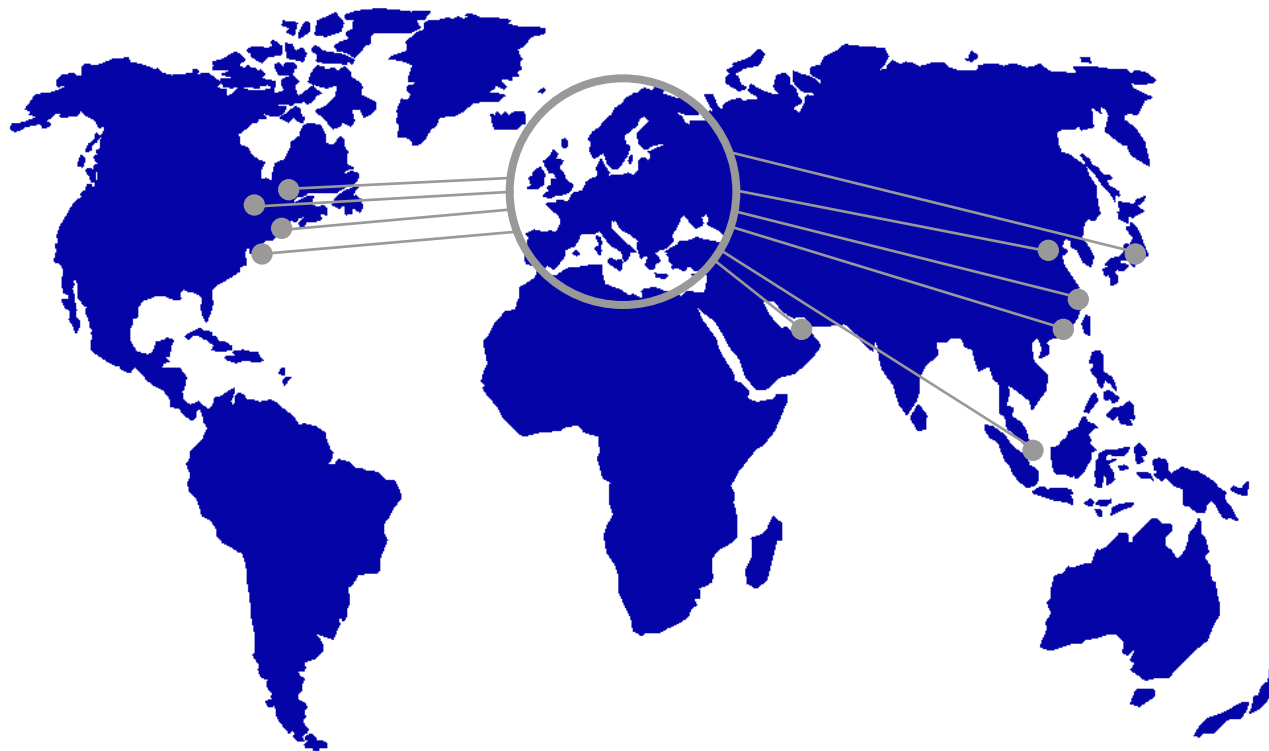


## Innovation and growth (II)

- 2007** Eurex acquires the US options exchange International Securities Exchange Holdings, Inc. (ISE)
- 2008** Acquisition of US financial news agency Market News International Inc.
- 2009** Acquisition of US financial news agency Need to Know News, LLC and increase of the interest in STOXX Ltd. to 50 percent plus one share
- 2011** Migration of the floor trading to Xetra<sup>®</sup> technology (Xetra Frankfurt Specialist Trading)
- 2012** Full acquisition of the derivatives exchange Eurex



# Globally operating provider of financial services: locations of Deutsche Börse Group



## 11 locations in Europe

Berlin  
Brussels  
Dublin  
Frankfurt /  
Eschborn  
Leipzig  
London  
Luxembourg  
Madrid  
Moscow  
Paris  
Prague  
Zurich

## 9 locations in Asia / North America

Beijing  
Chicago  
Dubai  
Hong Kong  
New York  
Ottawa  
Singapore  
Tokyo  
Washington, D.C.

# Corporate values

## **Client focus is core for our actions**

We deliver excellent services and products. We develop strong and sustainable relationships.

## **Dedication drives our business**

We are committed to our company and goals. We work across boundaries to make it happen.

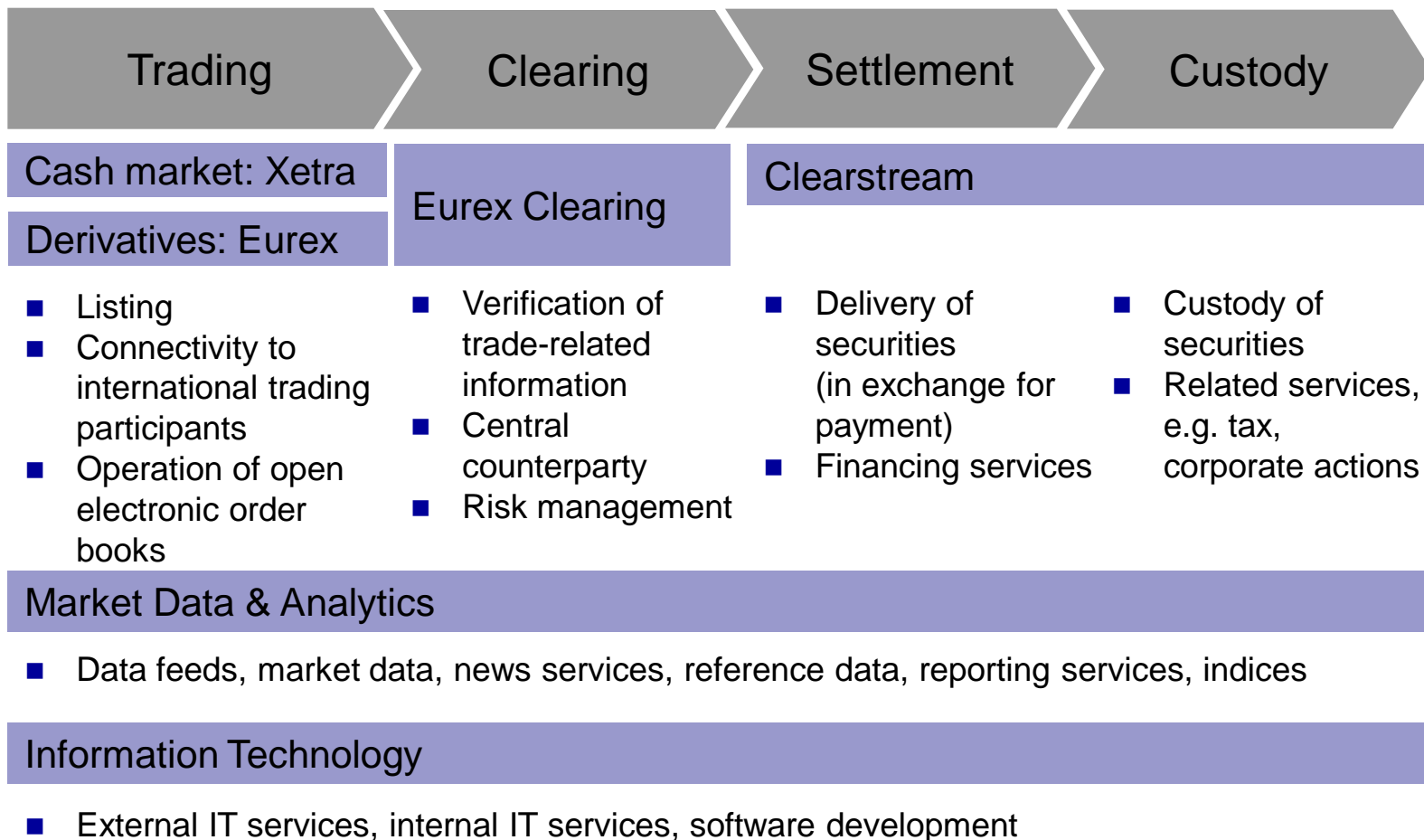
## **Innovation shapes our industry**

We challenge the industry. We search for opportunities by leveraging our businesses.

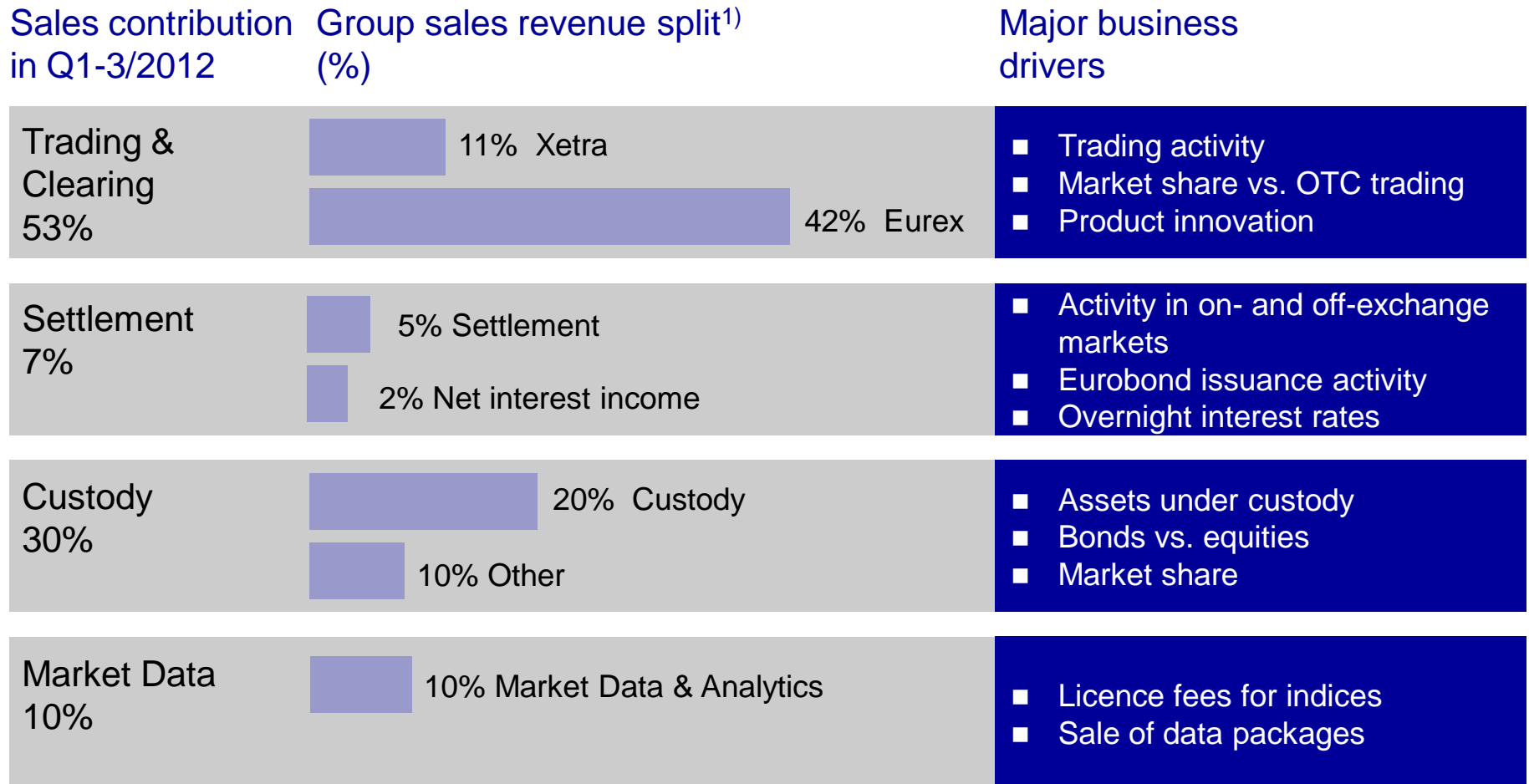
## **Integrity is the basis for our relationships**

We act honestly and take personal responsibility. We promote the efficiency, transparency and safety of the market.

# Deutsche Börse Group: integrated transaction processing for financial intermediaries



# Deutsche Börse Group: diversified business as the basis for sustainable growth



1) Including net interest income from banking business  
 Source: interim report Q3/2012 Deutsche Börse AG, as at 30 September 2012

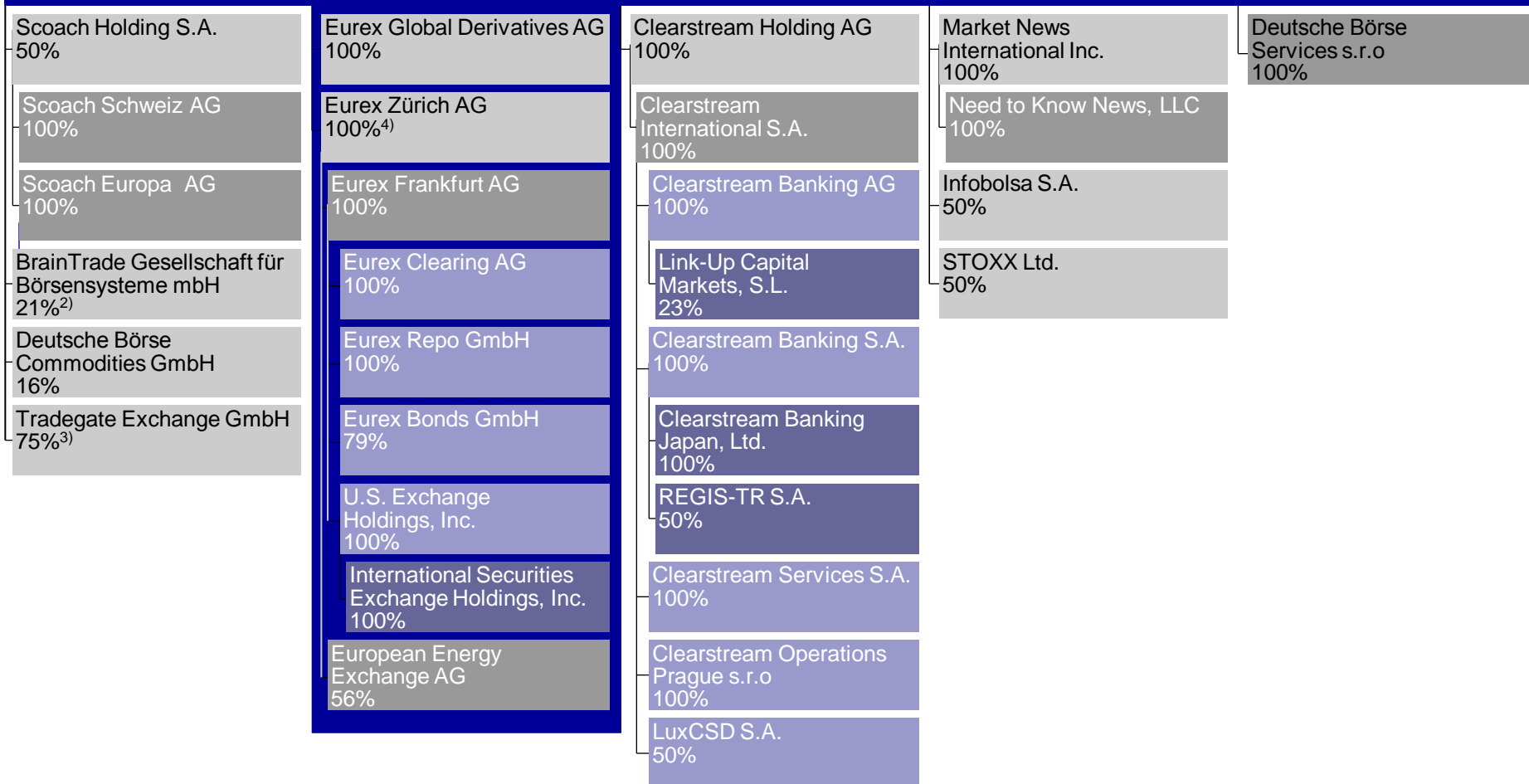


# Leadership structure of Deutsche Börse Group

Group Executive Board					
CEO R. Francioni	CFO G. Pottmeyer	Xetra F. Gerstenschläger	Derivatives & Market Data A. Preuss	Clearstream J. Tessler	Information Technology M. Kuhn
Programs and Advisory	Financial Accounting & Controlling	Market Development	Executive Office	Client Relations Europe & Americas	Central IT & Coordination
Internal Auditing	Strategic Finance	Markets Services	IT	Client Relations Asia/South/ME/Africa	Networks & Infrastructure Ops
Group Strategy	Investor Relations & Treasury	Market & Business Analysis	Business Development	Client Relations GSF & Broker/Dealers	VMS & Xetra/Eurex Operations
Corporate Communications	Group Compliance, Information Security & Risk Management	Trading Surveillance	Sales & Marketing	Business Management	AD Cash/Derivatives
Corporate Office	Human Resources		Operations	Operations Clearstream	Clearstream IT
General Counsel	Organization & Administration		Clearing	Investment Funds Services	
	SAP & Office Automation		Market Data & Analytics	CRD IV	

# Investments and partnerships strengthen product and service offering

## Deutsche Börse AG<sup>1)</sup>



1) Simplified presentation of main shareholdings, as at 1 May 2012

2) Direct equity interest Deutsche Börse AG: 14%

3) Plus an equity interest of 1%, which is held indirectly via Tradegate AG Wertpapierhandelsbank

4) Direct equity interest Deutsche Börse AG: 50%

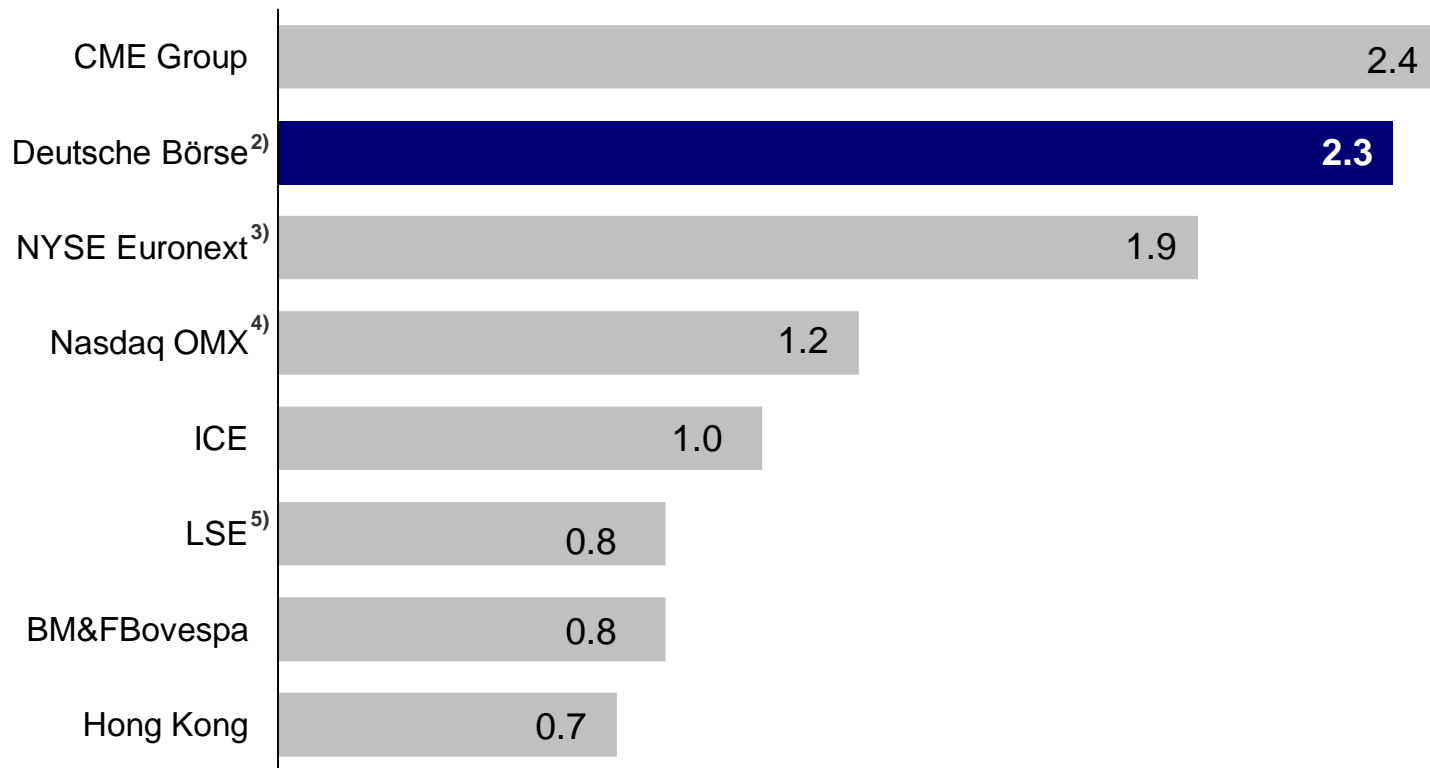
# Deutsche Börse Group: facts and figures

## Performance



# Company strategy: good position of Deutsche Börse Group in competitive environment

Sales revenue 2011 (in € billions)<sup>1)</sup>



1) Source: companies listed, Reuters

2) Sales revenue including net interest income from banking business; net income adjusted for costs of efficiency programmes and the ISE impairment charge

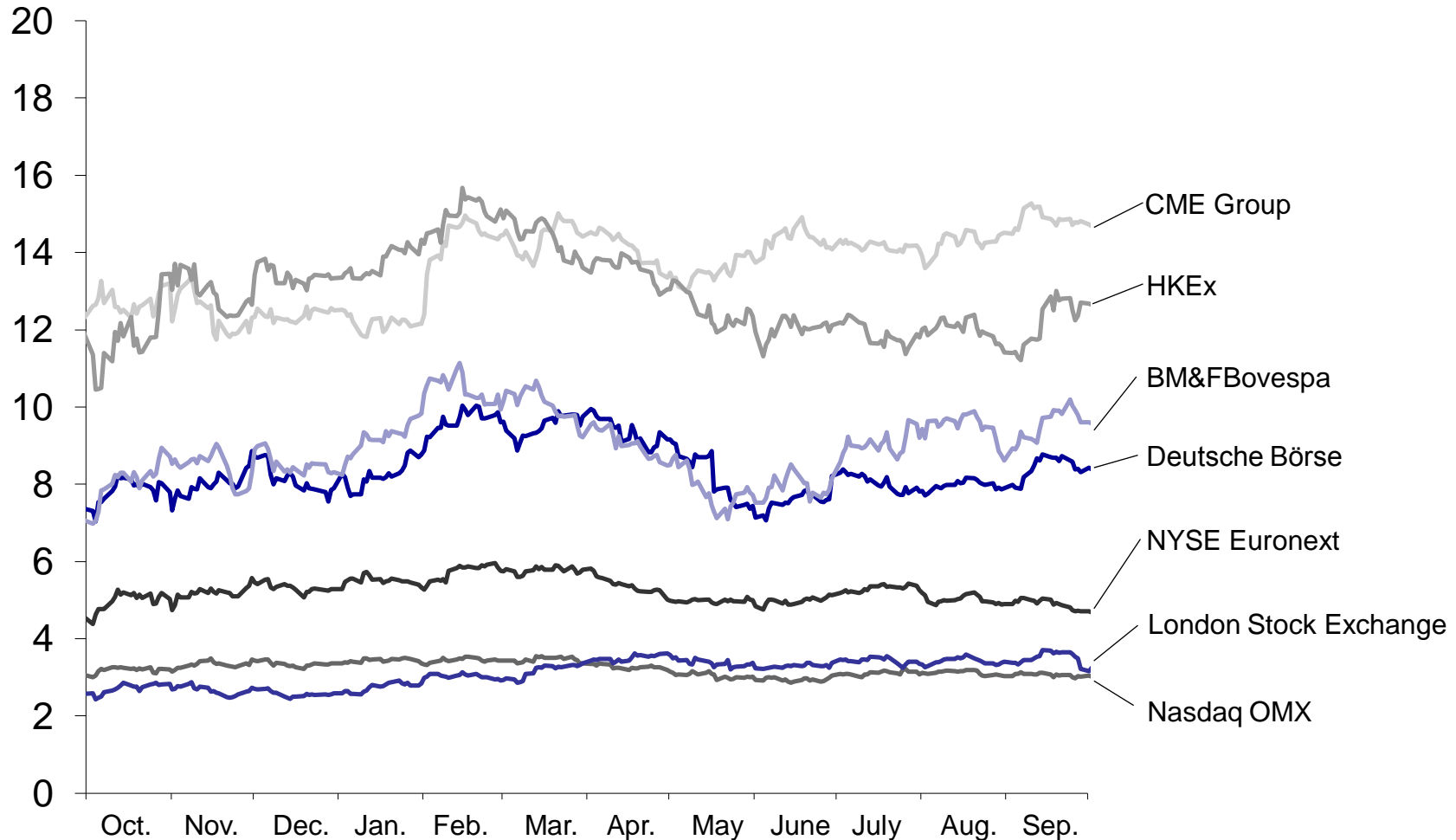
3) Total revenue excluding transaction-based expenses; net income adjusted for merger expenses / exit costs

4) Total revenue excluding liquidity rebates, brokerage, clearance and exchange fees

5) Net income adjusted for goodwill impairment

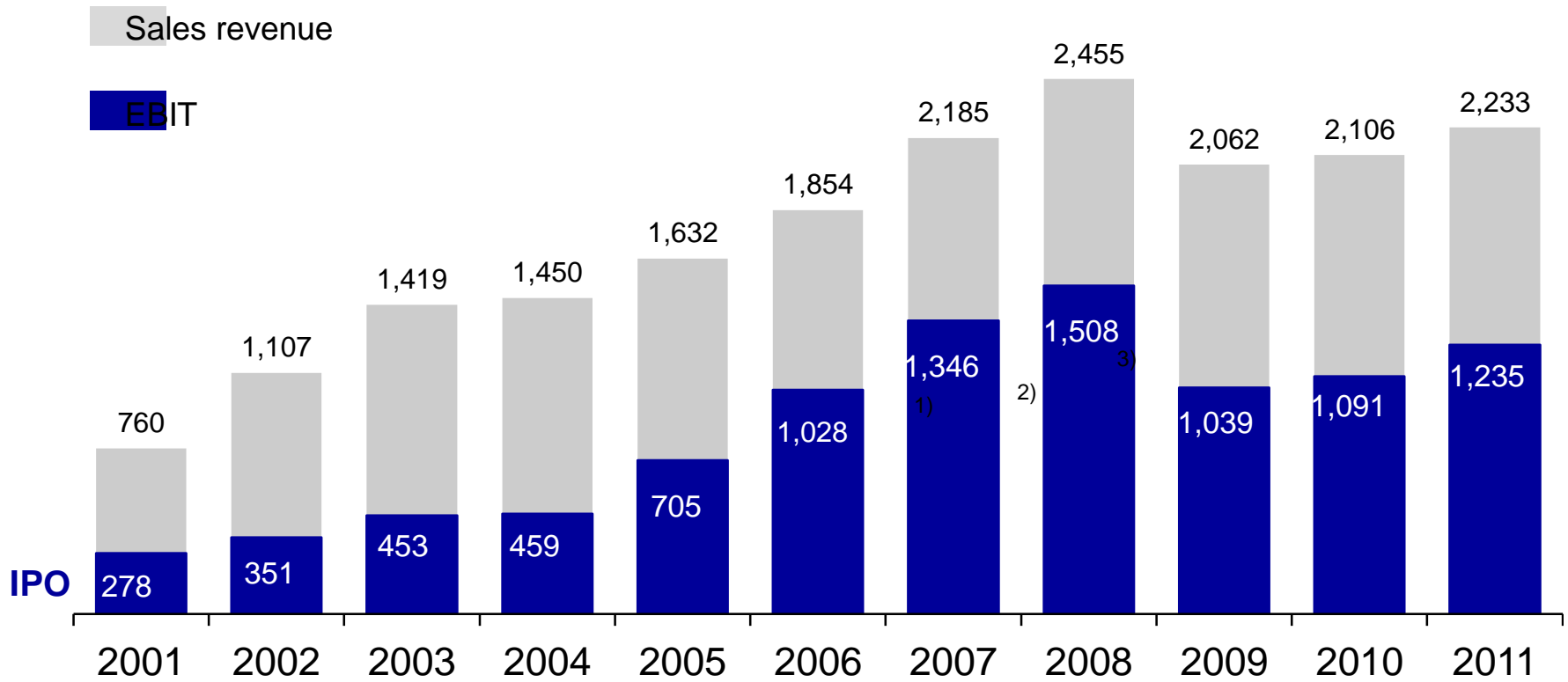
# Comparison of market capitalisation

Market capitalisation = number of shares outstanding x daily closing price (in € billions)



# Deutsche Börse: sustainable growth

## Sales revenue and EBIT (in € millions)



1) Adjusted for ISE impairment charge

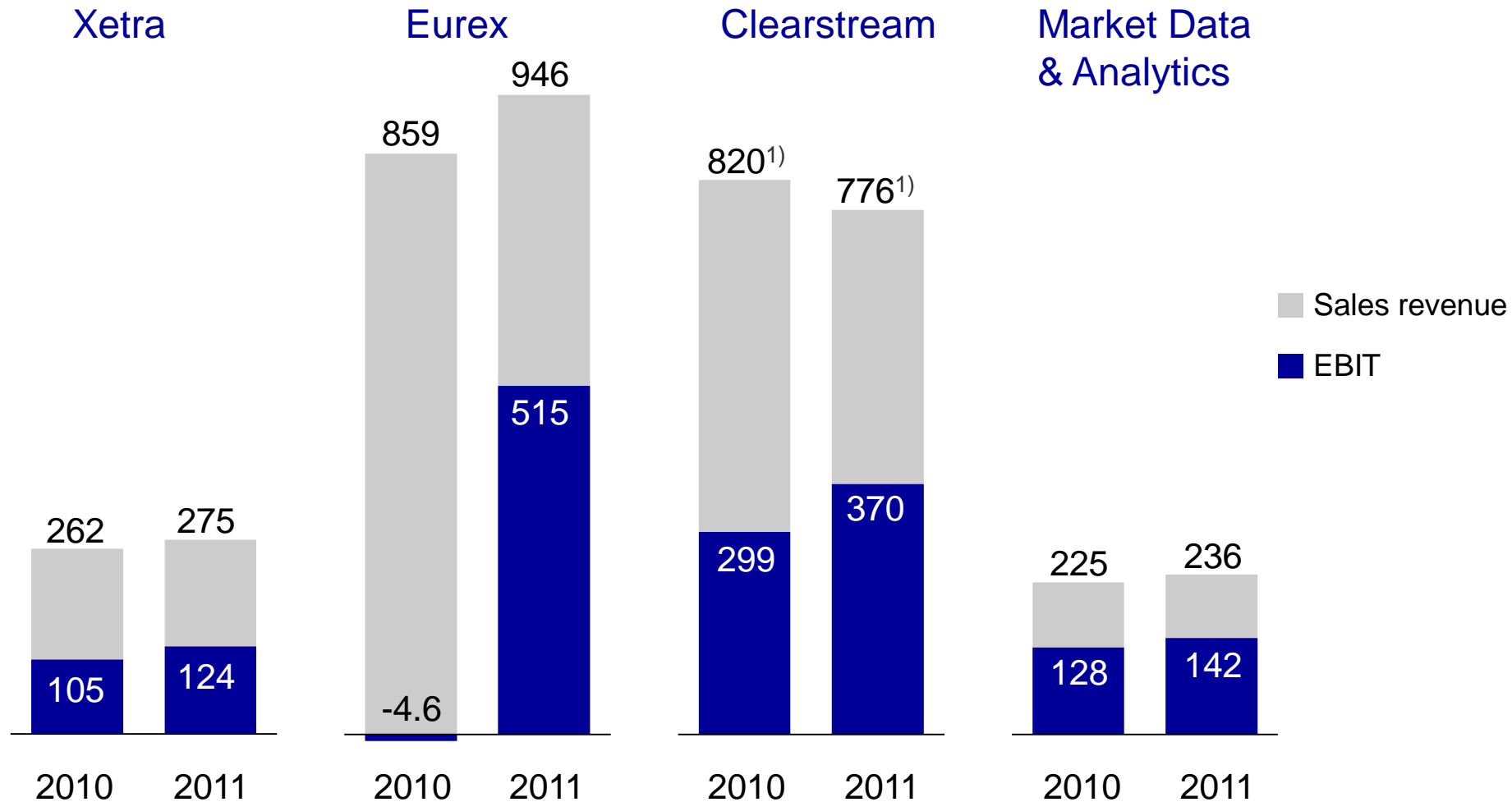
2) Adjusted for ISE impairment charge and costs for efficiency programmes

3) Adjusted for merger and acquisition costs and costs for efficiency programmes

4) CAGR = compound annual growth rate

Source: annual reports Deutsche Börse AG, as at 31 December 2011

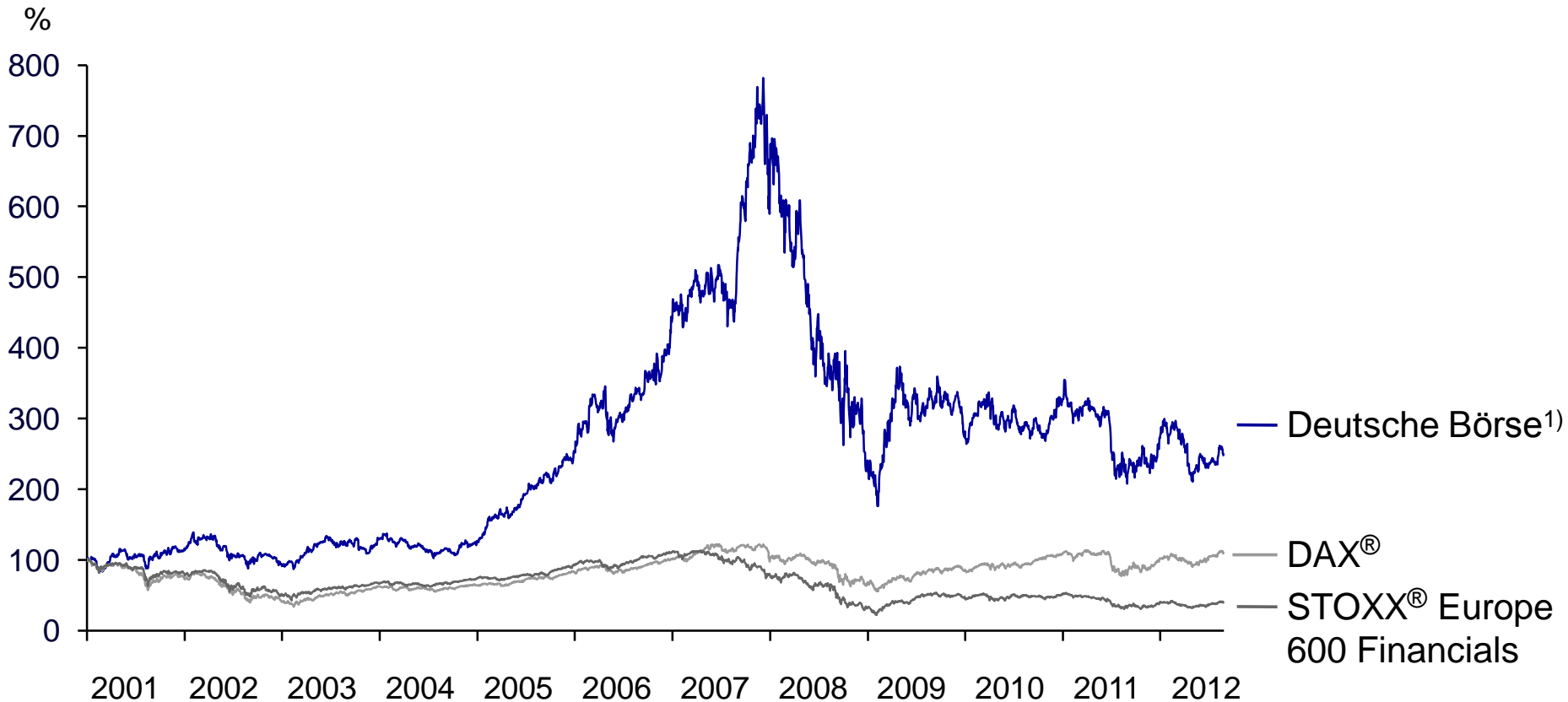
# Annual sales revenue and EBIT by segment (in € millions)



1) Sales revenue and net interest income  
 Source: annual report 2011 Deutsche Börse AG, as at 31 December 2011

# Performance of Deutsche Börse share compared to DAX<sup>®</sup> and STOXX<sup>®</sup> Europe 600 Financials

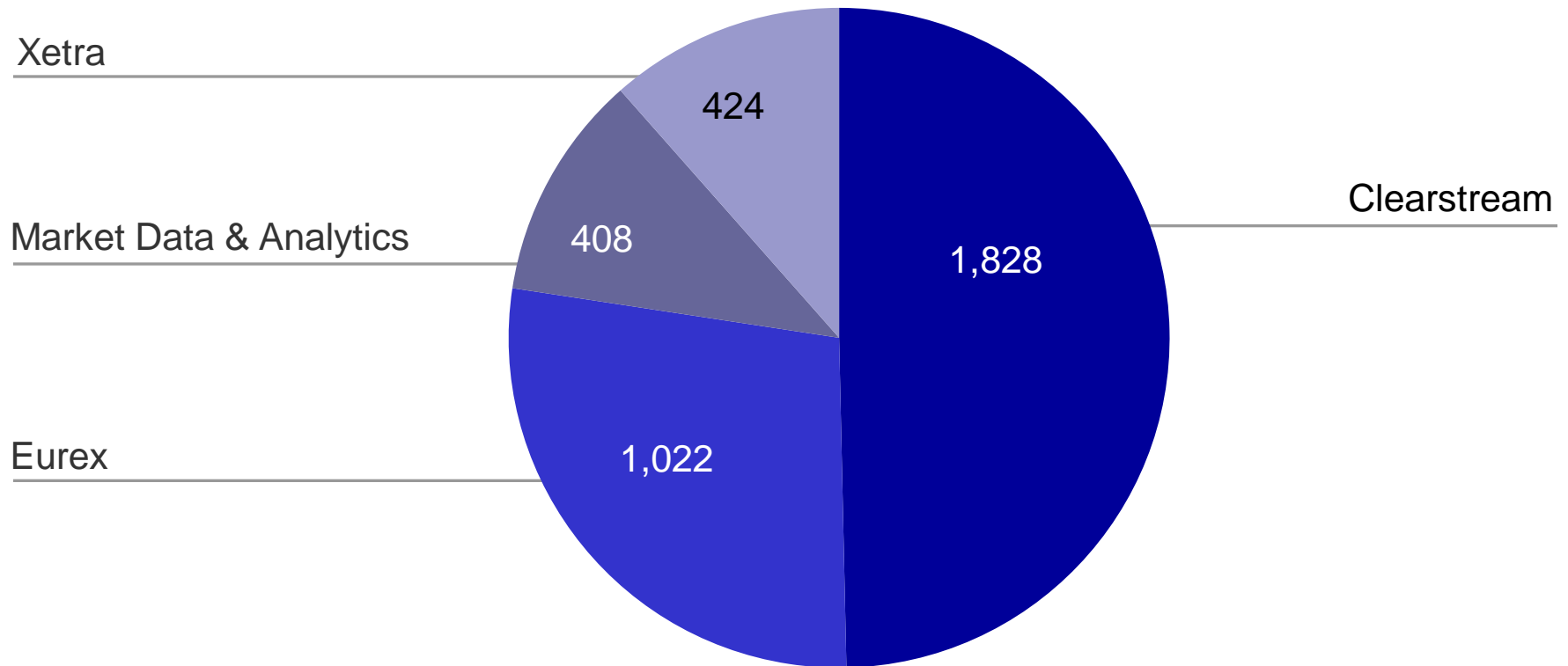
Indexed to closing price of IPO on 5 February 2001 = 100



1) Between 20 July and 31 December 2011 the data shown refer to tendered shares (ISIN DE000A1KRND6).  
As at 30 September 2012



# Deutsche Börse Group employees by business areas



Total: 3,682 employees

# Business area Derivatives and Market Data

## Eurex



# What are derivatives?

Derivatives are financial instruments whose value is based on one underlying from which it is derived.

Derivatives come in many varieties and can be defined by how they are traded, the underlying they “derive” from, and the product type (futures, options)

The derivatives market is predominately a globally connected, professional and wholesale market with banks, investment firms, insurance companies and corporates as its main participants

There are two competing segments in the derivatives market: the bilateral over-the-counter (OTC) segment and the multilateral on-exchange segment.

The main distinguish feature of derivatives traded on-exchange is the multilateral market organization with the use of safe and efficient central counterparty clearing



# Motivation for trading futures and options

## **Hedging:**

- Protecting existing or planned cash market positions by entering into an opposite position in the derivatives market

## **Speculation :**

- Take a view on the directional development of the underlying asset's price without owning or possessing (e.g. through borrowing) the underlying asset
- The attempt to make a profit from the speculative purchase or sale of futures or options

## **Arbitrage:**

- Exploiting price differences between different markets

# Customer groups trading at Eurex Exchange

## Proprietary traders

- Firms trading at Eurex Exchange with their own money and a speculative trading motivation.
- Strategies can be algorithmic, trend following, contrarian or scalping institutional flows (earning off the bid/offer spreads) for bigger-sized orders from banks and brokers.
- By buying and selling derivatives on a speculative basis, existing liquidity is utilized, and additional liquidity is provided.

## Market Makers

- Liquidity is provided by hedging option positions with comparable products or with cash market instruments, with the intention of earning the bid/offer spread.
- Fee rebates apply for Market Makers who fulfill the exchange's quotation obligations.

## Liquidity providers in futures

- In the early stage of a new futures contract, institutional and retail trading flows often require provision of liquidity by Market Makers specialized on providing liquidity in futures markets.
- Such liquidity is provided by hedging futures positions with comparable products or with cash market instruments, with the intention of earning the bid/offer spread.
- Fee rebates also apply for such activities.

# Eurex: the international derivatives exchange – product portfolio (I)

## Interest rate derivatives

- High performing derivatives provide the opportunity to trade the European yield curve.

## Equity derivatives

- Strongly expanding futures and options market
- Overall approx. 850 single-stock futures in four currencies from 20 countries can be traded via Eurex Exchange.

## Equity index derivatives

- Equity index derivatives were the highest performing segment in 2011.

## Dividend derivatives

- Futures on dividend component of the major European benchmark indices as well as futures on the single constituents of the EURO STOXX 50<sup>®</sup> index

## Volatility index derivatives

- Volatility index derivatives are ideally suited to hedge against fluctuations on the equity market.

## ETF derivatives

- Futures and options on exchange-traded funds as complementary trading and risk management tools

# Eurex: the international derivatives exchange – product portfolio (II)

## Inflation derivatives

- Futures contracts on the unrevised Harmonised Index of Consumer Prices (HICP) of the euro area excluding tobacco

## Property derivatives

- Annual futures contracts based on the total returns of the IPD<sup>1)</sup> UK Annual All Property Index for individual calendar years as well as other IPD indices

## Weather derivatives

- Hurricane futures provide Eurex members with the opportunity to trade or hedge insured losses related to specific storm events.

## Commodity derivatives

- Commodity index derivatives: Eurex futures based on one of the leading benchmarks in commodities trading
- Derivatives on CO<sub>2</sub> and power offered within the framework of the co-operation of Eurex and EEX<sup>2)</sup>
- Gold and silver derivatives based on fixings provided by The London Gold Market Fixing Ltd. and The London Silver Market Fixing Ltd.

1) IPD = Investment Property Databank Ltd.

2) EEX = European Energy Exchange AG

# Eurex: a broad range of products — trading opportunities in eleven asset classes

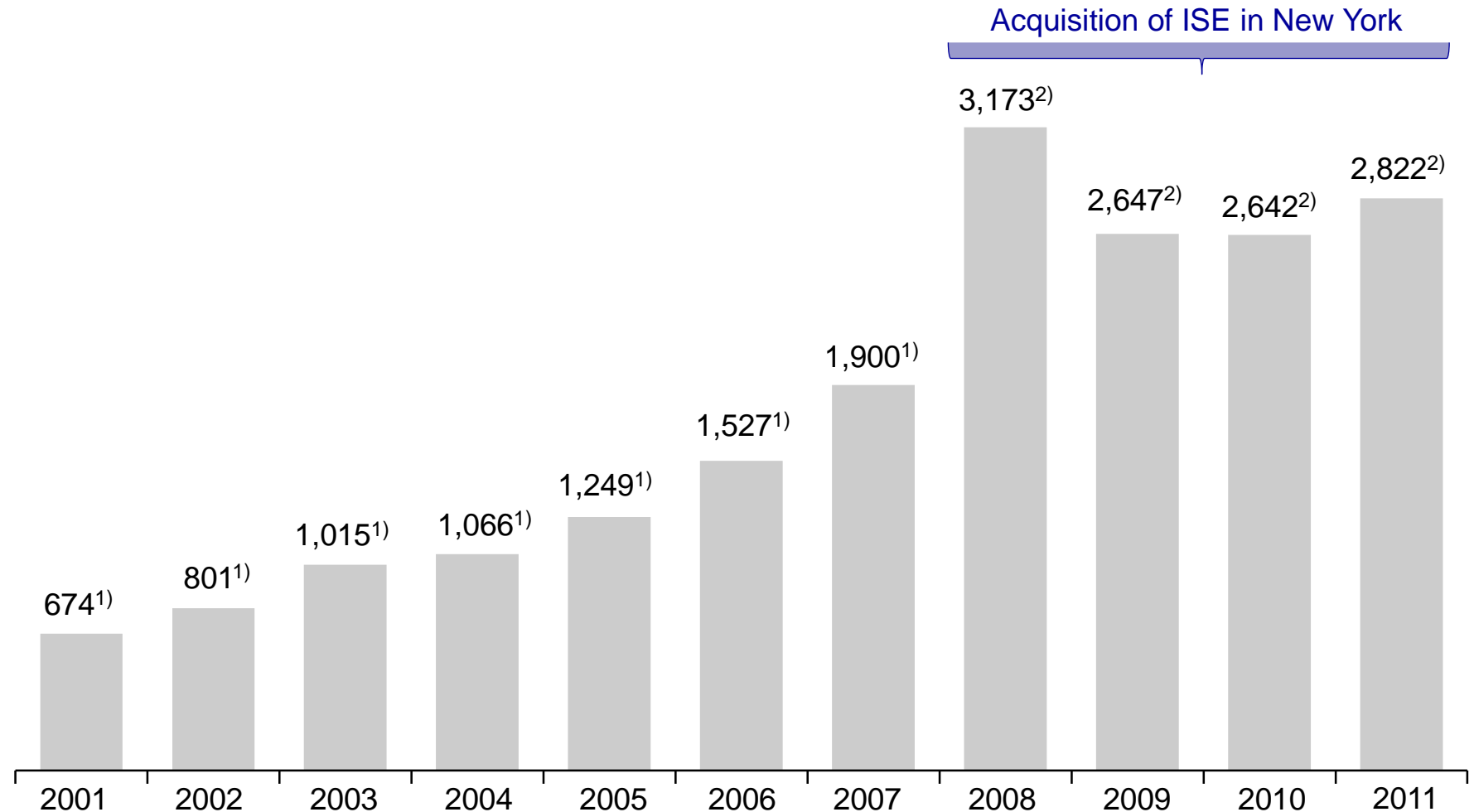
Equity derivatives		Equity index derivatives		Dividend derivatives	Volatility index derivatives	ETF derivatives
Options	Futures	Options	Futures <sup>1)</sup>			
Interest rate derivatives <sup>1)</sup>				Euro inflation futures <sup>1)</sup>		
Fixed income		Money market				
Commodity derivatives						
CO <sub>2</sub> derivatives <sup>1)</sup>	Precious metal <sup>1)</sup>	Dow Jones-UBS	Power derivatives <sup>1)</sup>	Agricultural derivatives <sup>1)</sup>		
Coal derivatives <sup>1)</sup>		Natural gas derivatives <sup>1)</sup>		Exchange traded commodities derivatives		
Weather derivatives <sup>1)</sup>				Property derivatives <sup>1)</sup>		
USA	Florida	Gulf				

1) Available for trading in the USA



# Trading volumes in the Eurex segment

contracts (in millions)



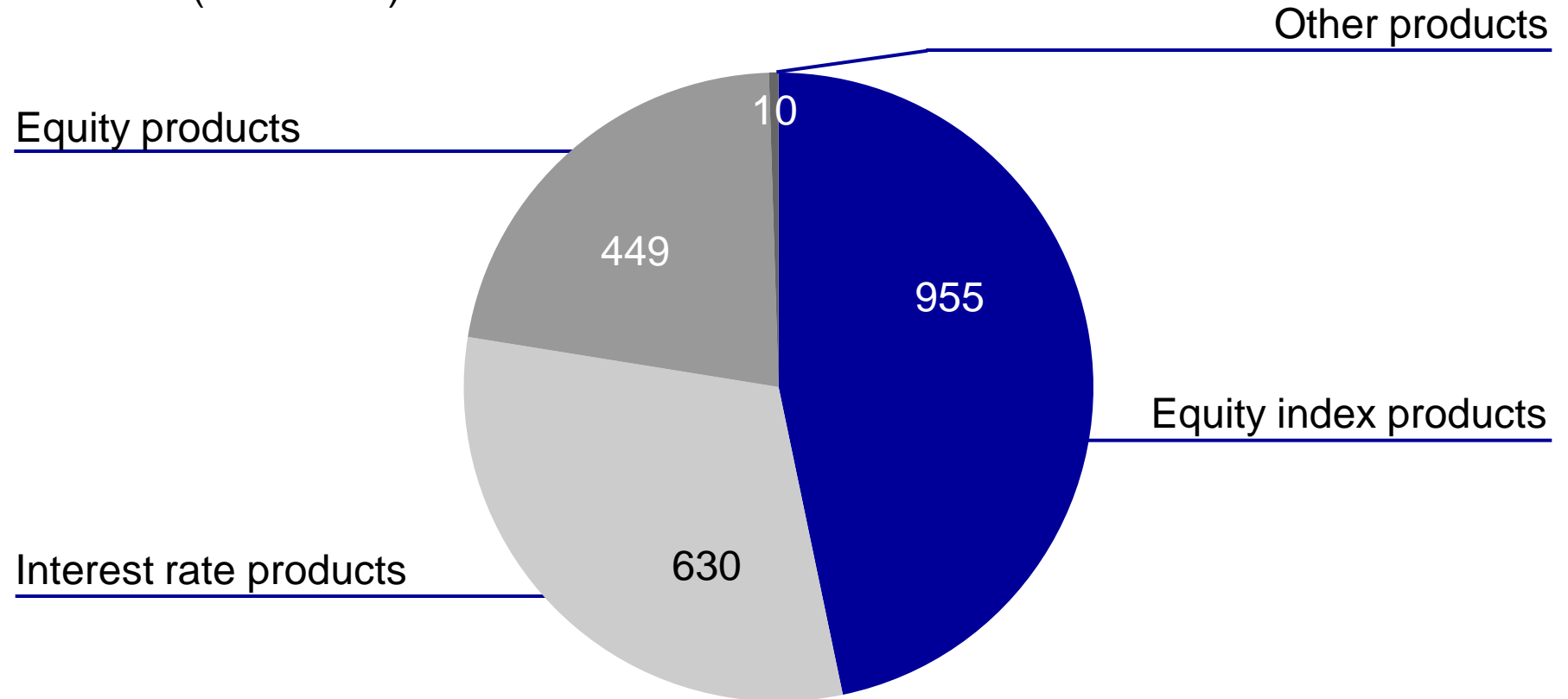
1) Amounts for 2001–2007: excluding US options of ISE

2) Amounts for 2008–2011: including US options of ISE

Source: annual report 2011 as at 31 December 2011

# Eurex: trading volumes in 2011

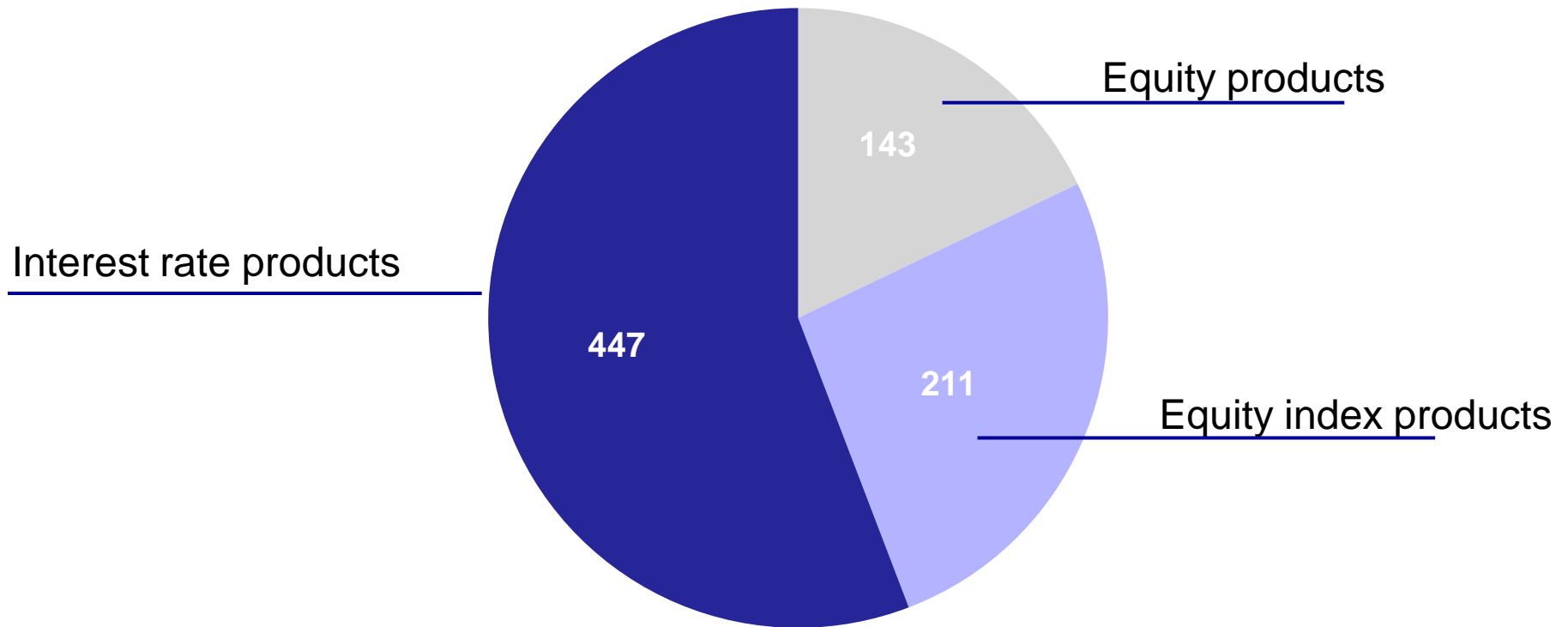
contracts (in millions)



Total: 2,044 million contracts

# Eurex: trading volumes in 2002

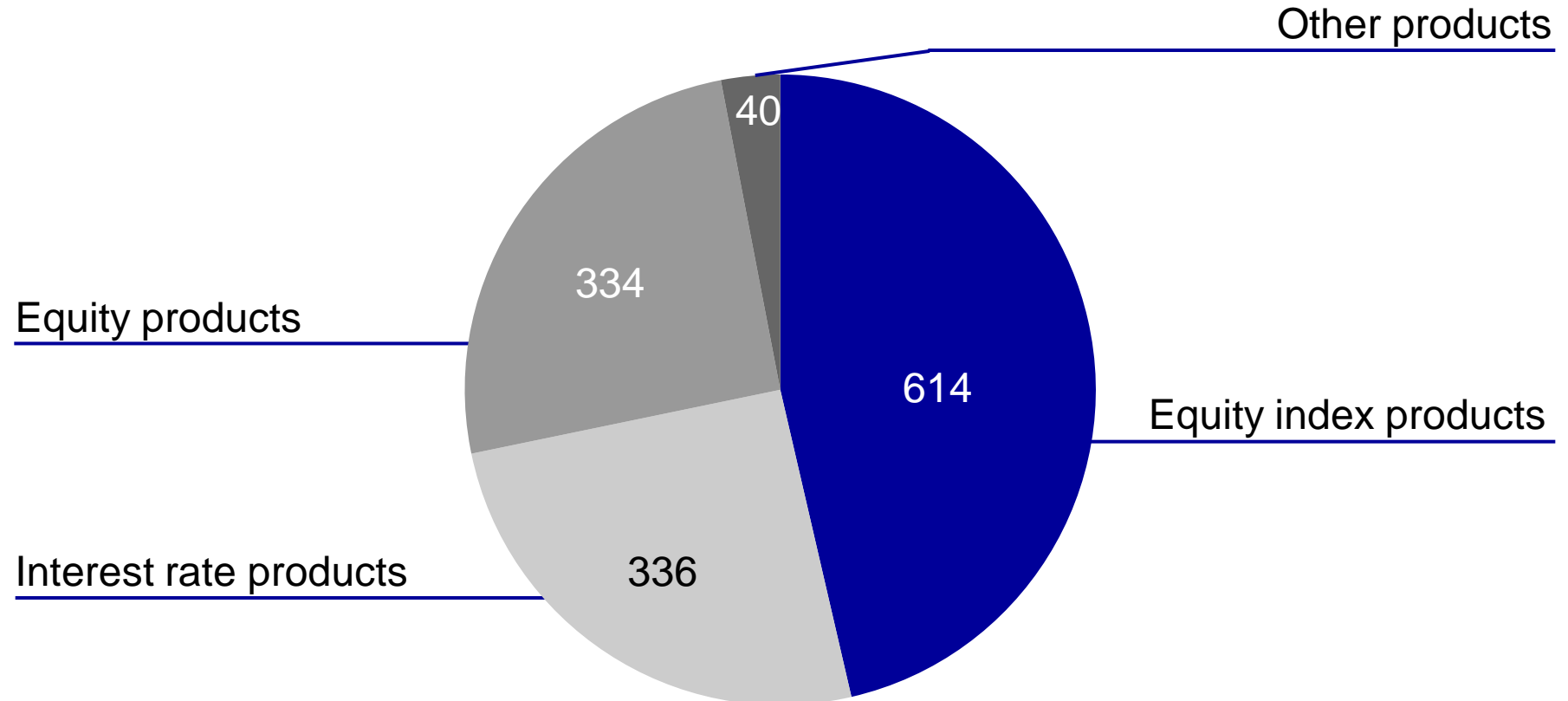
contracts (in millions)



Total: 802 million contracts

# Eurex: trading volumes in the first nine months of 2012

contracts (in millions)

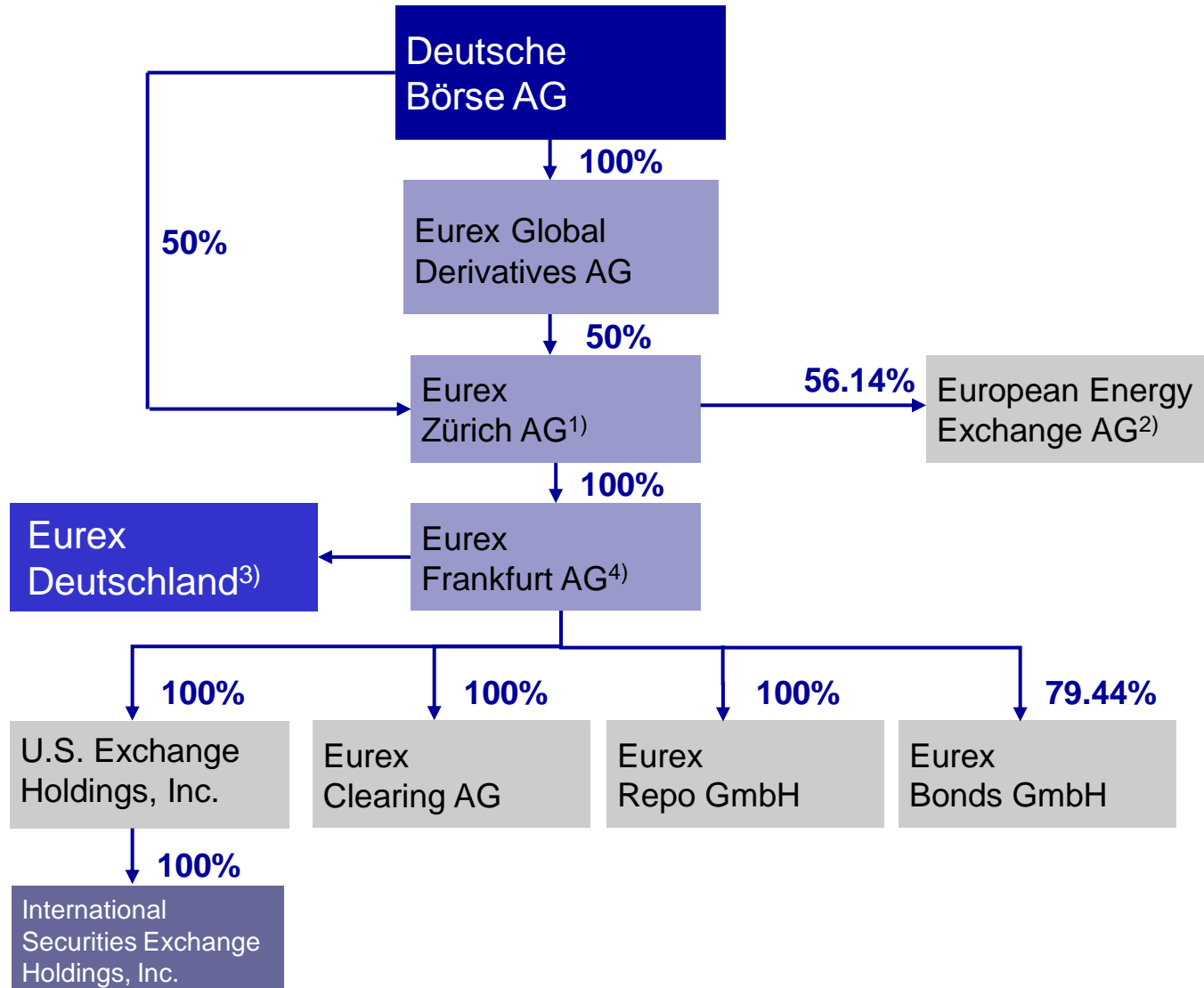


Total: 1,324 million contracts

# Eurex network: 436 participants trade in 33 markets



# Eurex: structure of ownership



1) Exchange under Swiss law at the same time  
 2) Administrating and operating institution of European Energy Exchange  
 3) Derivatives exchange under (German) public law  
 4) Administrating and operating institution of Eurex Deutschland

# Functions of the clearing house

- Central counterparty of the original buyer and seller after matching of a buy and a sell order (execution)
  
- Risk management of the transaction for both sides
  - Calculating margins for buy and sell side
  - Collecting collateral from buy and sell side
  
- 24-hours or intraday risk management to ensure mark-to-market exposure management
  
- Delivery management and control to ensure fulfilment of obligations on both sides of the trade

# Eurex Clearing AG at a glance

Eurex Clearing is **one of the world's leading clearing houses** offering fully automated and straight-through post-trade services for transactions in the following asset classes:

- derivatives
- equities
- repos
- energy
- fixed-income securities

Eurex Clearing acts as a **central counterparty** for these asset classes: it becomes a buyer to all sellers and a seller to all buyers, thereby minimising counterparty risk and improving operational efficiency. Eurex Clearing helps customers to manage trades, risk, collateral and delivery.



# Central counterparty (CCP) clearing strengthens market integrity and increases processing efficiency

## Reduced credit risk

Eurex Clearing AG becomes the legal counterparty for all trades and reduces credit risk by

- multilateral netting.
- replacement of bilateral credit risk with standard credit risk of CCP.
- collateralisation of risk exposure and post-default backing.

## Reduced capital requirements

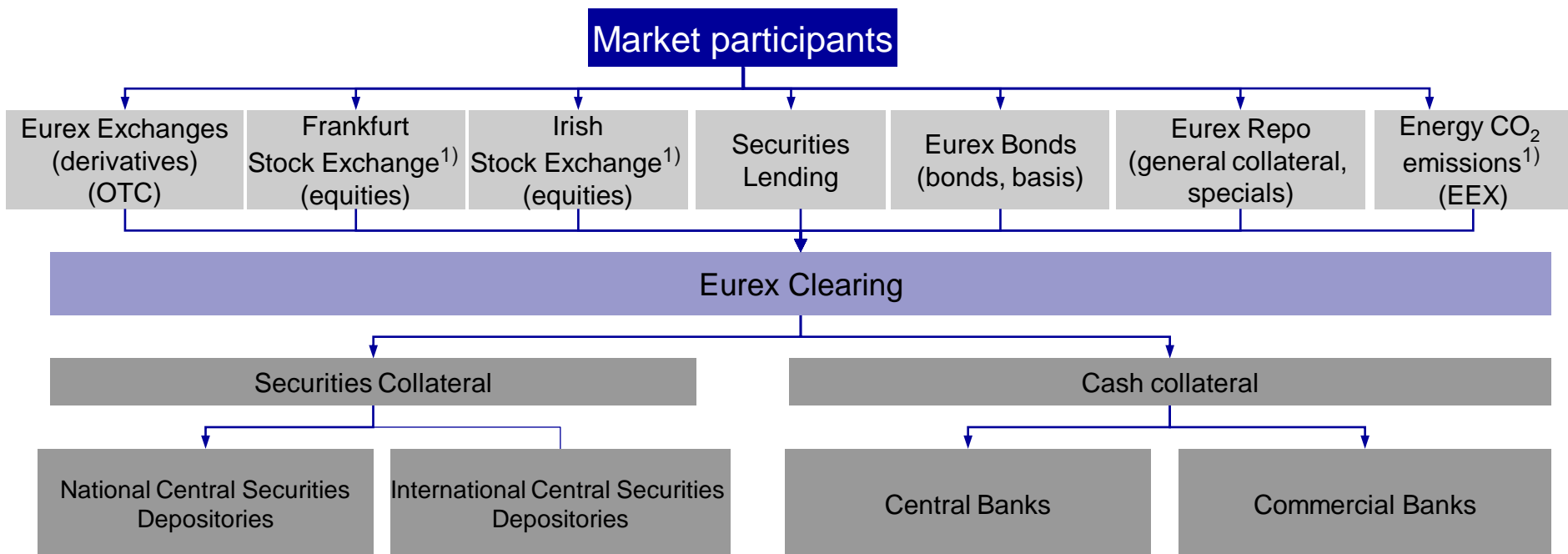
- According to the Basel III accord, there are equity capital requirements. In response to that, Eurex Clearing Members have to cover their business operations via the CCP by depositing a moderate amount of liable equity. NCMs<sup>1)</sup> can reduce their capital adequacy requirements if their positions are segregated by the relevant Clearing Member.

## Increased processing efficiency

- Standardised straight-through processing post-trading approach
- Netting of volumes and trades across trading locations reduces
  - back-office complexity.
  - fails and financing needs.

1) NCM = Non-clearing member

# Eurex Clearing offers central counterparty services for asset classes on different trading platforms

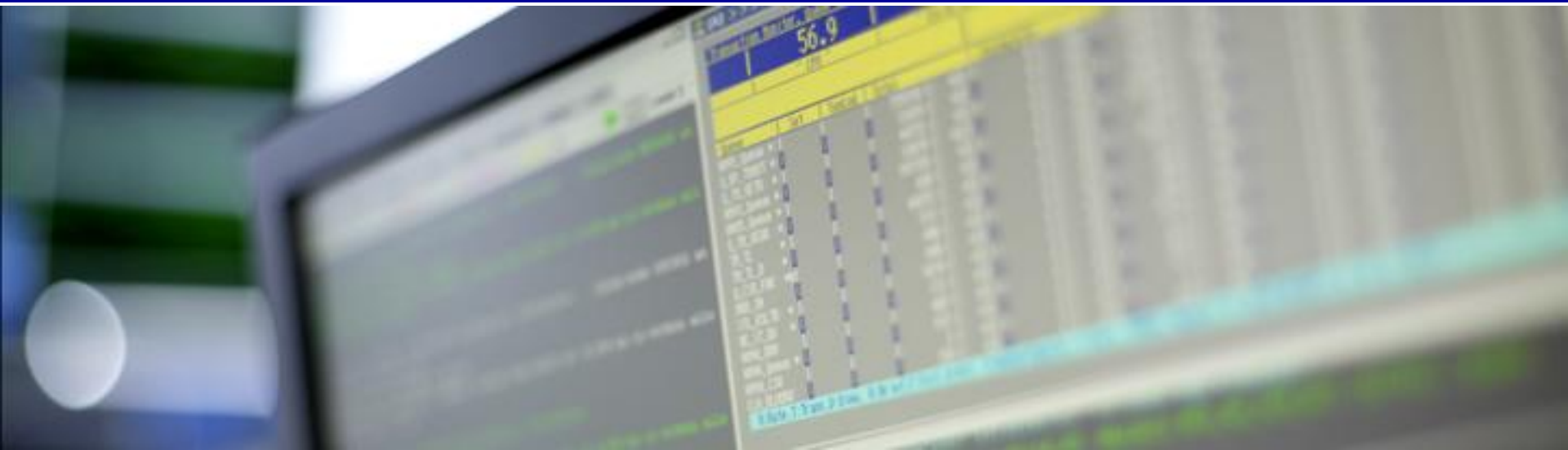


## Advantages:

- Effective risk and collateral management
- Reduction of cross-border settlements
- Mitigation of counterparty risk
- Straight-through processing (STP)

1) For Frankfurter Wertpapierbörse (FWB®, the Frankfurt Stock Exchange), the Irish Stock Exchange and the European Energy Exchange, Eurex Clearing is the central counterparty only for CCP eligible trades.

# Business area Information Technology



# Information Technology: business model

- Information Technology has decades of experience with the core processes of trading, clearing, settlement and the entire financial services sector.
- IT is renowned as a reliable operator of highly performant and highly reliable applications at low cost.
- Partnerships with leading consultants and product providers give Deutsche Börse IT a good starting position for optimising its business-critical core processes.

We aim at becoming the leading outsourcing partner for core processes in the financial services industry.

# Deutsche Börse Group operates systems for 32 exchanges and trading venues worldwide

Exchanges / trading venues	Market type		Launch
	Spot	Derivative	
<b>Eurex</b>		✓	<b>January 1990</b>
<b>Xontro<sup>1)</sup></b>	✓ (7)		<b>June 1992</b>
<b>FWB<sup>®</sup> (Xetra<sup>®</sup>)</b>	✓		<b>November 1997</b>
<b>NASDAQ OMX Helsinki</b>		✓	<b>September 1999</b>
<b>Vienna Exchange</b>	✓	✓	<b>November 1999 / April 2010</b>
<b>ISE (International Securities Exchange)</b>		✓	<b>February 2000</b>
<b>Irish Stock Exchange</b>	✓		<b>June 2000</b>
<b>EEX (European Energy Exchange)<sup>2)</sup></b>	✓ (2)	✓	<b>Aug. 2000 / March 2001 / Aug. 2005</b>
<b>Eurex Bonds<sup>®</sup></b>	✓		<b>October 2000</b>
<b>Eurex Repo<sup>®</sup></b>	✓		<b>July 2003</b>
<b>Scoach</b>	✓		<b>January 2007</b>
<b>Capacity Service</b>	✓		<b>May 2007</b>
<b>Bulgarian Stock Exchange</b>	✓		<b>June 2008</b>
<b>Southpool</b>	✓		<b>November 2008</b>
<b>European Power Exchange</b>	✓		<b>September 2009</b>
<b>European Market Coupling Company</b>	✓		<b>November 2009</b>
<b>Xetra International Market</b>	✓		<b>November 2009</b>
<b>Central European Gas Hub</b>	✓	✓	<b>December 2009 / December 2010</b>
<b>Ljubljana Stock Exchange</b>	✓		<b>December 2010</b>
<b>Xetra Frankfurt Specialist</b>	✓		<b>May 2011</b>
<b>GridLoss Service</b>	✓		<b>August 2011</b>
<b>Malta Stock Exchange</b>	✓		<b>July 2012</b>

1) electronic, broker-supported trading system for floor trading at seven securities exchanges in Germany: Berlin, Dusseldorf, Frankfurt/Main, Scoach, Hamburg-Hanover (BOAG Börsen AG), Munich, Stuttgart

2) spot markets for natural gas and EU emission allowances (EUAs)

As at 30 June 2012



DEUTSCHE BÖRSE  
GROUP



Our Community

# Corporate Responsibility at Deutsche Börse Group



- **Employees**
- **Economy**
- **Environment**
- **Corporate citizenship**

# Corporate Responsibility Initiatives

## 1 Corporate Responsibility – overall topics

- ❑ Proactively shape the sustainability debate
- ❑ Group wide sustainability committee with decision competence established
- ❑ DBG publishes integrated report

## 2 Economy

- ❑ DBG with ESG listing requirements/ESG segment that have been aligned with other exchanges
- ❑ Leading position in sustainability ratings/rankings



## 3 Employees

- ❑ DBG disposes of exemplary gender diversity ratio
- ❑ Corporate Responsibility engagement is awarded within StAPP
- ❑ Conduction of regular employee satisfaction surveys

## 4 Corporate Citizenship

- ❑ Focus on Corporate Citizenship initiatives worldwide where DBG is in the lead (DB Photography Prize, DB Arche, etc.)
- ❑ International expansion of Phineo gAG

## 5 Environment

- ❑ Ecological footprint of trading day has been calculated and is constantly being reduced
- ❑ DBG is awarded for state-of-the-art “Green IT” management



# Students, Universities, and Deutsche Börse

- As an active participant in the capital markets in financial centres around the world, we are highly dependent on the quality of our future employees' academic proficiency
- We are also interested in cutting-edge research into new products, new technologies and new strategies that enhance our capabilities as an exchange provider
- Our support comprises the personal involvement of our staff as well as the provision of financial assistance and market experience to our partners
- We believe it is important to build strong relationships which allow us to share knowledge and expertise with academic, social, and research organizations across the globe



# Selected teaching assignments of Deutsche Börse staff

## Employee

## Position at Deutsche Börse

## University

Dr. Reto Francioni

Chief Executive Officer

University of Basel

Dr. Martin Reck

Managing Director

University of Frankfurt

Dr. Stefan Mai

Head of Market Policy & European  
Public Affairs

University of Frankfurt

Jochen Theil

Senior Project Manager

University of Frankfurt

Bernd Mack

Head of VMS & Xetra/Eurex  
Operations

RheinMain University  
of Wiesbaden

Dr. Kai-Oliver Maurer

Head of Market & Business  
Research

University of Fulda

# University partnerships

- Deutsche Börse supports the education and training of the next generation of financial market participants through various outreach programs and partnerships



# Contact

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E-mail [deepesh.shah@deutsche-boerse.com](mailto:deepesh.shah@deutsche-boerse.com)