



DEUTSCHE BÖRSE  
GROUP

# Annual Report 2002

Focus on Process

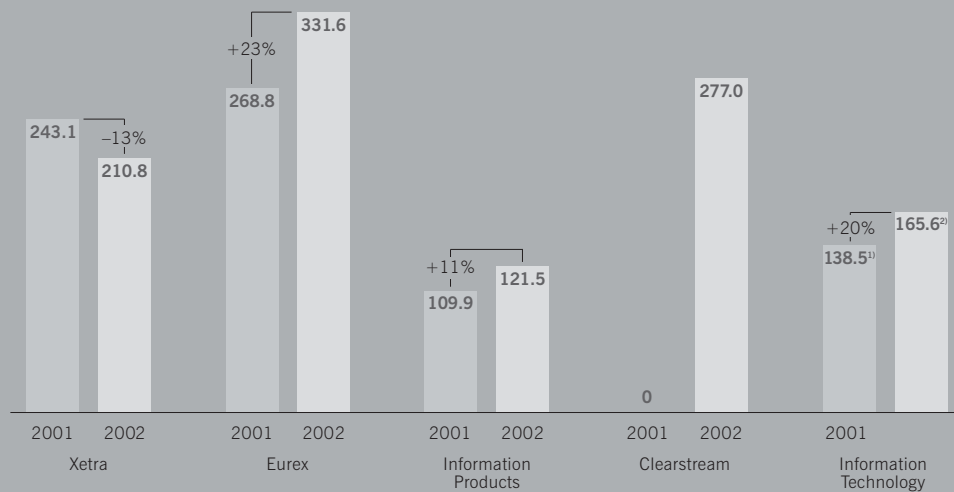
## Highlights by Quarter

in €m

	Q1		Q2		Q3		Q4		FY	
	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
Sales revenue	204.9	191.7	205.3	182.9	355.7	185.5	340.6	200.2	1,106.5	760.3
Net interest income from banking business	0	0	0	0	32.6	0	31.8	0	64.4	0
Earnings before interest, taxes and goodwill amortization and write-downs (EBITA)	88.4	90.2	81.2	70.3	136.7	64.8	113.6	53.0	419.9	278.3
Earnings before interest and taxes (EBIT)	87.4	90.2	80.0	70.3	87.9	64.8	95.9	52.8	351.2	278.1
Profit before tax from ordinary activities (EBT)	95.0	98.8	89.4	83.5	92.2	75.3	97.8	61.6	374.4	319.2
DVFA/SG earnings	64.6	65.2	59.7	52.2	38.5	49.4	72.3	36.9	235.1	203.7

## Sales Revenue by Segment

in €m

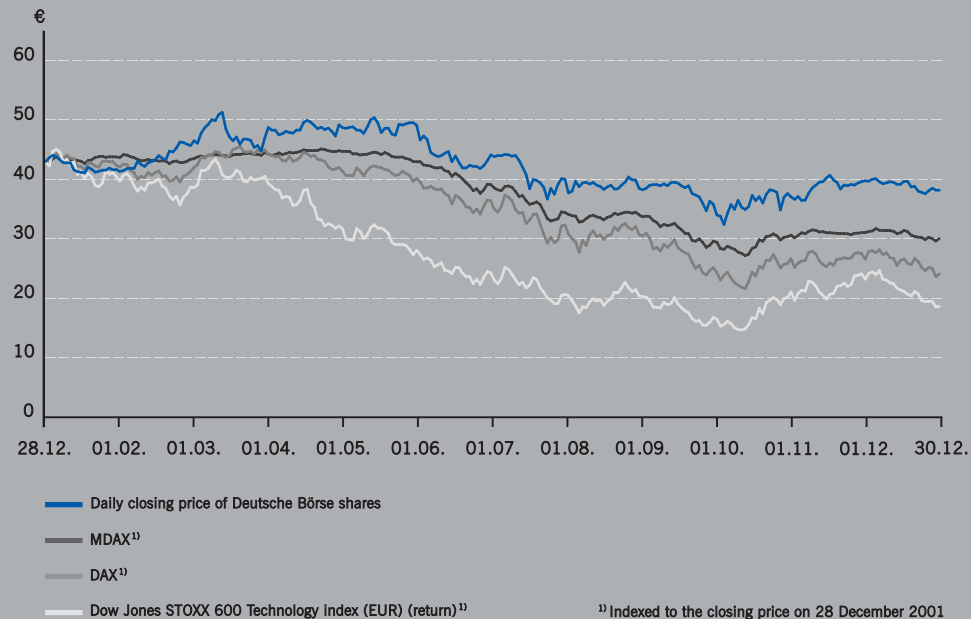


<sup>1)</sup> Deutsche Börse Systems and Xlaunch

<sup>2)</sup> Deutsche Börse Systems, entory, Clearstream TEC and Xlaunch

## Development of Deutsche Börse AG's Share Price

from 28 Dec. 2001 to 30 Dec. 2002



## Deutsche Börse Group: Financial Highlights

		2002	2001	Change %	
<b>Consolidated income statement</b>					
Sales revenue	€m	1,106.5	760.3	46	
Net interest income from banking business	€m	64.4	0	–	
Earnings before interest, taxes and goodwill amortization and write-downs (EBITA)	€m	419.9	278.3	51	
Earnings before interest and taxes (EBIT)	€m	351.2	278.1	26	
DVFA/SG earnings	€m	235.1	203.7	15	
Dividend (proposal for 2002)	€m	49.2	37.0	33	
<b>Consolidated cash flow statement</b>					
Cash flows from operating activities	€m	466.2	248.8	87	
Cash flows from investing activities	€m	–1,734.1	–152.8	1,035	
<b>Consolidated balance sheet</b>					
Total noncurrent assets	€m	2,656.4	737.2	260	
Shareholders' equity	€m	2,152.2	1,560.3	38	
Technical closing date liabilities	€m	3,475.1	164.7	2,010	
Total assets	€m	6,544.2	2,135.1	207	
<b>Performance indicators</b>					
DVFA/SG earnings per share	€	2.18	2.04	7	
Dividend per share	€	0.44	0.36	22	
DVFA/SG cash flow per share	€	4.35	2.83	55	
Employees (annual average)		2,302	1,030	123	
Sales revenue per employee	€ thousands	481	738	–35	
EBIT (excluding share of results of associated companies) / sales revenue	%	28.6	30.7	–7	
Return on equity <sup>1)</sup>	%	12.7	15.9	–20	
Equity ratio	%	70.1	79.2	–11	
<b>Market indicators</b>					
<b>Xetra</b>					
Number of transactions	thousands	60,001	49,719	21	
Order book turnover	€m	876,179	958,407	–9	
Participants (at 31 December)		359	413	–13	
<b>Floor trading</b>					
Number of transactions	thousands	86,653	124,342	–30	
Order book turnover	€m	157,760	235,780	–33	
<b>Eurex</b>					
Number of transactions	thousands	801,201	674,158	19	
Participants (at 31 December)		424	427	–1	
<b>Clearstream</b>					
Number of transactions	national	thousands	67.0	66.2	1
	international	thousands	15.2	19.8	–23
Securities deposits (at 31 December)	national	€bn	4,407	4,838	–9
	international	€bn	2,737	2,830	–3
<b>Deutsche Börse share price <sup>2)</sup></b>					
Opening price <sup>3)</sup>	€	43.21	33.50 <sup>4)</sup>	29	
High	€	51.50	44.93		
Low	€	32.40	29.77		
Closing price	€	38.16	43.21	–12	

<sup>1)</sup> Based on DVFA/SG earnings

<sup>2)</sup> Adjusted for the 10-for-1 stock split implemented on 1 June 2001

<sup>3)</sup> Closing price on preceding trading day

<sup>4)</sup> Issue price on 5 February 2001

# Our mission is to improve the efficiency of capital markets.

Our objective is to become the preeminent exchange organization. We will provide access to the most attractive securities and derivatives markets.

Being the only fully integrated exchange organization worldwide, we offer a full range of trading, clearing, settlement, custody, information and infrastructure services at lowest costs. We will organize new markets and thereby improve their liquidity.

We will provide first-class services targeted at intermediaries and vendors, investors and issuers worldwide.

We initiate and support improvements of the regulatory framework and are open for valuable partnerships.

To achieve these goals we build on our uniquely skilled professionals and the power and reliability of our fully integrated electronic systems. Thus, we create superior shareholder value.

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## Dear Shareholders,

Deutsche Börse Group continued its growth course in fiscal 2002. Despite the difficult environment, the Group increased its sales revenue by €346 million, and its earnings by €73 million, thus exceeding the goals we set at the beginning of the year. The Supervisory Board and the Executive Board will be proposing a dividend of €0.44 per share – an increase of 22 percent on last year – to the Annual General Meeting on 14 May 2003.

The Group's growth can be attributed in part to the acquisition of the securities settlement and custody organization Clearstream International in the middle of the year. The Group now employs around 3,300 people at its primary locations in Germany, Luxembourg and Switzerland, as well as at its branch offices in London, Paris, Chicago, New York, São Paulo, Hong Kong and Dubai. It is their dedication and professionalism that has made the Group's excellent results possible.

Today, Deutsche Börse Group provides around 2,000 customers – primarily from Europe and the US – with a range of efficient and cost-effective infrastructure services. On behalf of all our employees and myself, I would like to personally thank all our customers for the confidence they have shown in Deutsche Börse Group.

Dear shareholders, despite the difficult environment we will continue to justify your trust, and will do our utmost to fulfil your expectations.

With kind regards,



Werner G. Seifert  
Chairman of the Executive Board

# Managing Directors

as at 1 March 2003

**Werner G. Seifert**, born 1949  
Chief Executive Officer Deutsche Börse AG  
Responsible for Group Coordination and  
Customers/Markets (Information Services,  
Technology Services)  
Frankfurt/Main

**André Roelants**, born 1943  
Deputy Chief Executive Officer  
Deutsche Börse AG  
Responsible for Customers/Markets  
(Banking and Custody Services)  
Lintgen, Luxembourg

**Yves Baguet**, born 1960  
Responsible for Delivery  
(Operations, Infrastructure and Implementation)  
Waltzing (Arlon), Belgium

**Rudolf Ferscha**, born 1961  
Member of the Executive Board Deutsche Börse AG  
Responsible for Customers/Markets  
(Trading and Clearing Services)  
Frankfurt/Main

**Matthias Ganz**, born 1963  
Responsible for Operations  
Glashütten/Schlossborn

**Frank Gerstenschläger**, born 1960  
Responsible for Technology Services  
Darmstadt

**Mathias Hlubek**, born 1963  
Member of the Executive Board Deutsche Börse AG  
Responsible for Finance/Group Corporate Center  
Kronberg

**Ulrich Kastner**, born 1954  
Responsible for Application Development  
Trading and Consulting  
Eschborn

**Michael Kuhn**, born 1954  
Member of the Executive Board Deutsche Börse AG  
Responsible for Technology/Systems  
Frankfurt/Main



**Christoph Lammersdorf**, born 1950  
Responsible for Information Services  
Mainz

**Gerhard Leßmann**, born 1958  
Responsible for Application Development  
Clearing and Settlement, Custody  
Kronberg

**Axel Nawrath**, born 1954  
Responsible for Policy, Communication and Legal  
Berlin

**Volker Potthoff**, born 1954  
Responsible for Banking and Custody Services  
Bad Homburg

**Martin Reck**, born 1961  
Responsible for Group Functionality  
Rockenberg

**Jürgen Karl Röthig**, born 1962  
Responsible for Trading/Clearing/Info Operations  
Oberursel

# Management Structure

as at 1 March 2003

In addition to the central functions (Group Coordination and Corporate Center), the management structure of Deutsche Börse Group reflects the three core functions of the company's business model: "building" trading, clearing and settling systems (Customers/Markets), "operating" them (Operations) and "loading" the systems with transactions (Technology/Systems).

A team of 15 Managing Directors leads the Group in a committee structure comprising Management Committees, Group Committees and an Executive Committee made up by six of the 15 Managing Directors. In line with the Aktiengesetz (AktG, German Stock Corporation Act), this Executive Committee corresponds to the Executive Board of Deutsche Börse AG. While the Management Committees reflect Deutsche Börse Group's core functions, the Group Committees operate cross-functionally.

Executive Committee			
W. G. Seifert (CEO) M. Hlubek (CFO)	A. Roelants (Deputy CEO) R. Ferscha	M. Ganz (COO)	M. Kuhn (CIO)
<b>Group Coordination and Corporate Center</b>	<b>Customers/Markets</b>	<b>Operations</b>	<b>Technology/Systems</b>
Group Coordination W. G. Seifert	Management Committee "Customers/Markets" W. G. Seifert	Management Committee "Operations" M. Ganz	Management Committee "Technology/Systems" M. Kuhn
Policy, Communication and Legal A. Nawrath	Trading and Clearing Services R. Ferscha	Group Functionality M. Reck	Central Support M. Kuhn
Finance/ Group Corporate Center M. Hlubek	Information Services C. Lammersdorf	Trading/Clearing/ Info Operations J. Röthig	Delivery Y. Baguet
	CEO Clearstream A. Roelants	Settlement/Custody Operations M. Ganz	Application Development Trading and Consulting U. Kastner
	Banking and Custody Services V. Potthoff		Application Development Clearing and Settlement, Custody G. Leßmann
	Technology Services F. Gerstenschläger		

Group Committee "Product Development" M. Ganz

Group Committee "Investment" M. Hlubek

Group Committee "Risk Management and Compliance" W. G. Seifert

Group Committee "Compensation and Policy" M. Hlubek

# Supervisory Board

## **Dr. Rolf-E. Breuer**

### **Chairman**

Chairman of the Supervisory Board  
Deutsche Bank AG  
President  
Bundesverband deutscher Banken

## **Manfred Zaß**

### **Deputy Chairman**

Chairman of the Executive Board (until 31 Jan. 2002)  
DGZ DekaBank Deutsche Kommunalbank

## **Ralf Arnemann**

Staff Member in the IP Applications Section  
Deutsche Börse Systems AG

## **Herbert Bayer**

Trade Union Secretary  
ver.di e.V., Area Frankfurt/Main and Region,  
FB Financial Services

## **Dr. Peter Coym**

Member of the Executive Board  
Lehman Brothers Bankhaus AG  
Chairman  
Verband der Auslandsbanken in Deutschland e.V.

## **Leonhard H. Fischer**

Member of the Executive Board (until 31 October 2002)  
Dresdner Bank AG and  
Member of the Executive Board (until 31 October 2002)  
Allianz AG

## **Uwe E. Flach**

Deputy Chairman of the Executive Board  
DZ Bank AG, Deutsche Zentral-Genossenschaftsbank

## **Hans-Peter Gabe**

Staff Member in the Personnel Services Section  
Deutsche Börse AG

## **Dr. Peter Gloystein** (until 9 September 2002)

Spokesman for the Executive Board (until 31 Aug. 2002)  
ING BHF-Bank AG

## **Harold Hörauf**

Personally Liable Partner  
HSBC Trinkaus & Burkhardt KGaA

## **Sandra S. Jaffee** (as of 22 November 2002)

Executive Vice President Citibank N.A.  
President and CEO Global Securities Services

## **Dr. Stefan Jentzsch** (as of 15 May 2002)

Member of the Executive Board  
HypoVereinsbank AG

## **Dr. Norbert Juchem** (until 15 May 2002)

Member of the Executive Board (until 31 January 2002)  
HypoVereinsbank AG

## **Hessel Lindenbergh** (as of 22 November 2002)

Member of the Executive Board  
ING Group  
Chairman  
Netherlands Bankers' Association

## **Dr. Claus Löwe** (until 19 September 2002)

Senior Partner  
arsago ACM GmbH  
Bad Homburg

## **Friedrich von Metzler**

Personally Liable Partner  
B. Metzler seel. Sohn & Co. KGaA

## **Fritz Nols**

Chairman of the Supervisory Board  
Fritz Nols Global Equity Services AG  
Spokesman for the Executive Board  
Bundesverband der Wertpapierhandelsfirmen e. V.

## **Klaus M. Patig**

Member of the Executive Board  
Commerzbank AG

## **Roland Prantl**

Staff Member in the Configuration Management Section  
Deutsche Börse Systems AG

## **Sadegh Rismanchi**

Staff Member in the Configuration Management Section  
Deutsche Börse Systems AG

## **Gerhard B. Roggemann**

Member of the Executive Board  
Westdeutsche Landesbank Girozentrale

## **Rainer Roubal**

Chairman of the Executive Board  
ICF Intermediär Center Frankfurt Kursmakler AG

## **Johannes Witt**

Staff Member in the Financial Accounting and Controls  
Section  
Deutsche Börse AG

## **Silke Zilles**

Staff Member in the IP Marketing & Sales Section  
Deutsche Börse AG  
Frankfurt/Main

# 2002 – The Year That Was

1st quarter		2nd quarter			
January	February	March	April	May	June
<p><b>Annual Reception 2002</b> Invited by Deutsche Börse, around 1,000 guests from the worlds of business, politics and the financial community – including the main speaker Frits Bolkestein, EU Commissioner in charge of the Internal Market and Taxation – meet to discuss current developments on the European capital markets.</p> <p><b>Neuer Markt Sentiment Index debuts</b> Together with Cognitrend, Deutsche Börse establishes a mood barometer survey for the Neuer Markt. The Sentiment Index tracks the ratio of optimists to pessimists and the way this changes on a weekly basis. In October, a DAX® mood barometer for blue chips will supplement the Neuer Markt Sentiment Index.</p>	<p><b>Expansion of Xetra European Stars</b> Deutsche Börse admits 17 French securities, one Belgian and one Finnish security – all from the Dow Jones Euro STOXX 50<sup>SM</sup> – to its European trading segment, Xetra European Stars®.</p> <p><b>Takeover offer to Cedel owners</b> Deutsche Börse AG makes an offer to the owners of Cedel International for the acquisition of their shares. In the event of a takeover, Deutsche Börse will become the sole owner of the securities settlement company Clearstream International. Cedel currently holds 50 percent of the shares in Clearstream – as does Deutsche Börse.</p>	<p><b>Shares at all-time high</b> On 12 March, the Deutsche Börse shares reach their highest level to date at €51.50. Since the IPO in February 2001, the shares have risen in value by around 53 percent.</p> <p><b>Round lot one for MDAX securities</b> With immediate effect, investors may buy MDAX® shares starting with an order size of one share.</p> <p><b>Electricity exchange merger</b> EEX®, a subsidiary of Deutsche Börse, and Leipzig Power Exchange (LPX) merge to form “EEX European Energy Exchange AG”, based in Leipzig. Hourly trading takes place on the Leipzig Sapri system, derivatives trading and continuous block trading are effected via the Frankfurt Xetra® system.</p>	<p><b>Two years of XTF</b> Two years after its introduction, Deutsche Börse's XTF® segment has established itself as a permanent feature on the German capital market and, at the same time, as Europe's most important market for exchange-traded index funds.</p> <p><b>MTS France market data from Frankfurt for the first time</b> Deutsche Börse exclusively provides the real-time prices of MTS France, one of the key markets for government bonds in Europe.</p> <p><b>12th German Equity Forum</b> The German Equity Forum is held in Frankfurt am Main for the first time. The initiative, led by Deutsche Börse, KfW (the German Development Bank) and the State of Hesse, brings together companies seeking capital with specialist investors. The event is opened by Roland Koch, Prime Minister of Hesse.</p> <p><b>Deutsche Börse invites the public on the Night of Museums</b> With almost 2,500 visitors, great interest is generated by Deutsche Börse's art collection XL Photography on the Night of Museums.</p>	<p><b>Annual General Meeting 2002</b> The shareholders resolve a dividend for fiscal 2001 of €0.36 per share – a 20-percent increase year-on-year. The AGM is broadcast live on the Internet for the first time.</p> <p><b>Investor Center online</b> The portal for private investors offers up-to-date information on the capital markets and useful details on trading with shares, derivatives and warrants: <a href="http://www.deutsche-boerse.com/marketinfo/index_e.htm">www.deutsche-boerse.com/marketinfo/index_e.htm</a>.</p> <p><b>Launch of NISAX 20</b> Deutsche Börse calculates the NISAX 20 in cooperation with Norddeutsche Landesbank. The index shows the development of the 20 largest companies in Lower Saxony.</p>	<p><b>Free float: A new weighting criterion for share indices</b> With immediate effect, the weighting of a company in Deutsche Börse's share indices is based on its free float shares – shares that can be freely traded and are not held by the founding family or major shareholders.</p> <p><b>Symposium on Capital Market Law</b> Representatives of the European Commission and the German Federal Government, together with representatives from academic institutions and securities trading, meet at the Neue Börse to discuss the proposals made by the European Commission to create a pan-European supervision of capital markets.</p> <p><b>Private placement successful</b> More than 9 million Deutsche Börse shares are placed with institutional investors in Europe and the US at a price of €44 per share. The proceeds go towards the acquisition of Cedel International.</p> <p><b>Commercial Paper issued</b> Deutsche Börse issues commercial paper with a volume of around €400 million to partially finance the acquisition of Cedel.</p>

3rd quarter		4th quarter				
July	August	September	October	November	December	
<p><b>Acquisition of Cedel International completed</b> Deutsche Börse acquires Cedel International – and with it its 50-percent share in Clearstream International – at a price of €1.6 billion. The largest transaction in the history of the securities industry to date is financed using the proceeds of the IPO, the successful private placement and the commercial paper program. Deutsche Börse's offer is accepted by all Cedel shareholders.</p> <p><b>a/c/e refocused</b> Eurex and the Chicago Board of Trade (CBOT) restructure their a/c/e alliance: Eurex will be exclusively responsible for the a/c/e platform's software and its further development; CBOT will pay license fees for the use of the software.</p>	<p><b>Interface to central counterparty</b> Deutsche Börse Systems' Xentric® CCP Request Broker offers a new, professional interface between the in-house systems of stock trading participants and the central counterparty (CCP).</p> <p><b>Round lot one for DAX securities</b> Deutsche Börse reduces the order size for all DAX securities to just one, allowing a minimum lot of one for all Xetra-traded shares.</p> <p><b>Launch of Xetra Release 7.0</b> The new version offers an enhanced front end and interface for customizing the system to trading participants' environments. In addition, the trading system now also includes the relevant functions for the launch of Xetra BEST® in September.</p>	<p><b>First Eurex participant in Australia</b> Fortis Clearing Sydney Pty Ltd. becomes the first Australian participant directly linked to Eurex.</p> <p><b>New service for private investors: Xetra BEST</b> Xetra Best Execution – or Xetra BEST for short – supports the immediate execution of private investors' orders at lower prices than would be generated using the Xetra order book at that time.</p> <p><b>7th Global Securities Financing Summit in Luxembourg</b> Clearstream invites finance experts to debate developments in securities financing and discuss efficient liquidity and collateral management.</p>	<p><b>CreationOnline added to CreationConnect</b> CreationOnline, the secure browser solution for access to Clearstream's settlement process, is now available via Clearstream's virtual private network and the public Internet.</p> <p><b>Deutsche Börse Computershare offers share register management services</b> The newly formed joint venture by Deutsche Börse AG and Computershare Ltd. offers German public companies assistance with share register management.</p> <p><b>New index concept presented</b> As of March 2003, the development of prices on the German stock market will be even more transparent thanks to a new index concept: in future, Deutsche Börse will distinguish between traditional and technology sectors below the DAX. The new index system will be introduced at the first chaining date 2003.</p>	<p><b>Infobolsa investment</b> Deutsche Börse acquires a 50-percent interest in Infobolsa, one of the leading European providers of real-time financial information. A German subsidiary is expected to provide information to German financial services providers.</p> <p><b>13th German Equity Forum</b> Once again, Deutsche Börse and KfW host the German Equity Forum in Frankfurt. For the first time, listed companies also present their business models and products to analysts and institutional investors.</p> <p><b>Exchange Council agrees on new segmentation of stock market</b> New exchange rules are resolved by the Exchange Council and approved by the Exchange Supervisory Authority of the State of Hesse. As of the beginning of 2003, there will be two new segments on the Frankfurt Stock Exchange: the Prime Standard – with particularly high transparency requirements – and the General Standard.</p>	<p><b>eb.rexx: New index family for fixed-income securities</b> Together with Eurex Bonds, Deutsche Börse introduces a new index group, initially comprising ten German bond indices.</p> <p><b>Deutsche Börse in the DAX</b> Almost two years after its IPO, Deutsche Börse is included in the German blue-chip index DAX.</p> <p><b>Clearstream expands Vestima</b> Clearstream's purchase of Filinks adds a complementary technology to the Vestima® investment fund service. It will increase efficiency in forwarding orders from domestic markets.</p> <p><b>Acquisition of entory complete</b> Deutsche Börse redeems the final remaining tranche of shares from the previous shareholders and now holds a 100-percent interest in entory AG.</p>	

**Business concept: Combining economies of scale and scope at different value-added intensities**



## Deutsche Börse: Focus on Process

A single European financial market for the benefit of both investors and issuers – this is what the European Union is aiming to achieve by no later than 2005 with its Financial Services Action Plan. A series of EU directives is being drawn up, including, most notably, the Investment Services Directive (ISD), which is intended to harmonize the structures of the securities markets. Simultaneously, the debate on the right structure for cross-border securities transactions has intensified over the past year. Various bodies have voiced their opinions on the matter: since the European Commission began a consultation process in the area of clearing and settlement in May 2002, the European Parliament has produced a report; the G30, a group of representatives of prominent market participants and public institutions, drafted its position in January 2003. In addition, the European Commission has formed a committee of experts chaired by Alberto Giovannini, whose second report (which will appear in the spring of 2003) will provide the basis for its approach to the issue. In other words: the architecture of the European capital market is undergoing a complete overhaul.

As a successful capital market infrastructure services provider, Deutsche Börse Group is looking carefully at these opinions and is continuing to develop its business model against the backdrop of this debate. In line with calls made by some contributions to the debate, Deutsche Börse Group analysed its performance in European cross-border securities transactions in its study entitled “Cross-Border Equity Trading, Clearing & Settlement in Europe”, which was published in April 2002 and which can be accessed at [www.deutsche-boerse.com/Services/Publications/Downloads](http://www.deutsche-boerse.com/Services/Publications/Downloads). The first part of the following considerations shows that the securities industry, as well as the

European and German legislators, should be trying to streamline the diversity of regulatory frameworks in Europe. The process-oriented business model provided in the second part of this chapter demonstrates how Deutsche Börse is already making a contribution to creating a more efficient international capital market architecture. The third part shows how Deutsche Börse Group developed a functional leadership structure out of this business model on 1 January 2003, in order to continue to focus systematically and swiftly on the future requirements of the European capital market structure.

### **Efficiency in the European securities sector is possible despite regulatory and institutional diversity**

Investors should always take every opportunity to improve their returns and minimize their risk. This is particularly important in light of the current weakness on the capital markets, which has been continuing for several years now. One option is to diversify into various European capital markets. In practice, however, the costs involved in this type of diversification outweigh the benefits for most investors. In order to maintain a presence on all markets for investors or for the purposes of proprietary trading, banks and other intermediaries must be linked to various trading and settlement systems. This involves a degree of complexity, from both a technical and regulatory point of view, which in turn brings direct and indirect costs. One alternative is to engage a second intermediary in the target market, which incurs even higher costs. Following the introduction of the euro, European politicians expect the costs involved in the trading and settlement of cross-border securities transactions to fall.

### **How extensive are the political expectations?**

In theory, the following model can be conceived: a standardized trading and settlement platform for all European markets with a standardized market model and uniform standards, for example for trading regulations, for the deposit of collateral, for settlement periods and for the extended regulatory environment for accounting or tax systems. This would mean that trading participants would only have to connect to a process based on a single technology, and therefore to one institutional and regulatory system. The costs for market participants would fall: this standardized and integrated process from the incoming order to the last stage in the settlement process would bring the unit costs down to a minimum. That's the theoretical wishful thinking, anyway.

### **Would the model be politically viable?**

Will the future private demand for cross-border trading be enough to justify the material investments and the restriction of competition? All of the national markets would have to cede national sovereignty over the regulatory framework in order to implement this model – but is this desirable and can it be achieved? Could Luxembourg, Switzerland and Ireland really be persuaded to give up their competitive advantages, e. g. from their low rates of tax? On the other hand, would the United Kingdom be willing to do away with its stamp duty, although this provides the British Treasury with revenue which exceeds the total



amount to be saved on European cross-border transactions? Finally: would the United Kingdom and Switzerland remain outside the model because of their non-membership of the euro zone? Are the complexity costs involved in the engagement of intermediaries really the only relevant criteria? After all, this problem has long been of no consequence to institutional investors, who are tied to the liquidity of their domestic market through their brokers.

**Would introduction of the model be a responsible move from a regulatory perspective?**

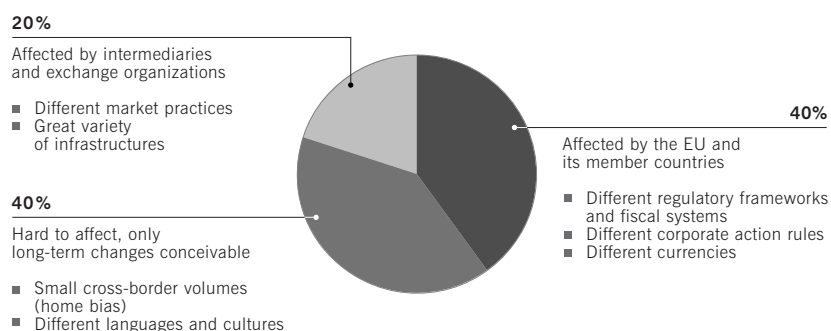
Regardless of its feasibility, the model of an entirely standardized European infrastructure ignores the economies of scale. The advocates of the unified model are the very ones who are bringing this important argument to bear: should the transaction costs in the cross-border stock market be at the same low level for all European investors? If so, which domestic market should serve as the reference market? Depending on their size, different domestic markets have significantly different economies of scale – the Luxembourg stock market cannot achieve the same economies of scale as the German one.

This systematic problem cannot be solved either politically or economically. This is why prices for cross-border and domestic transactions can only be harmonized for each individual country. If this system were to be implemented, we would remain in a situation in which the same transactions were priced differently in France to Germany or Italy. As such, investors would be at either an advantage or a disadvantage depending on where they live. This problem does not only affect investors, it also impacts the infrastructure providers: the protection of national regulation in Europe has led to over-capacity in trading, clearing and settlement. Would the smaller, national providers of infrastructure services then be forced to give up, or become junior partners as part of a consolidation process?

The distortions caused by a single European infrastructure would also affect the intermediaries: the unit and connection costs still depend on the volume of orders – the effects of differing participant sizes are not automatically eliminated by a single infrastructure. Rather, a unified system would promote a concentration movement among intermediaries. This would lead to a new pricing power at just a few intermediaries, who could then reverse the reduction in clearing and settlement transaction fees for retail customers if they want.

### Additional costs of cross-border securities transactions per year

Total volume €4.3 billion p. a.



### Do the benefits outweigh the material and regulatory costs of the theoretical model?

All of these effects and consequences should be looked at in relation to the size of the problem. On closer examination, the price for the diverse range of institutional providers in Europe is lower than those who talk of the costs being "ten times as high as in the USA" would lead us to believe. According to analyses carried out by Deutsche Börse Group and published in the aforementioned study, the inefficiencies of the current system amount to €4.3 billion per year, compared to a theoretical model which would allow transactions to be processed at the costs applicable in the cheapest country of reference (see chart). The scale of this inefficiency has since been confirmed by competitors. Using the same method and the figures used in the study, the total annual cost for equity transactions in Europe amounts to €40.9 billion. The inefficiency of the current diversity therefore accounts for one tenth of total costs.

And of this tenth, only one fifth (2 percentage points or around €860 million) is attributable to the market infrastructure, thus corresponding to a €28 burden on an average institutional transaction of €150,000 – a rate of 0.19 per mill. In fact, these costs are the result of the diversity in the technologies used and the inefficiency of the current processes. The remaining €3.4 billion, on the other hand, can be put down to the fact that the harmonization of the general regulatory framework is progressing too slowly. Regulatory frameworks are often established by the national political bodies in order to create apparent competitive advantages, such as with the various legal constructs for securities (for example, the prevalence of registered shares in the United Kingdom, and bearer shares in Germany) or the different tax treatment of capital services such as interest and dividends, or the different regulations governing company takeovers. It cannot even be ruled out as yet that the regulatory frameworks will drift further apart in the future, for example the tax systems.

This applies despite the fact that the idea of a single framework is perfectly conceivable and has long been in existence in other sectors of the securities market: after all, with the Eurobond market, Europe has had a cost-efficient and smooth-running cross-border bond market for decades now. It is only when the basis for a similar regulatory framework for the stock market has been established politically that the costs for cross-border securities transactions will fall in line with political expectations. Exchange and settlement organizations, as well as the intermediaries involved, will do their homework in the meantime and make the processes more efficient.

#### **How does the model comply with concepts of a free market economy?**

Is a public “utility company” (this is what would arise from such a model), as opposed to competing capital market infrastructure providers, really in a position to work cost-effectively, and can it, and does it want to, be innovative in the absence of competitive pressure? Most European countries have, quite rightly, moved towards privatization in the telecommunications, energy and railway sectors. The trend is to move away from dirigisme and towards market mechanisms. This has brought welcoming results: in the telecommunications sector, for example, efficiency improved drastically following the end of the state monopoly. Why should the right move for the stock markets lie in the opposite direction?

#### **Cui bono – who would benefit most from the model?**

By and large, the first conclusion to be drawn is that the problem is less relevant, and of a lesser magnitude than the debate surrounding it might lead us to believe. Secondly, responsibility has been spread very unevenly on the shoulders of capital market participants. The calls for a dirigiste solution come, for the most part, from the global securities houses. These often started expanding into Europe only a few years ago (even though they barely invested in the infrastructure in the past), but also include banks which were originally European and which have since parted with their interests in the exchange and settlement organizations at a high profit, meaning that they have also amortized their investments. These companies are now trying to use their order volumes to take over the management of clearing and settlement companies in particular by calling for user participation. They want to adapt these processes to meet their cost needs – not necessarily to the benefit of smaller market participants. This would allow them to process their order volumes in-house (to internalize them) and thus to increase their margins to the detriment of private investors. These very same companies believe, unlike the smaller intermediaries, that they no longer require stock exchanges for the cash market, but only the appropriate clearing and settlement infrastructures.

### **Efficiency and effectiveness only by means of a free market economy approach**

At this point, Deutsche Börse would again like to emphasize its long-standing objective to minimize the trading and settlement costs for the European capital market: “Our mission is to improve the efficiency of markets” (see p. 1). As part of this objective, Deutsche Börse differentiates between trading and settlement costs and makes them transparent. The results of its ongoing endeavors become particularly clear when one considers how long it is taking banks or postal service providers to lower the cost of basic services such as transfers and delivery.

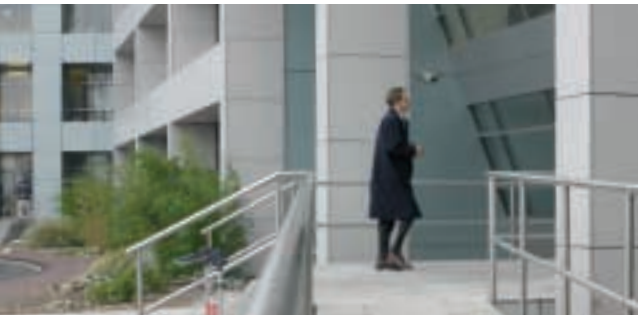
Deutsche Börse Group is trying to streamline the existing diversity on the European markets within the framework of a free market economy. It wants to create value for shareholders, and can only do so by serving its customers to the very best.

Deutsche Börse Group is convinced that its approach benefits all capital market participants – issuers, investors and intermediaries – far better than a public utility company, under the sole control of those who use it, ever could.

In light of the fact that the regulatory structures, for which exchange and settlement organizations are not responsible and which they are unable to influence, account for four-fifths of the problem (see chart on p. 18), Deutsche Börse Group is focusing on that fifth which it can influence: focus on process! The fact is that in the current environment (or, at least, in a very similar one) processes can be streamlined more quickly and with greater benefits than the cross-border harmonization of various different systems in a broader sense. The business model of Deutsche Börse Group, which is integrated along the value chain, is not the expression of an ideology, but of the pragmatic realization to increase advantages to customers, both today and in the future.

### **Process-oriented Group business model**

In spite of its diversified business portfolio and the vast range of transactions at different stages of the value chain, Deutsche Börse is running what is ultimately a monolithic business. All of its endeavors must focus on improving the securities and derivatives trading process from the incoming order to the final settlement (“money versus securities”) and the custodian services which follow, in the interests of its customers. This means running transactions through the integrated system more quickly, more reliably, more efficiently and with less risk.



### **Harmonization in Europe and beyond possible for all transactions**

The range of transactions which form part of the process chain and resulting portfolio is, however, vast. This means that there are various approaches which could be taken to further harmonize and standardize the European capital market and thus make cross-border transactions more efficient. The vast range of areas covered internationally already offers a host of possibilities which Deutsche Börse exploits at every opportunity.

### **Cash market: Focus on Europe**

It is in this sector that expansion poses the most problems, not only for Deutsche Börse, but for all stock exchanges: the liquidity concentrated on a single trading platform cannot be transferred easily, even with fierce competition. Despite all European harmonization efforts, this is the result of the protection offered by the national regulatory frameworks.

There are, however, three possible models for the consolidation of liquidity: firstly, the purchase of other markets. The French-led Euronext, for example, is attempting to consolidate the Dutch, Belgian and Portuguese markets horizontally on a single technical platform. The difficulty involved in integrating the Dutch market, however, demonstrates how regulatory resistance has to be overcome and traditional patterns of behavior revised.

Secondly, there is the “insourcing” of other markets: Deutsche Börse uses its technical platform to operate the Irish and Austrian markets as well. This allows these markets to benefit from Deutsche Börse’s low unit costs, and trading participants enjoy a wider offering via a single technical point of access. Similar approaches have been taken on the Scandinavian markets as well as on London’s virt-X, which has outsourced its operations to the SWX Swiss Exchange.

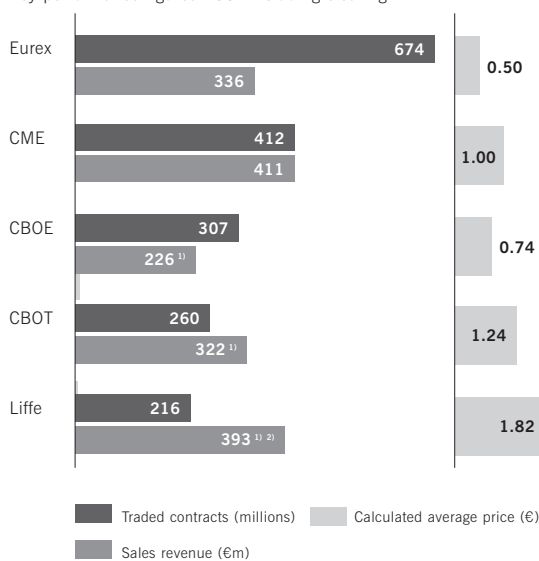
Thirdly, there is the option of merging the cash markets: Deutsche Börse attempted a merger with the London Stock Exchange in 2002. The project could not be implemented due to a series of reasons. Once again, established patterns of behavior among market participants, regulatory differences and national perspectives proved to be major stumbling blocks. Nonetheless, the actual structural and technical dimension did not pose an insurmountable problem then, and it would not pose one today.

**Derivatives market: US equities are on the way**

Eurex, which belongs to Deutsche Börse Group, is the market leader in all derivatives on European underlyings, with the exception of short-term interest-rate futures. This means that even today, it serves an international market. Eurex will now develop the market for derivatives on US underlyings, which, like the market for euro products, is international. In doing so, it is relying on its market model and unrivaled price-performance ratio. One example: it is virtually impossible to make a direct comparison of derivatives trading prices. Figures for turnover and sales revenue demonstrate, however, that Eurex is the clear price leader among the world's major derivatives exchanges: according to the latest available figures for 2001, Eurex generated sales revenue (including clearing) which was lower than, or on a comparable level with that of its main competitors. However, since by far the most contracts are traded on Eurex®, the average price (sales revenue divided by the number of contracts) amounted to €0.50 per contract, compared with between €0.74 and €1.82 for its competitors in Chicago and London. Eurex was also able to generate the highest profits, thus proving that low prices and shareholder value are by no means a contradiction (see chart).

**Eurex derivatives market: Unrivaled price performance ratio**

Key performance figures 2001 including clearing



<sup>1)</sup> Figures include estimated fees of the clearing organizations OCC (CBOE), BOTCC (CBOT) and LCH (Liffe).

<sup>2)</sup> Estimated sales revenue

### **Clearing, information products, settlement and custodian services: Global reach**

Eurex Clearing AG allows Deutsche Börse Group to minimize the risks involved on the derivatives market, and recently also on the cash market, for securities and bond instruments on both exchange and OTC markets across all time zones. With its Information Services, Deutsche Börse focused its data dissemination on Europe, but it achieves worldwide distribution downstream via Reuters and Bloomberg. Its data dissemination platform CEF (Consolidated Exchange Feed) handles data flows from other stock exchanges and trading platforms as well. Clearstream, which is now wholly owned by the Group, settles German securities transactions which are processed on the Xetra® platform, but also OTC securities transactions Europe-wide. This means that no other settlement organization is more active in the field of cross-border securities trading in Europe than Deutsche Börse Group. Clearstream is active internationally in the settlement of OTC bond trading and in all custodian services.

### **Stronger together**

The range of areas it covers allows Deutsche Börse to achieve Group-wide effects for the benefit of its customers that other global exchange and settlement organizations cannot match. This means, for example, that the different product areas covered and interrelations between these products can be exploited: a cooperation with the Finnish derivatives exchange allowed a substantial proportion of the cash market liquidity of Nokia shares to be transferred to the Xetra platform. And with indices such as the Dow Jones STOXX<sup>SM</sup>, the Eurex derivatives market became the unbeatable market leader for European indices.

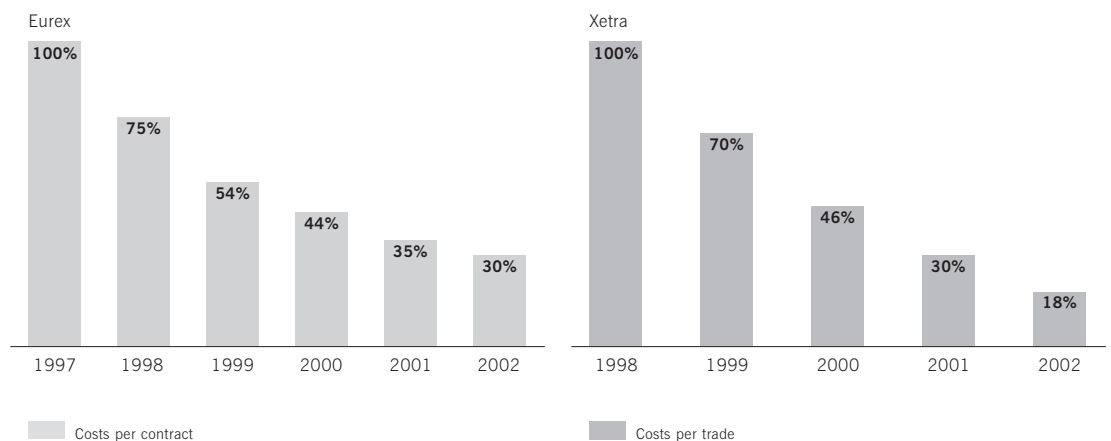
Since Deutsche Börse Group's various services can be accessed via a single network, market participants can procure additional products and services at low access costs. A London-based Eurex participant, for example, can procure the appropriate Xetra services. American market participants, on the other hand, who are already connected to Eurex and use it to trade European interest-rate futures, can, should they wish, connect easily to Eurex's new US exchange, which is to be built. By using interrelations between the technologies used, Xetra and Eurex are able to operate on other markets, too: Xetra serves as the trading platform for Eurex Bonds, and while the EEX<sup>®</sup> energy exchange is operated via Xetra, Eurex enables trading in energy derivatives.

### Economies of scale with highest priority

The efficiency factor of fixed employee costs is almost unlimited. One example: around 70 employees manage 17 different markets on a daily basis, regardless of how stable these markets are at any given moment, in real-time dialogue with hundreds of customers worldwide. The same is true for the technologies used: Eurex Bonds and Eurex Repo, the EEX energy exchange, the stock exchanges in Helsinki, Dublin and Vienna contribute to the economies of scale of Xetra and Eurex (see chart). This means that the Xetra and Eurex trading systems could settle the entire European transaction volume. As such, Deutsche Börse Group should be seen as a highly-efficient

“transaction engine”: now that the relevant functions have been consolidated under one roof and under a single management, Deutsche Börse Group can erect an almost unlimited number of new markets, target new regions and introduce products and services without generating any significant new fixed costs (see chart “Business Model” on p. 14). With its agency agreement model, it can ensure that new transactions incur lower fixed costs than it is the case with competitors who wish to enter the same sectors. Even though it has improved efficiency, Deutsche Börse Group has also created a considerable number of new jobs. Thanks to its global sales success, higher productivity goes hand in hand with higher staff numbers.

### Economies of scale: Again lower unit costs in the cash and derivatives markets





### Numerous opportunities for growth

In its projects for organic growth, too, Deutsche Börse relies on the positive effects of the areas covered. One example of this is provided by the outsourcing projects for intermediaries and institutional investors: the new settlement capabilities resulting from the acquisition of Clearstream, and the combined technical expertise of Deutsche Börse Systems, Clearstream and entory make Deutsche Börse Group a possible provider and, as such, a point of contact for institutions who wish to outsource. It is also using the infrastructures and competencies it has built up in capital market transactions to acquire additional exchanges and settlement organizations. The envisaged transactions must allow significant “spill-over effects” with the areas covered by the acquired company, for example by providing additional volume for an existing platform or by extending the value chain by means of systems solutions via entory AG for the rollout of infrastructures in Europe. And with the Infobolsa cooperation with the Madrid stock exchange, Deutsche Börse can establish a new business in the German-speaking countries before eventually internationalizing further. Finally, it can use the establishment or acquisition of derivatives exchanges in the USA to enable its Information Products division to expand its distribution network into an additional timezone.

### Keeping its distance from takeover euphoria

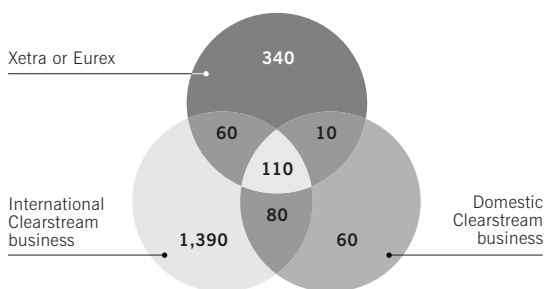
In spite of all of this, Deutsche Börse will not be misled into paying inflated prices for acquisitions. In its sector, more than in any other, the “curse of victory” is a constant threat, because the few acquisition opportunities which do exist do not always create value: the “offering” of acquisition opportunities is still very limited. Most of the organizations are not sellable, and even when they are, their shareholders are not yet ready to sell. Certain combinations could, after all, also give the regulators cause for concern. And even when all of the conditions are right, the targets are still partly too expensive and the synergy effects to be expected do not always compensate for the dilutive effects for the shareholders. This means that the attainable coverage effects must be sufficiently great to at least compensate for the dilutive effects within a few periods. This is why Deutsche Börse’s acquisition strategy is a long-term one, although it is always in a position, both from a financial and an organizational point of view, to bid for an attractive object at short notice.

**Opportunities for cross-selling**

Since the integration of Clearstream International, Deutsche Börse has connections to more than 2,000 wholesale customers worldwide. No other exchange and settlement organization can draw upon a larger customer base. At the same time, only around 5 percent of these customers use all of the types of services offered by Deutsche Börse Group (see chart). This results in an enormous cross-selling potential which will be systematically exploited in the years to come: via Xetra customers to Eurex services and vice versa, from Clearstream Banking Frankfurt to Clearstream Banking Luxemburg and vice versa, from trading to post-trade business and vice versa.

**Huge cross-selling potential:  
Out of 2,050 customers<sup>1)</sup> only 110 use  
the entire service range**

Number of customers



<sup>1)</sup> Customers with business relationships to several areas within Deutsche Börse Group are counted only once.

**Orientation at straight-through processing**

It therefore becomes clear that only a business model based on vertical integration can use fixed costs in the most efficient way possible and exploit the vast range of areas covered for the benefit of a larger, European capital market. Deutsche Börse Group is committed to straight-through processing (STP), the end-to-end processing of an order: our analyses and the opinion of market participants show that the existing cross-process and cross-product STP efficiency in the Group's core function Customers/Markets corresponds to best practice. In this environment, Deutsche Börse Group is focusing on improving its internal processes and reducing costs. The STP initiatives aim to integrate the processes, the collateral deposited and the risk position, and to set standards for securities markets. These initiatives are based on an in-depth understanding of the current and up-and-coming structures in the sector, and the consequences on the Group and its customers.

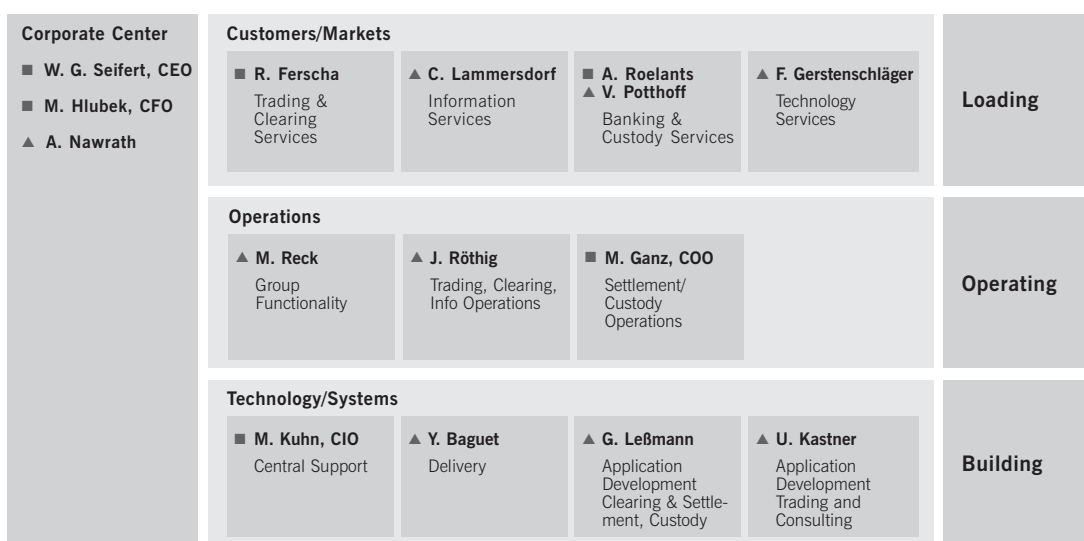
## Functional business model reflected in the management structure

What's unique about Deutsche Börse Group's business model is the "multiple use" of its fixed costs, which it provides in the form of its expertise and systems. Deutsche Börse sees itself as a transactions engine, which operates beyond geographical or political borders and uses the resources it has to trade and settle everything which can be traded and settled at the lowest variable costs. In line with this functional process model, its management has been organized to focus systematically on the continuous improvement of the relevant processes.

## Transformation of complexity into energy – a new management structure

With effect from 1 January 2003, Deutsche Börse Group introduced a new management structure. On the one hand, this structure takes account of the growth of the Group and the demands which come with it, including the further plans for internationalization and the readiness to break into new businesses; on the other hand, it means that the individual segments will be more closely integrated in order to leverage synergy effects, to keep the organizational structure as a whole lean, to optimize decision-making processes and improve cost controlling. At the level of the 15 managing directors, the new structure is conceived in such a way that tasks are allocated in a more function-oriented manner. This move means that the Group is parting with the organizational structure it has had until now, which had been distinctly oriented towards its legal entities.

### New management structure: Focus on core functions



**Adjusted to the core functions:****Building, operating, loading**

Deutsche Börse Group has developed a management structure which reflects the three core functions of its business model (that of a highly-efficient transaction engine), namely the “building” and “operating” of trading, clearing and settlement systems and the “loading” of the systems with transactions, in order to achieve economies of scale and fully exploit its fixed costs. Since the beginning of the year, the organization has been divided into the core functions Customers/Markets Operations and Technology/Systems (see chart on p. 27). This new structure also signals the completion of the full integration of Clearstream International into Deutsche Börse Group.

- The core function “Customers/Markets” combines the former Xetra and Eurex segments with their accompanying clearing services in Trading and Clearing Services. This is Deutsche Börse’s way of reflecting the convergence of the cash and derivatives markets to be recognized on the participants’ side. Further organizational areas in Customers/Markets are Banking/Custody, Information Services and Technology Services (entory AG). Customers/Markets incorporates all of the Group’s marketing operations, allowing it to offer the best possible, one-stop service to its customers. The near-market components of product and service development are also contained in this core function, in order to allow the Group to respond quickly and effectively to the existing and future needs of its customers.

The Chief Executive Officer (CEO) of Deutsche Börse heads this management function personally, thus underlining the increased importance of product development, marketing and sales, as well as the management of the various sales channels.

- The core function “Operations” is split into the three functional areas Settlement/Custody, Trading/Clearing/Information and Group Functionality. It is responsible for improving the integration efficiency by means of straight-through processing, further developing the functionality of the Group’s systems and reducing unit costs. Operations incorporates all customer service functions for operative day-to-day business, i. e. for the use and operation of the trading and settlement systems. Deutsche Börse Group hopes to achieve maximum customer satisfaction by means of its integrated customer services.
- The core function “Technology/Systems” – which, with more than half of all employees, is the largest unit – deals with the centralized further development and operation of all trading, clearing and settlement systems used by Deutsche Börse Group.

**Management network by committees**

A team of 15 managing directors leads the Group in a committee structure comprising Management Committees, Group Committees and an Executive Committee. In accordance with German law, the Executive Committee corresponds to the Executive Board. The Management Committees reflect the three core functions: the CEO is chairman of the Customers/Markets Committee, the Chief Operating Officer (COO) heads the Operations Committee and the Chief Information Officer (CIO) leads the Technology/Systems Committee. In order to link

the three core functions at Group level, four Group Committees were created.

- The Product Development Committee makes sure that the most promising new products and services get the go-ahead for use throughout the organization.
- The Investment Committee is responsible for ensuring that the use of the required resources is in harmony with the company's growth and earnings targets.
- The Risk Management and Compliance Committee monitors the Group's risk position and its integrity in everyday processes.
- The Compensation and Policy Committee ensures that Deutsche Börse's management system is always up to date.

### **Close to the customer**

These management committees, which, particularly in the Customers/Markets Committee, focus systematically on improving the benefits for the customer, consult with the customer committees which Deutsche Börse has established over the past few months. The cash market committees are divided, for example, into primary markets and secondary markets. A diverse range of target groups are represented on these committees, from institutional investors and asset managers, through brokers and fund managers, to private investors. The Group wants to work more closely and more efficiently with market participants. The Advisory Committees advise the Group on the further expansion of the market and help it to drive forward development in the stock market environment.

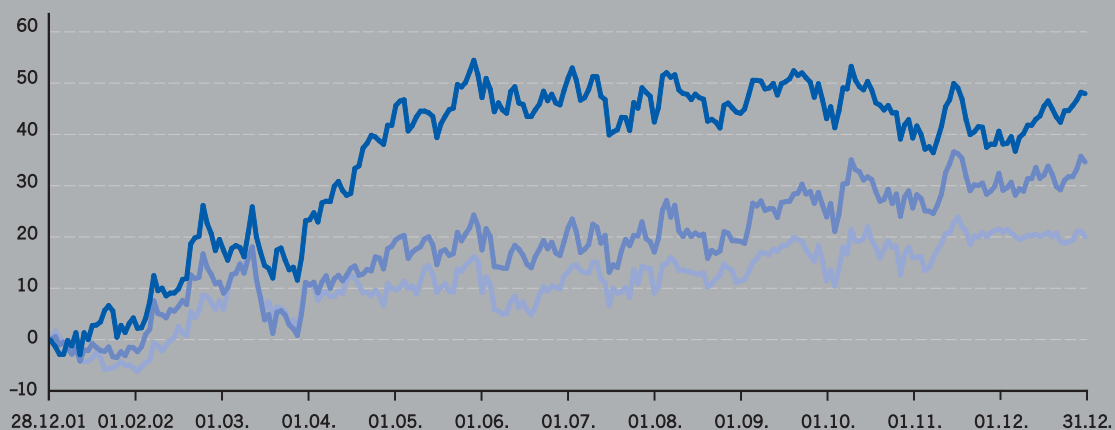
The experience and expertise of the members will allow integrated solutions to be elaborated along the value chain. Regular discussions in the advisory committees allow the Group to make its intentions (be it in relation to new products or improvements to the Rules and Regulations) transparent for its customers in a timely fashion. This brings us back to the remarks in the first part of this text, in which the organizational form of the public utility companies was criticized: no-one is more interested in responding systematically and quickly to the wishes of the customer than an organization which has to, and wants to, bring maximum benefit to shareholders.

Deutsche Börse Group believes that the reasons set out above make its business model a compelling one. The wonderful thing about the free market economy is that every theoretical solution, regardless of how elegant it may be, also has to work in practice. Europe should allow competition between the stock exchanges, also with respect to their organizational forms, instead of limiting customer choice through dirigisme. May the best ideas and organizational forms win! Deutsche Börse Group is confident that its organizational form as a listed stock corporation works, and will continue to work, in practice, and it will again this year offer better products at similar or lower prices in the interests of its customers and shareholders.

- Shares outperform reference indices
- Deutsche Börse AG included in the DAX
- Earnings per share (EPS in accordance with DVFA/SG) amount to €2.18
- Dividend payment to shareholders up 22 percent
- Deutsche Börse receives excellent ratings from agencies
- Further growth in proportion of international and institutional investors

### Deutsche Börse AG shares outperformed reference indices in 2002

Indexed to closing price on 28 December 2001  
in percent



Relative performance of Deutsche Börse share price

- vs. Dow Jones STOXX 600 Technology Index (EUR) (return)
- vs. DAX
- vs. MDAX

Performance of Deutsche Börse share price in absolute figures is shown on the Inside front cover.

## Deutsche Börse AG Shares: Capital Markets Reward Successful Business Model

The end of fiscal 2002 marks nearly two years since Deutsche Börse AG's IPO on 5 February 2001. In this short interval, the company has become firmly established on the capital markets thanks to its diversified business model. After performing well in the MDAX<sup>®</sup>, its shares have now been included in the DAX<sup>®</sup> index. Coverage by analysts has also increased further: 28 analysts – including representatives of almost all of the major investment banks – tracked Deutsche Börse AG's performance by issuing commentaries and reports in 2002. On the one hand, this underscores the global interest in our company's "transaction service provider" business model; on the other, this broad share research has been a key factor behind the changes in our shareholder structure: over 53 percent of Deutsche Börse AG's shares are now held by non-German – primarily institutional – investors. International rating agencies confirm this confidence in Deutsche Börse's business model: Moody's rated the Group Aa1, while Standard & Poor's gave us an AA+ rating.

In the second year after the IPO, Deutsche Börse AG's shares continued strongly outperforming the market overall. Whereas the DAX and MDAX lost 2,267 points (44 percent) and 1,301 points (30 percent) respectively during the same period, and the Dow Jones STOXX<sup>SM</sup> 600 Technology declined by 291 points (57 percent), Deutsche Börse's share price amounted to €38.16 at 31 December 2002, a year-on-year decrease of 12 percent. The highest price for the year amounted to €51.50 on 12 March, the lowest to €32.40 on 1 October (Xetra<sup>®</sup> closing prices).

Share performance – and particularly the relative development as compared with the market overall – is an indicator of the future growth that the capital markets expect of companies. The relative price performance of Deutsche Börse's shares demonstrates that the capital markets anticipate greater growth potential for Deutsche Börse than for most other German blue chips.

### Excellent access to capital markets simplifies financing

Deutsche Börse utilized the financial buffer generated by its IPO to expand the company by acquiring Clearstream International, the securities settlement and custody company, in which it previously held half of the shares. This acquisition strengthens Deutsche Börse's position as a fully integrated transaction service provider and represents another logical step toward further diversifying the company's sources of sales revenue.

### Capital increase oversubscribed three times

The value of the broad ownership structure and the confidence that institutional investors place in Deutsche Börse's shares were evident in June 2002, when Deutsche Börse placed just over nine million new shares from a capital increase on the capital markets in order to finance the acquisition of Clearstream International. This placement met with a great deal of interest among institutional investors despite the difficult market environment: within a matter of hours, all shares had been placed. The offering was oversubscribed three times.

### Financial flexibility maintained

The capital increase enabled Deutsche Börse to maintain its high level of financial flexibility. Thanks to the proceeds from the placement of the new shares of almost €400 million, the need for outside capital was low. After the acquisition of Clearstream International, the Group's net debt amounts to less than €250 million. The excellent ratings and the high level of institutional investor demand for Deutsche Börse's shares will enable the company to continue to utilize the capital markets for raising equity and outside capital to finance value-building acquisitions.

#### Analyst coverage (December 2002)

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| ■ Bankgesellschaft Berlin            | ■ Goldman Sachs                 |
| ■ Bayerische Landesbank              | ■ Hauck & Aufhäuser             |
| ■ Bear Stearns                       | ■ HSBC Trinkaus                 |
| ■ Berenberg Bank                     | ■ HypoVereinsbank               |
| ■ BNP Paribas                        | ■ ING BHF-Bank                  |
| ■ Cazenove                           | ■ JP Morgan                     |
| ■ Commerzbank Securities             | ■ Julius Bär                    |
| ■ Concord Effekten                   | ■ Lehman Brothers               |
| ■ Crédit Agricole Indosuez/Cheuvreux | ■ Merrill Lynch                 |
| ■ Deutsche Bank                      | ■ M.M. Warburg                  |
| ■ Dresdner Kleinwort Wasserstein     | ■ Morgan Stanley                |
| ■ DZ Bank                            | ■ Sal. Oppenheim                |
|                                      | ■ Schroder Salomon Smith Barney |
|                                      | ■ SEB                           |
|                                      | ■ UBS Warburg                   |
|                                      | ■ WestLB                        |



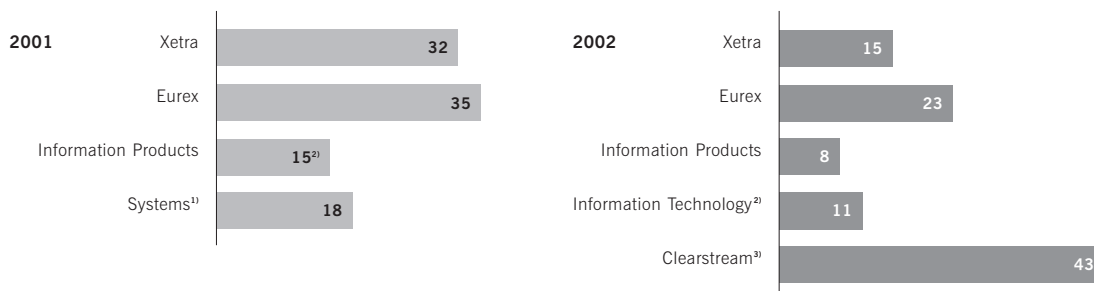
## Inclusion in the DAX thanks to diversified business model

With effect from 23 December 2002, Deutsche Börse AG was admitted to the DAX. The key factors in the decision were market capitalization and exchange volume, as with any other admission to or exclusion from the index.

This acceptance into the DAX only 22 months after initial listing underscores Deutsche Börse's dynamism and successful strategy. Deutsche Börse's value-added business model enables it to grow faster than its competitors – a factor that is rewarded by the capital markets. As at 31 December 2002, the market capitalization of Deutsche Börse AG was €4.3 billion, making the company one of the twenty largest included in the DAX.

## Clearstream diversifies Deutsche Börse further

Sales revenue by segment in percent



<sup>1)</sup> Sales revenue Deutsche Börse Systems and Xlaunch

<sup>2)</sup> Sales revenue IT Division incl. Deutsche Börse Systems, entory and Xlaunch

<sup>3)</sup> Clearstream pro forma for 2002 as a whole

## Earnings per share reflect positive company performance

Beyond its highly traditional name, Deutsche Börse (which means “German Stock Exchange”) is much more than just a marketplace organizer for trading in German equities: the company is a transaction service provider that opens up the global capital markets to companies and investors with state-of-the-art technology. Deutsche Börse is more diversified than its competitors, offering a range of products and services that span the entire customer process chain from front to back office.

The positive performance of this diversified business model is reflected in the earnings of Deutsche Börse Group. The Group grew substantially, with sales revenue up 15 percent (from €760.3 billion in 2001 to €1,106.5 billion in 2002) and EBIT up 26 percent (from €278.1 billion in 2001 to €351.2 billion in 2002). In 2002, earnings per share (EPS in accordance with DVFA/SG) amounted to €2.18, an increase of 7 percent.

### Earnings per share

	2002	2001
<b>Number of Deutsche Börse AG shares as at 31 Dec.</b>	111,802,880	102,760,000
<b>Average number of shares</b>	107,615,903	99,763,014
<b>Earnings per share in accordance with DVFA/SG (€)</b>	2.18	2.04
<b>Distribution to shareholders (€m)</b>	49.2 <sup>1)</sup>	37.0
<b>Distribution per share (€)</b>	0.44 <sup>1)</sup>	0.36

<sup>1)</sup> Proposal for 2002

## Development of Deutsche Börse's sales revenue and profit in the last 10 years

	Sales €m	Profit before tax from ordinary activities €m
1993 <sup>1)</sup>	231.2	49.4
1994 <sup>1)</sup>	245.8	28.3
1995 <sup>1)</sup>	268.1	26.8
1996 <sup>1)</sup>	296.4	46.6
1997	340.4	84.4
1998	455.1	123.3
1999 <sup>2)</sup>	599.0	131.5
2000 <sup>2)3)</sup>	648.9	218.9
2001 <sup>2)</sup>	760.3	319.2
2002 <sup>2)</sup>	1,106.5	374.4

<sup>1)</sup> Consolidated financial statements in accordance with the HGB

<sup>2)</sup> Deutsche Börse Clearing AG was fully consolidated until 1999. The 50 percent interest in Clearstream International S.A. was carried at equity following the merger of Deutsche Börse Clearing AG with the operations of Cedel International S.A. to form Clearstream International S.A. Following the acquisition of Cedel International S.A., Clearstream International S.A. has been fully consolidated since 1 July 2002.

<sup>3)</sup> Sales revenue for fiscal 2000 restated to exclude net licence fees collected on behalf of the regional exchanges.

The continuity in the company's dividend policy reflects the anticipated further growth of the Group. Deutsche Börse intends to increase its dividend per share by 22 percent year-on-year. A total of €49.2 million will be distributed to shareholders (€0.44 per share). The yield per share, which includes the share price performance and dividends, therefore amounted to -10.7 percent.

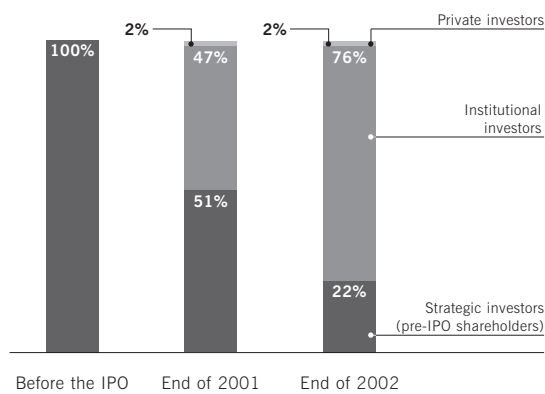
### Proportion of international investors rises

The change in the shareholder structure also indicates the value placed on Deutsche Börse's business model by the capital markets. In 2002, the proportion of shareholders from other countries increased significantly and now totals over 50 percent. At the same time, the number of financial investors, who are focusing on sustained value growth, has grown as compared with the number of strategic investors. This is a positive sign for Deutsche Börse Group: the company's market-oriented approach strengthens its efforts to increase shareholder value.

Paramount goal of Deutsche Börse AG is and will remain the continuous improvement of the benefits to be gained by the clients. Accompanying this is the company's aim to upgrade its own value along the entire process chain. Deutsche Börse AG anticipates continued growth again in 2003.

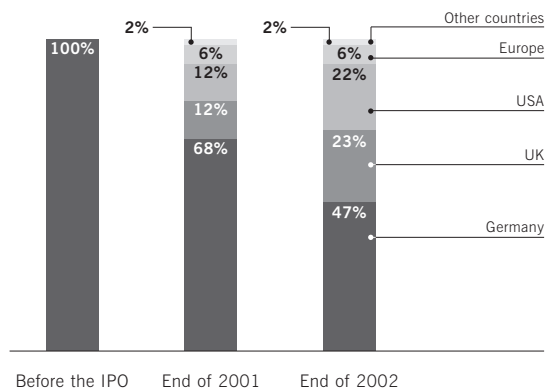
### Institutional investors hold majority of shares

Shareholder structure



### International investors more strongly represented

Geographical distribution



- Number of staff increases almost threefold due to acquisitions of Clearstream International and entory
- Highly qualified international team
- Attractive salaries and first-rate social benefits
- Conscious promotion and development of qualified employees
- Management recruited from own ranks

#### Deutsche Börse Group employees

Division	2002	2001
<b>Number of employees as at 31 Dec.</b>	3,318	1,123
<b>Xetra</b>	179	194
<b>Eurex</b>	142	116
<b>Information Products</b>	161	84
<b>Information Technology</b>	1,448	–
thereof: <b>Deutsche Börse Systems</b>	533	536
<b>Clearstream TEC</b>	571	n.a.
<b>entory</b>	336	388
<b>Xlaunch</b>	8	8
<b>Corporate Services</b>	449	185
<b>Clearstream</b>	939	n.a.
<b>Sales revenue per employee<sup>1)</sup> (€ thousands)</b>	481	748
<b>Average age</b>	35.9	36.4
<b>Percentage of university-educated employees</b>	68.0	64.4

<sup>1)</sup> Based on the average of full-time equivalent (FTE) employees

## Our Staff: Skills Base Increases

After the acquisition of the IT service provider entory and the clearing organization Clearstream International in fiscal 2002, the number of staff employed by Deutsche Börse Group increased almost threefold. For the company, this means a substantial increase in highly qualified employees and therefore even better conditions for its business success. Depending on their position in the value chain at Deutsche Börse, employees have special skills due to their training as economists, lawyers, computer scientists, or physicists, for example. They are highly analytical and result-oriented, and possess the social competence to take responsibility early on. Deutsche Börse Group offers employees very attractive salaries and above-average social benefits, while training staff via special courses as well as directly on the job. In 2002, the Group became even more international, opening up a whole new range of career development opportunities for employees.

2002 was dominated by volatile capital markets and a weak labor market. This was the backdrop against which Deutsche Börse successfully integrated the employees of two newly acquired companies into the Group. After the acquisition of the IT service provider entory and the clearing company Clearstream International, Deutsche Börse Group employed 3,318 permanent staff as at 31 December 2002 – almost three times as many as the year before (see table on opposite). 1,738 of these employees were employed by Clearstream International, and 336 by entory, including its subsidiaries Finnovation GmbH and

Silverstroke AG. The employee turnover rate amounted to 8.7 percent. Deutsche Börse employs a young, especially well-educated and international team. The average employee age is 36 years, while 68 percent of the staff are university-educated. At present, staff are employed at 17 sites in 11 countries. As at 31 December 2002, the company employed 3,126 staff from the EU (Germany: 1,783, France: 360, UK: 225, Luxembourg: 175, other EU countries: 583) and 192 employees from other European countries and overseas.

## Deutsche Börse Group offices and number of employees

as at 31 December 2002

	Office	Number of employees
<b>Germany</b>	Frankfurt <sup>1), 2), 3), 4)</sup>	1,593
	Berlin <sup>3)</sup>	1
	Ettlingen <sup>4)</sup>	232
	Hamburg <sup>4)</sup>	8
	Cologne <sup>4)</sup>	2
	Munich <sup>4)</sup>	17
<b>Europe</b>	Luxembourg <sup>2)</sup>	1,190
	Lisbon <sup>5)</sup>	6
	London <sup>1), 2)</sup>	98
	Madrid <sup>5)</sup>	68
	Paris <sup>1), 2)</sup>	13
	Zurich <sup>3)</sup>	16
<b>America</b>	Chicago <sup>1), 3)</sup>	36
	New York <sup>2)</sup>	11
	São Paulo <sup>2)</sup>	5
<b>Asia</b>	Dubai <sup>2)</sup>	3
	Hong Kong <sup>2)</sup>	19
<b>Total</b>		3,318

<sup>1)</sup> Deutsche Börse and Deutsche Börse Systems

<sup>2)</sup> Clearstream

<sup>3)</sup> Eurex

<sup>4)</sup> entory

<sup>5)</sup> Infobolsa

## Recruitment

Deutsche Börse is among the most attractive employers in Germany. This has been confirmed by various studies and surveys conducted among staff members and university graduates. The majority of Deutsche Börse's employees are recruited via the Internet. Both applicants and employees value the company's excellent training and development opportunities, job security, and market success. Deutsche Börse Group's corporate culture and image as an employer are a solid foundation for the recruitment, development and long-term commitment of employees to the company.

## Training and development

The training options for employees of Deutsche Börse Group were also influenced by the need to integrate Clearstream International and entory in 2002. Employees participated in more than 270 different seminars on topics such as software applications, foreign languages, interpersonal skills, and specific stock exchange issues at Deutsche Börse, entory and Clearstream International. Starting in 2003 the internal training program will also be accessible via the electronic staff-training portal.

Deutsche Börse regularly proves that commitment within and to the company is worth it: nearly 80 percent of management is recruited from the company's ranks as a result of the conscious promotion of employees who stand out due to their extraordinary skills, creativity, and high level of commitment.

Deutsche Börse Group favors flexible structures, flat hierarchies, and short decision-making chains. Highly qualified beginners and experienced experts work together in project teams to encourage knowledge transfer and accountability.

## Performance and remuneration

Deutsche Börse offers highly attractive salaries and above-average social benefits. An integrated human resources system will be implemented in the coming year to make employee development and remuneration even more transparent. Skills and performance are the key criteria here.

Deutsche Börse Group will introduce an employee stock program in 2003 to link remuneration more directly to individual performance and the success of the company.

### The Infobolsa team:

#### Financial information for professionals

Within less than six months after the acquisition, the ten-member project team succeeded in positioning Infobolsa Deutschland GmbH as a supplier of up-to-date capital and money market data. The new company is a subsidiary of Infobolsa S.A., a joint venture between Deutsche Börse AG and Bolsa de Madrid; within the past ten years, this company has developed into the leading supplier of financial information in Spain and Portugal (see p. 70).

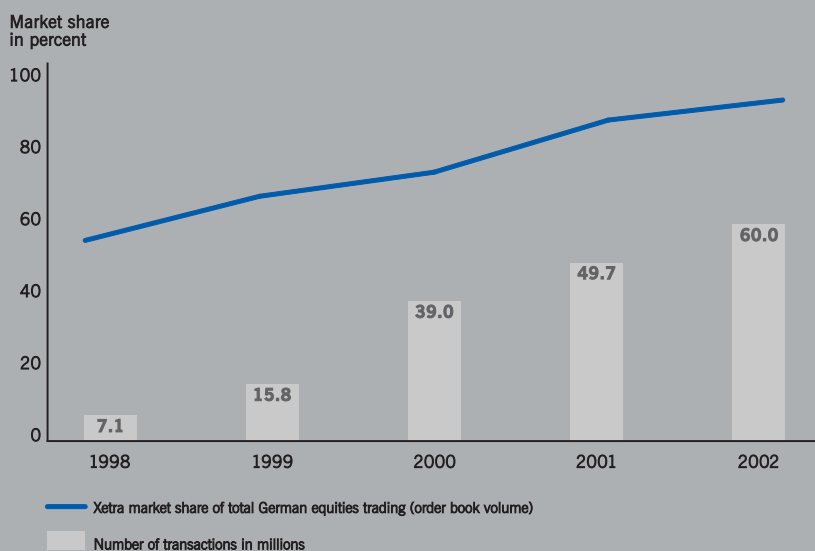
Eight team members – three from Infobolsa S.A. and five from the Information Products and Information Technology divisions of Deutsche Börse – first examined the technical conditions for the German-Spanish partnership and analysed the requirements of the German market. The team then designed the prototype for a financial information system, which was ready for the first pilot implementation at a customer's company after only six months.

Michael Rode (31) is responsible for product development within the Infobolsa project. "The team worked hard to achieve this success, both in Frankfurt and for several longer periods in Madrid", Michael Rode says. Infobolsa was his first international project of this dimension. And he was thrilled by the challenge: "Which other company gives you the opportunity to build something completely new with a highly motivated team while allowing you maximum freedom to do so"?

Thomas Book (31) and his team took care of all the financial and legal issues surrounding the establishment of Infobolsa. "It was great fun to steer this team with colleagues from various cultures toward a common goal", concludes Book. What fascinates him about the Infobolsa project are its prospects: "The formation of Infobolsa Deutschland GmbH is the first step toward building a major European information supplier. The market should watch out for us"!

- Sales revenue of Xetra segment down by 13 percent to €10.8 million
- EBIT down to €17.4 million (minus 55 percent)
- Number of transactions on Xetra increased by 21 percent, market share further enhanced
- New segmentation of equity market increases transparency and legal certainty
- Greater efficiency for market participants thanks to central counterparty
- Position as one of the leading index funds trading platforms asserted
- Launch of Xetra BEST: price guarantee and immediate order execution

#### Xetra increases number of transactions and enhances market share





## Xetra: Setting Standards, Creating Structures

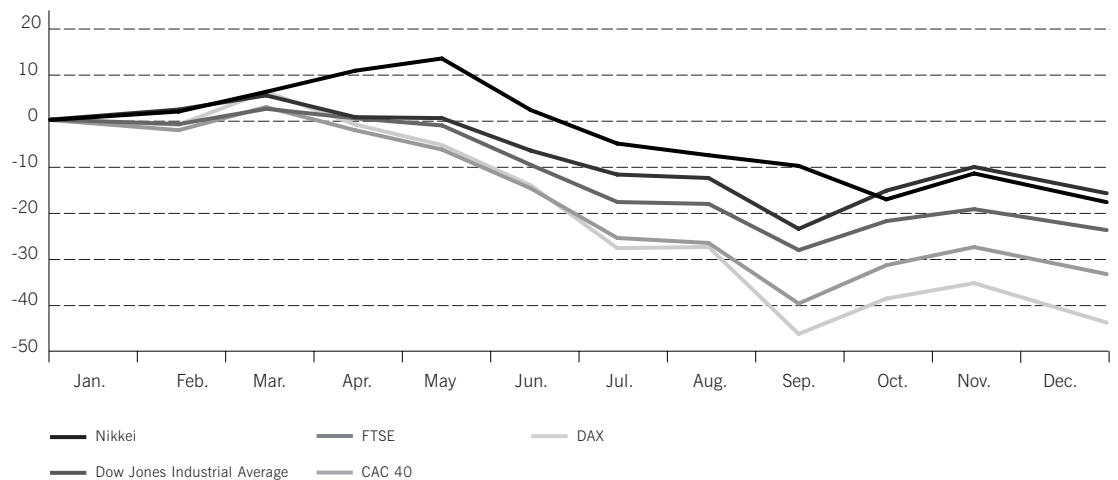
The slump on the equity markets continued in 2002. However, Deutsche Börse's Xetra Division was able to maintain its position in this difficult environment. At the same time, it set standards and created structures that offer the potential to increase its value when the markets pick up. These include establishing a new structure for the German equity market, which has already been the European leader in terms of transparency and investor protection. Other innovations – such as the expansion of the equity market infrastructure to include an equity central counterparty or the improved conditions for executing customer orders on Xetra® (Xetra BEST®) – prepare the ground for future growth. Xetra is also synonymous with the systematic automation and internationalization of securities trading. The trading system bundles liquidity in a network spanning 16 countries. It operates independently of the trader's location, substantially lowers transaction costs and provides deep insight into the order book by documenting the bids and asks for every security that can be traded. This ensures transparency and fairness for all market players.

2002 again saw sharp setbacks in equity prices around the world. International benchmark indices hit all-time lows, and the DAX® was disproportionately affected (see chart on p. 48). The reasons for this include a global economic slowdown spanning all sectors and the extreme restraint being shown by private investors. Correspondingly, the market was unreceptive to new issues in 2002. With only four IPOs on the FWB® Frankfurter Wertpapierbörse (the Frankfurt Stock Exchange), issuing business remained muted. Despite the adverse market environment, the Xetra Division expanded its position in fiscal 2002.

The total number of transactions on Xetra rose to 60.0 million in 2002 (as against around 49.7 million in the previous year) – a year-on-year increase of 21 percent. However, sales revenue failed to match the previous year's figures; in total, it amounted to €210.8 million (as against €243.1 million in 2001) which corresponds to a decrease of 13 percent. This is because part of the Xetra fees are measured in terms of the value of traded shares, which has fallen in 2002. Nonetheless, prices for trading in Xetra have remained constant.

## DAX underperformed other blue-chip indices

Performance of international benchmark indices in 2002  
in percent



In 2002, the Xetra Division continued to invest in laying the foundations for future growth. Xetra developed the central counterparty for securities trading and founded the subsidiary Deutsche Börse Computershare in October 2002 to tap the German market for services geared to the issuers of registered shares.

The division partially offset falling sales revenue through savings in external and operating costs, and by reintegrating Newex®, the market segment for Central and East European securities. In 2002, operating and network costs in the Xetra Division amounted to €42.5 million, as against €47.3 million in the previous year. Earnings before interest and taxes (EBIT) declined by 55 percent to €17.4 million – particularly as a result of investments in the central counterparty (€15.8 million). All in all, the Xetra Division contributed 5 percent to Deutsche Börse Group's total earnings.

## German capital market pioneers investor protection and transparency in Europe

Over recent years, the German capital market has experienced dynamic development at a regulatory level; in many cases, Deutsche Börse AG was the agent of this change. In fiscal 2002, it focused in particular on investor protection and the modernization of stock exchange law.

Following the introduction of the "Viertes Finanzmarktförderungsgesetz" (Fourth German Financial Market Promotion Act), Deutsche Börse restructured the equity market. The new structure, which is both clearer and more consistent, became effective on 1 January 2003, and replaces the previous mix of multiple markets, segments and sector divisions. Deutsche Börse can now meet the requirements of issuers and investors with even greater precision.

At the heart of this reform are two clearly differentiated admission standards: the Prime Standard and the General Standard.

- In the Prime Standard, issuers must meet transparency requirements that comply with the information requirements of international investors. A listing in the Prime Standard is a precondition for admission to a Deutsche Börse selection index.
- The General Standard is based on legislative requirements and acts as the entry segment to the German capital market. Its regulations are compulsory for all issuers.

#### One market – two standards

As of second quarter 2003, issuers can choose between admission to the Prime or the General Standard. The two standards each have different transparency requirements that companies must subsequently meet.

##### Prime Standard

Additional transparency through

- quarterly reports
- international accounting (IFRS/IAS or US GAAP)
- financial calendar
- at least one analysts' conference per year
- ad hoc disclosures in German and English

##### General Standard

Statutory requirements, such as annual and half-yearly reports and ad hoc disclosures in accordance with German law

Transparency and attractiveness on the one hand, and legal certainty and integrity on the other are preconditions for high-quality, efficient capital markets. The new structure will make the German equity market even more attractive for national and international investors, while the greater legal certainty will boost investor confidence.

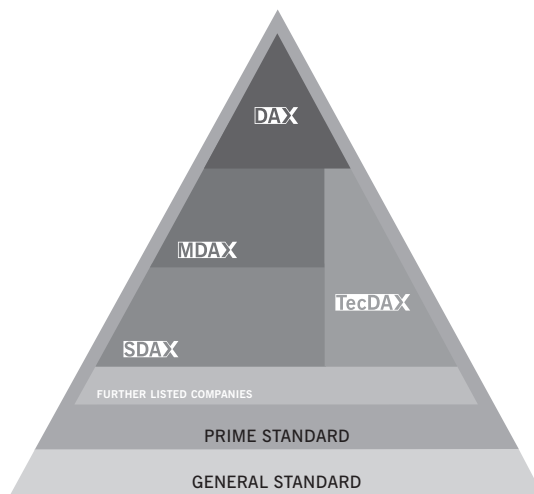
#### New indices offer greater clarity

Parallel to the restructuring of the equity market, Deutsche Börse has introduced an index system that is oriented to different investment strategies. The DAX still represents the 30 largest German securities (blue chips). Below the DAX, a distinction is made between traditional and technology sectors. Deutsche Börse's index for the traditional sectors is the MDAX<sup>®</sup>, which will be reduced from 70 to 50 securities (mid caps). Technology companies will be listed in the TecDAX<sup>®</sup>, the new technology index, which will represent the 30 largest technology securities. The SDAX<sup>®</sup> comprises 50 securities and comes directly below the MDAX as a selection index for smaller companies (small caps). The CDAX<sup>®</sup> (Composite DAX) continues to comprise all German securities in the Prime and General Standards across all sectors and segments.

A company may only be admitted to one of the selection indices – DAX, MDAX, SDAX and TecDAX – if it meets the additional transparency requirements of the Prime Standard and is continuously traded on Xetra. The three selection indices below the DAX are also open to foreign companies whose home market is Germany. The NEMAX<sup>®</sup> 50 Neuer Markt Index will be calculated until the end of 2004, in order to ensure the continuity of the financial products based on it.

## New indices create the most transparent equity market in Europe

Deutsche Börse selection indices



### Neuer Markt: Role model for transparency and liquidity

As of the end of 2003, Deutsche Börse will discontinue Neuer Markt as an independent segment; instead it will be fully integrated into the Prime Standard. Companies can choose the new segment as their IPO platform. All securities still listed on Neuer Markt and in SMAX® may be traded without restriction, regardless of the restructuring of the equity market.

With the resegmentation of the equity market and the introduction of a clearer set of indices, Deutsche Börse drove forward key restructuring processes in fiscal 2002. In future, it will exchange its role as innovator for that of a moderator, helping to coordinate the sometimes divergent interests of market participants and legislators.

### Close coordination with customers

Products and services have to meet the requirements of different customer groups. Deutsche Börse coordinates the central themes with its customers in equally-represented committees. In the Primary Markets Advisory Committee, for example, employees of Deutsche Börse discuss together with representatives of issuers, investment banks and investors the future structure of the primary market. The Investors Advisory Committee, which is made up of representatives of leading institutional investors, advises Deutsche Börse on the expansion of its spectrum of products and services tailored specially to investor needs (see also p. 96ff.).

### Central counterparty: Fewer risks and greater efficiency for market participants

Since 1998, there has been a Eurex central counterparty for derivatives; in Q1/2003, Deutsche Börse will also introduce the central counterparty (CCP) for the Frankfurt Stock Exchange's cash market.

How does the central counterparty work? When a securities transaction takes place, Eurex Clearing AG acts as a counterparty for both the buyer and the seller, who thus conclude the transaction anonymously with the central counterparty, rather than each other. This anonymity simplifies complex trading strategies involving equity market, derivatives market and index products. Then, the central counterparty assumes the default risk and offsets the participant's purchases against its sales (netting). Only the resulting balance is invoiced in line with the principle of "delivery against payment". To allow the CCP to perform this function, cash market participants deposit collateral with it in the form of cash, securities, or book-entry securities.

With the CCP, Deutsche Börse is investing in the sustained improvement of the securities trading infrastructure: it is extending the two-link processing chain of trading and settlement to include a clearing component. The central counterparty is Deutsche Börse's answer to the growing demands for standardization, risk management and efficiency in the securities business.

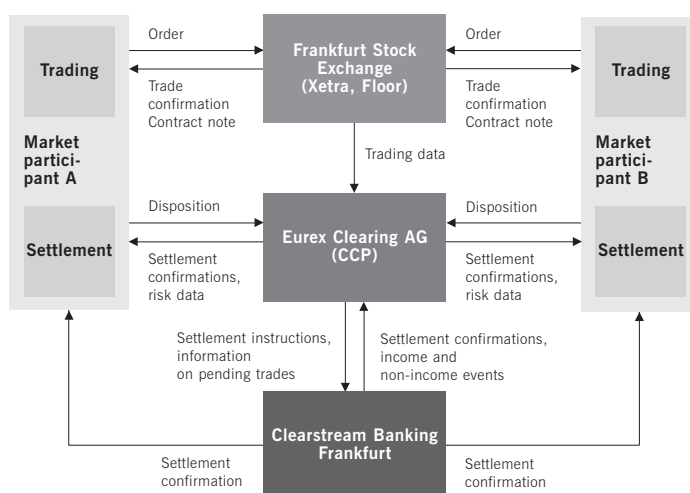
The CCP product range is initially limited to German collective custody shares tradable on Xetra. The first release of the central counterparty provides the foundation for a fully integrated clearing house that will consolidate Deutsche Börse's position as a one-stop provider of securities services. With future releases, Deutsche Börse plans to extend the product offering to include foreign shares, exchange-traded funds and OTC business (off-exchange trading), for example.

#### **Xetra price model: Individual use of different services**

Parallel to realizing the Equity CCP, the Xetra Division will launch a new price model on 1 April 2003. In future, trading, clearing and settlement are to be invoiced separately. Compared with the previous all-in price for trading and settlement, the new system will make it easier for customers to individually use the various services of Deutsche Börse and make price comparisons with competitors.

Under the old pricing model, prices in Xetra trading were already linked to the volume of an order, with a floor and a ceiling for each individual order. This principle will be retained in the new Xetra pricing model, but a change in the applicable limits will see small orders become cheaper and large orders more expensive. Even with this new pricing regime, Xetra will be the price leader among the European exchanges.

#### **The CCP model: Anonymous trading at lower risk**



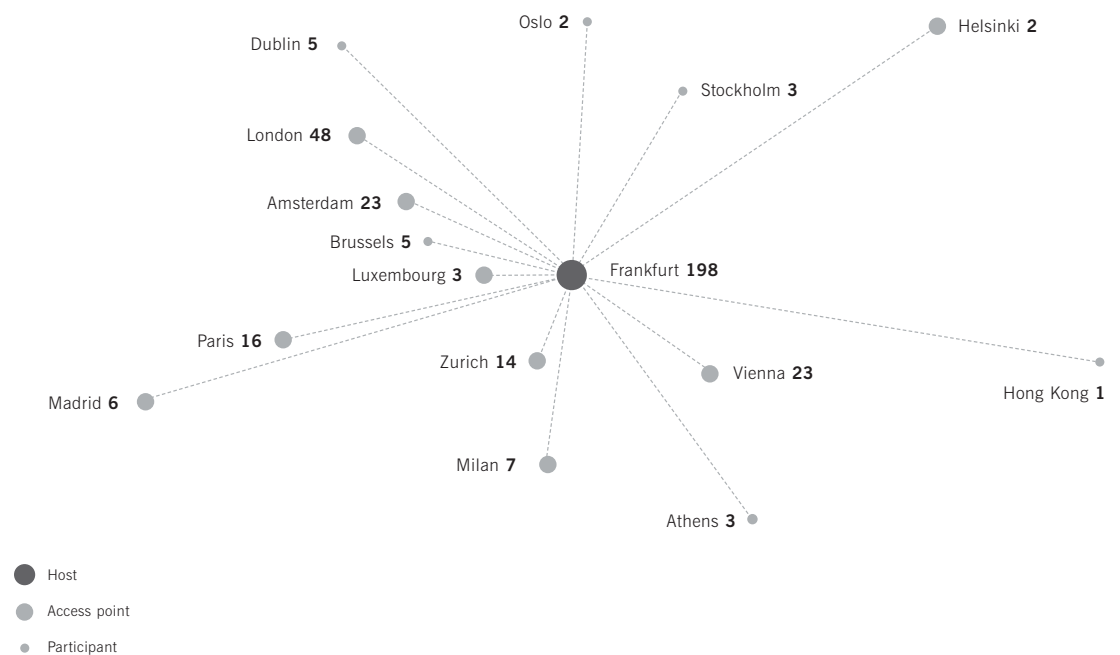
#### **Xetra BEST: Price guarantee for private investors thanks to best execution of customer orders**

Xetra Best Execution – or Xetra BEST for short – is a new service with which Deutsche Börse has reinforced the competitive position of its Xetra platform. Xetra BEST highlights Deutsche Börse's skill in reacting to market requirements quickly and flexibly and in promoting the concentration of liquidity on a single trading platform.

Since 2 September 2002, the Xetra Division has been offering banks and securities trading houses an additional alternative for order execution: they can either execute orders on Xetra or use Xetra BEST internally to net them against their portfolio. However, a precondition is that they calculate a better price for their customers than the current Xetra price. Private investors have the advantage of a price guarantee, and Xetra BEST also ensures immediate execution of their orders.

### Increased international significance of the Xetra platform

Trading participants on Xetra as at 31 December 2002



### Deutsche Börse Computershare: Professional issuer services

Deutsche Börse Computershare GmbH is a joint venture between Deutsche Börse AG and the Australian company Computershare Ltd. The company's core services are share register management, general meeting services and Internet voting.

In choosing Computershare Ltd., Deutsche Börse partnered with the most efficient provider of issuer services in the business. Computershare, founded in 1979, manages data for around 68 million shareholders worldwide and provides services to listed companies, investors, stock exchanges and financial services providers.

Deutsche Börse Computershare, based in Frankfurt/Main, was formed in the autumn of 2002, and is currently managing data of around six million registered shareholders.

### **XTF Exchange Traded Funds: Sales revenue growth with innovative products**

Two years ago, Deutsche Börse introduced a segment for exchange-traded funds (ETFs) under the XTF® brand. In 2002, XTF was the most successful segment in terms of order book volumes on the Frankfurt Stock Exchange after the DAX, and one of the strongest ETF markets in Europe in terms of sales revenue (almost 45 percent). Deutsche Börse offers investors major advantages as against the competition: the largest network of participants in the world, a link between the cash and derivatives markets based on a standardized technological infrastructure and the lowest transaction costs.

In addition to the ETFs themselves, the shares the funds are based on are also traded on Xetra. Parallel to this, the Eurex derivatives exchange offers derivatives of the ETF base indices, and became the world's first exchange to offer trading in ETF options and futures on 18 November (see also p. 62).

In 2002, the funds generating the greatest sales revenue were the DAX<sup>EX</sup> at €13.65 billion and the Dow Jones Euro STOXX 50<sup>EX</sup> at €9.04 billion. These two products alone accounted for 32 percent of the European market for ETF trading. Currently, 65 index funds and 23 actively managed funds are listed on Deutsche Börse's XTF segment. In offering the pan-European sales platform XTF, Deutsche Börse provides the investment funds with access to further markets and customer groups.

### **Xetra expands into new markets**

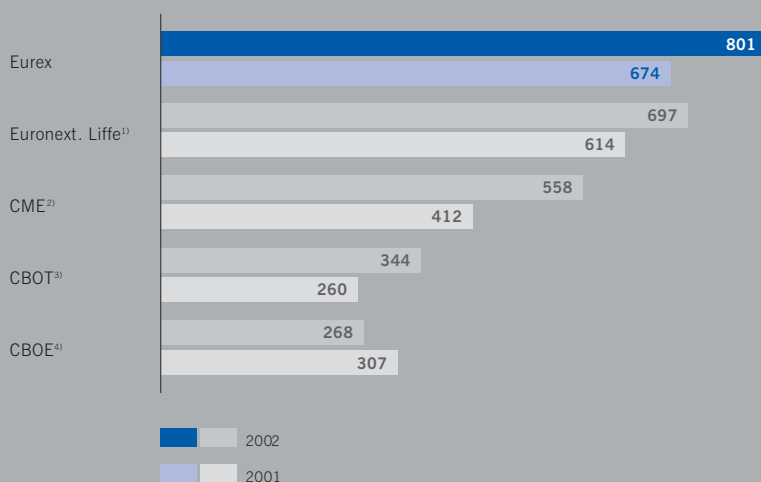
In 2001, Deutsche Börse began admitting international shares to Xetra trading under the name "Xetra Global Markets" in order to further increase its market share. Under this one-stop-shopping concept, investors can trade in foreign blue chips with a high degree of liquidity and at low cost on Xetra, implement complex trading strategies with international stock options on Eurex and settle all their orders at domestic rates through Clearstream.

Xetra Global Markets currently comprise Xetra US Stars® and Xetra European Stars® – i. e. the Dow Jones Industrial Average, Dow Jones Global Titans 50, S&P 100 and Nasdaq 100 securities, as well as the Dow Jones Euro STOXX 50<sup>SM</sup>'s Dutch, French, Belgian and Finnish securities. Today, the entire Euro STOXX 50 on Xetra has already achieved a level of liquidity similar to that of the MDAX.

- Eurex increases sales revenue by 23 percent to €31.6 million
- EBIT grows to €158.3 million (plus 60 percent)
- Leading position as derivatives exchange in the world
- World market leader for capital market products and stock options
- Index products record largest increases (plus 60 percent)
- Eurex drives forward development of global network and taps US growth market

### Eurex increases lead over competitors

Annual transaction volume  
in million contracts



<sup>1)</sup> Joint venture of the derivatives exchanges in Paris, London, Brussels, and Amsterdam. The volume of the index contracts traded on Euronext in Paris is considerably smaller than that of the other exchanges.

<sup>2)</sup> Chicago Mercantile Exchange

<sup>3)</sup> Chicago Board of Trade

<sup>4)</sup> Chicago Board Options Exchange



## Eurex: Success in Volatile Markets

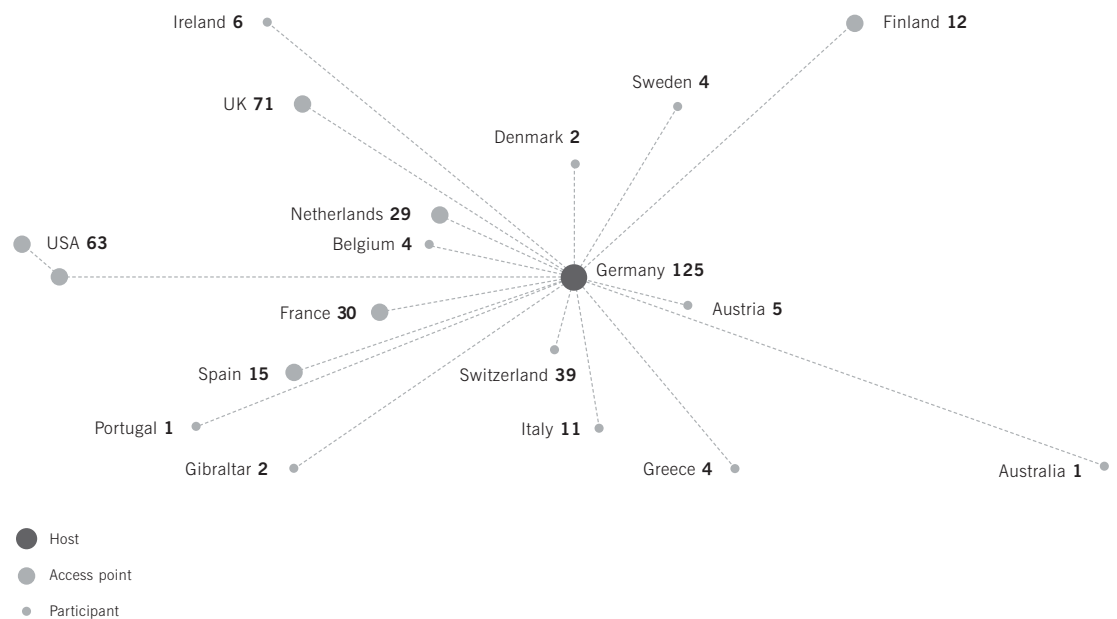
The Eurex derivatives exchange is the world market leader for trading and clearing futures and options. Its global distribution network for derivatives market products with 424 participants in 18 countries and over 10,000 trading screens, the integration of trading and clearing and an attractive product portfolio make the Eurex Division the largest growth driver in Deutsche Börse's business model. The Xetra and Eurex divisions are closely tied to one another. The cash markets supply the underlyings for products on derivatives markets in the form of shares and bonds. In 2002, the volatility of the equity markets boosted demand for derivatives. It also further reinforced the trend towards risk management optimization and neutral clearing platforms, which also help to reduce credit risk. In fiscal 2002, Eurex launched Europe's fastest-growing derivatives market products by introducing sector indices; it attracted new customer groups and expanded its cooperation with off-exchange markets.

The Eurex derivatives exchange, a joint venture between Deutsche Börse and SWX Swiss Exchange, impressively confirmed its leading position for trading and clearing financial derivatives in fiscal 2002: after increasing the volume of contracts traded by almost 50 percent in 2001, Eurex went on to improve this figure by a further 19 percent in 2002. 801.2 million contracts were traded.

October 2002 was the most successful month in Eurex's history to date: it achieved a new volume record with 86.5 million contracts, an increase of 36 percent year-on-year (October 2001: 63.7 million contracts).

**Global distribution network:****424 Eurex participants with more than 10,000 trading screens in 18 countries**

as at 31 December 2002



Eurex's core business is trading in capital market products: it is the world market leader in this field. In 2002, it achieved a European market share of more than 90 percent and a world market share of around 60 percent, with a trading volume of 446.6 million contracts. The most frequently traded product was the Euro Bund Future, which accounted for around 24 percent of trading volume or 191.2 million contracts (a year-on-year increase of 7 percent). This has been the world's most actively traded contract since January 1999.

Trading in the Euro Bobl Future amounted to 114.6 million contracts in the past year, corresponding to a 15-percent increase; Euro Schatz Future contracts rose by 17 percent to 108.7 million.

Even stronger trading volume growth was recorded for equity- and index-based derivatives. In fiscal 2002, Eurex posted a trading volume of 354.0 million contracts for these products – 34 percent more than in the previous year. The largest share (210.7 million contracts) related to the equity index derivatives segment. On average, Eurex generated a trading volume increase of 60 percent with these products, which include

futures and options on the DAX®, Dow Jones Euro STOXX 50<sup>SM</sup> and NEMAX® 50, among others. The stock options segment recorded 8 percent more contracts as against 2001, for a total of 143.3 million. In fiscal 2002, Eurex became the largest stock options exchange in the world, based on the value of the underlying shares, overtaking the Chicago Board Options Exchange (CBOE), the previous world leader.

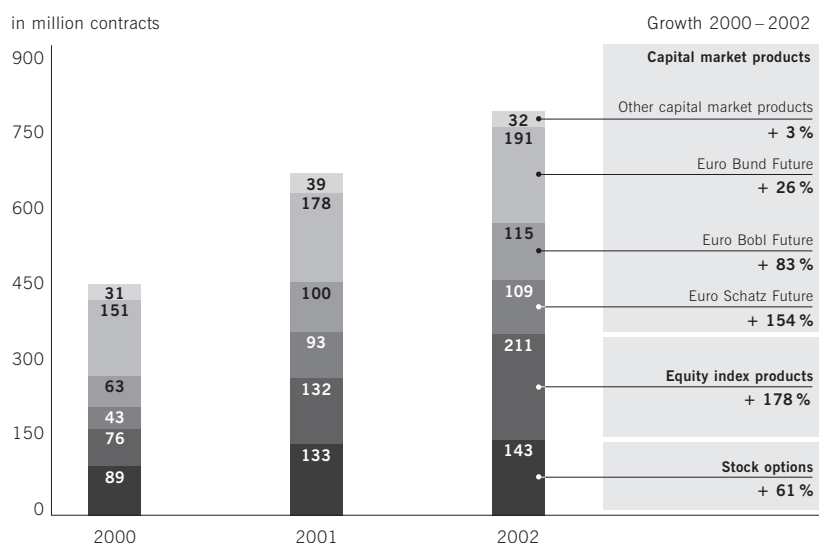
What makes Eurex’s product portfolio particularly interesting is its diversity, which has continued to improve with rising volume. Despite Eurex’s double-digit growth rates, Euro Bund Futures are now only responsible for around 24 percent of total volume (2000: 33 percent), while the proportion accounted for by the equity index segment rose from around 16 percent in 2001 to over 26 percent in 2002. This broader diversification makes Eurex trading products more attractive for investors.

**The Eurex product range**

- Capital market products, e. g. Euro Bund, Euro Bobl, Euro Schatz
- Equity index products, e. g. futures and options on the DAX, NEMAX, Dow Jones Euro STOXX and exchange traded funds (ETFs)
- Equity products, e. g. German, Swiss and international equity options
- Money market products, e. g. Euribor Futures, Euribor Futures options

Eurex generated sales revenue totaling €331.6 million in fiscal 2002 with these trading volumes, a 23-percent increase year-on-year. 80 percent of the German-Swiss joint venture’s earnings are included in the income statement of Deutsche Börse AG as earnings contributed by the Eurex Division.

**Rising trading volume in capital market, equity and index products**



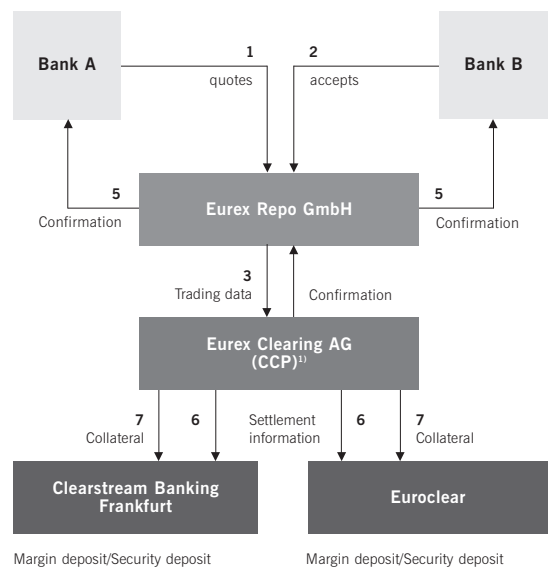
Costs went down by 2 percent and stood at €247.0 million in 2002 (2001: €252.6 million). The Eurex Division's earnings before interest and taxes (EBIT) for 2002 were up roughly 60 percent on the previous year's figure at €158.3 million. At 45 percent, they are the largest contributor to Group EBIT. In 2002, Eurex was again the most successful and fastest-growing segment of Deutsche Börse Group.

### Eurex Bonds and Eurex Repo: New trading platforms for new customers

On 22 May 2002, Bundesrepublik Deutschland Finanzagentur GmbH (the German Finance Agency, which is the German government's central service provider for credit financing issues) started trading on the Eurex Bonds and Eurex Repo platforms. The Agency's involvement emphasizes the growing significance of fully electronic bond and repo trading. The German Finance Agency brings the number of participants on Eurex Bonds to 23 banks and trading houses and the total number of Eurex Repo participants to 21.

Repo transactions allow low-cost, low-risk management of short-term liquidity. A repurchase agreement (repo) entails the sale of securities with a simultaneous agreement to buy back securities of the same kind at a later date.

#### Processing a euro repo transaction



<sup>11</sup> Contractual relationships exist between bank A and Eurex Clearing AG (CCP) as well as between bank B and Eurex Clearing AG (CCP).

**Eurex Bonds**

is the fully electronic platform for OTC bond trading and is operated by Eurex and major bond trading houses. In addition to German government bonds, Eurex Bonds offers issues by the Kreditanstalt für Wiederaufbau (KfW – German Development Bank), the European Investment Bank and individual German states, as well as Jumbo-Pfandbrief (mortgage bond) issues.

**Eurex Repo**

is the European marketplace for repo trading (sale and repurchase agreements) in German bonds and Jumbo mortgage bond issues as general collateral for secured fund-raising and special repos for lending specific securities with terms from one to 365 days. In November 2002, the outstanding volume on Eurex Repo totaled nearly €10 billion.

## Equity index derivatives: International products for internationally oriented investors

From an investment strategy viewpoint, European products will continue to grow in significance as economic integration in Europe increases. While only 10 percent of the equity index contracts traded on European exchanges were European at the beginning of 2001, Eurex's Dow Jones Euro STOXX<sup>SM</sup> contract has now achieved a market share of more than one third of all European

equity index contracts. Together with DAX, Dow Jones STOXX and SMI index contracts, Eurex has a European market share of almost 60 percent, based on the value of the underlyings.

### Derivatives contracts on sector indices

Institutional investors operating on a global scale in particular have their sights set on the European market as a whole; they prefer to invest in cross-border sectors rather than in individual securities on national markets. Reflecting the internationalization of investment behavior, Eurex has introduced a total of twelve additional futures and options contracts on European sector indices. On 22 April 2002, Eurex launched futures and options on the Dow Jones Euro STOXX index's automotive, energy and insurance sectors, followed by the financial services, media and utilities sectors on 23 September. The leap in volume can be taken as an indication of the increased attractiveness of the index derivative range: trading in Dow Jones STOXX sector index futures and options rose to around 14,800 contracts per day in 2002 – seven times the figure for the previous year.

### Options and futures on European ETFs

In 2001, Eurex became the first European exchange to offer exchange-traded fund (ETF) derivatives. Eurex was also the first exchange in the world to introduce ETF futures in addition to options. The derivatives exchange is reacting here to developments on the cash market, where the number and transaction volume of ETFs is rising constantly (volume increase in 2002 as against 2001: around 41 percent).

Deutsche Börse's Xetra Division commenced trading in ETFs in 2000. On 18 November 2002, Eurex launched ETF futures and options on the market. These products supplement the range of traditional hedging instruments. Institutional investors welcome the possibility of diversifying more greatly their investment activities, and use these instruments for precise risk management. ETF futures and options offer three key advantages:

- Management of smaller risk positions is optimized.
- They open up arbitrage and trading opportunities between the derivatives and cash markets.
- They are structured for physical delivery.

### Fully electronic trading a success factor

Eurex, just like its predecessors DTB and Soffex, has been a fully electronic exchange since it was founded in 1998. Its powerful and highly accessible software contributes to the efficiency of trading and clearing; new releases constantly improve on functionality and ensure consistently high performance.

Eurex offers its customers a fully integrated trading and clearing platform for the settlement of the entire derivatives trading process chain. As no additional clearing fees are incurred, Eurex's all-in prices are unbeatable. In addition, extending integrated clearing services to include cash market products (fixed-income securities and shares) enables joint valuation of cash and derivative positions. Thus, participants in both markets can profit from lower costs.

The Eurex range of products is developed in close coordination with the clients. Working groups are held at regular intervals with market participants to discuss new ideas and suggestions (see also p. 96ff.).

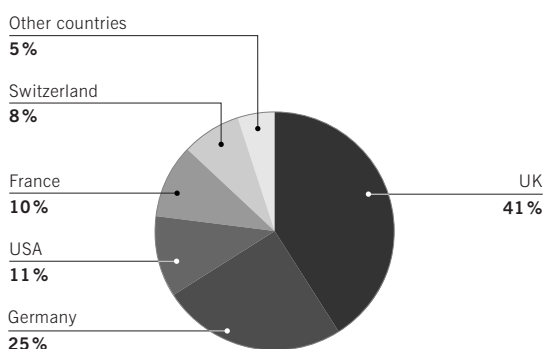
### Eurex taps US growth market

It's not just the product range that is becoming more international. For example, Finnish stock options are traded at Eurex within the framework of the cooperation with HEX (Helsinki Exchanges). With some 20 million contracts (2001: 15 million), the option on Nokia is one of the most frequently traded stock options on the Eurex derivatives exchange.

Eurex is opening up a growing number of international markets and is experiencing above-average growth abroad: in 2002, Eurex generated almost 70 percent of its trading volume with international participants (companies headquartered outside Germany or Switzerland). This corresponds to year-on-year growth of 7 percentage points. 41 percent of the trading volume was accounted for by UK participants, up 8 percentage points from 33 percent in 2001. At the same time, the share of the volume traded by German participants declined to 25 percent (2001: 31 percent).

#### Eurex – Focus on business with international customers

Share of volume by region



Eurex reached two milestones on the US market – a market made all the more important by its growth potential. First, Eurex has been permitted to offer European sector index products in the US as well, from spring 2002. The approval for this was granted on 2 April 2002 by the Commodity Futures Trading Commission (CFTC) supervisory authority. This means that Eurex participants in the US can now trade these contracts directly from the US.

Second, the restructuring of the *a/c/e* alliance between Eurex and the Chicago Board of Trade (CBOT) in July 2002 enables Eurex to extend its current derivatives business in the US to include products with US underlying, and to establish its own exchange. These plans underpin Eurex's global growth strategy.

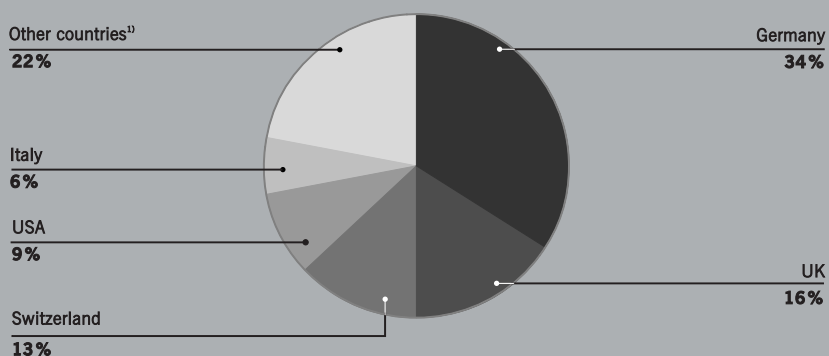
Eurex and CBOT agreed at that point to end the alliance as it had originally been laid out in January 2004 – nine months before its scheduled end in October 2004. They also lifted all restrictions regarding products and areas of cooperation which, initially, had not been supposed to be reassessed before 2008. The new structure of the alliance grants Eurex greater flexibility in its products, technology and future strategy.

The restructuring of the *a/c/e* alliance allows Eurex to establish its own exchange in the US under US regulation. Trading in US interest rate, index and equity product derivatives is expected to commence on the new US exchange in early 2004. Customers will be able to use the current Eurex® and *a/c/e* infrastructure for both US and European products, thereby profiting from the cost-efficient, direct access to the entire spectrum of Eurex products.

- Sales revenue up by 11 percent to €121.5 million
- EBIT grows to €34.3 million (up 102 percent)
- Significant growth in the Real-time Information business area thanks to new packaging
- New index system ensures improved transparency
- External marketing of historical price and trading data successful
- Equity interest in Infobolsa S.A. opens up attractive growth opportunities

### International marketing of IP products

Distribution of sales revenue in percent



<sup>1)</sup> France (5%), Austria (2%), Luxembourg (2%), Netherlands (2%), Spain (2%), among others



## Information Products: No Information – No Trading

Information is essential to all financial market transactions: no one would invest in securities without company-specific reference data, prices, and index levels. Often, however, market participants are confronted with a flood of information that is difficult to sift through. The Information Products (IP) Division channels these massive information flows by filtering out the most essential data, offering customers focused products that are tailored to their individual needs. IP calculates, distributes, and markets classic cash market indices, such as DAX<sup>®</sup>, MDAX<sup>®</sup> and, since March 2003, TecDAX<sup>®</sup>, which are well known to private investors as well as professionals. However, the majority of the division's sales revenue is generated by prices and information for professional investors.

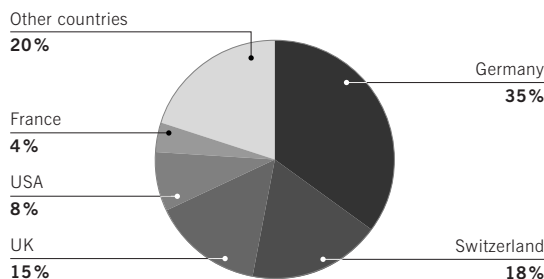
Despite the weak leads from the capital markets, the Information Products Division grew strongly in the 2002 reporting period, contributing substantially to the growth of the Group. Sales revenue rose from €109.9 million in 2001 to €121.5 million in 2002, up 11 percent. The significant increase in sales revenue combined with strict cost management resulted in above-average EBIT (€34.3 million, up 102 percent over the previous year). In 2002, Information Products (IP) contributed 10 percent of Deutsche Börse Group's overall earnings.

Although IP is distributing an ever-increasing volume of data, the division's costs remained stable in the year under review. IP benefits from the scalability of its systems, which are designed to handle growth in data volumes – this is especially true for the Consolidated Exchange Feed (CEF) central distribution system, which delivers the division's information. Another factor that affected the cost structure positively in the past fiscal year was the reuse of systems designed to be utilized in-house to develop products for external clients; the data warehouse StatistiX<sup>®</sup> is one example of these systems.

IP is relatively immune to economic volatility; the division is primarily involved in the business-to-business market, mostly and increasingly on an international basis: around 70 percent of the terminals to which IP supplies the “Cash Market Germany (Frankfurt/Xetra)” product are located in European countries other than Germany or in the USA. As a result, IP generates more than two thirds of its revenue outside of Germany.

#### International terminal connections

Distribution of terminals for the “Cash Market Germany (Frankfurt/Xetra)” real-time product in percent



#### Precisely tailored information for investors

Information Products is Deutsche Börse Group's information factory, and its raw material is financial data. The data is collected from Deutsche Börse's electronic trading platforms and other sources, compiled into a uniform format, processed to produce premium products, and marketed to clients. All five of IP's business areas – Real-time Information, Indices, Research Services, Back-office Services, and Information Solutions – are integral to this process chain. These business areas develop and distribute products that are tailored precisely to clients' information needs.

Market players view Information Products as their partner: they can rely on the quality of the products, the service and advice. Focusing on the customers' needs is a central task for all segments of the division – from product design to distribution and administration. The price structure also reflects the notion of partnership; in some cases, they lie way below those of international competitors.

#### Real-time Information

At 9 percent, Real-time Information generated the highest sales revenue growth in the division in 2002. This business area distributes and markets the trading data of Deutsche Börse Group and its international cooperation partners. Its hit product “Cash Market Germany (Frankfurt/Xetra)”, which was relaunched in a new format in 2002, documents the performance of Germany's central cash markets (FWB® – the Frankfurt Stock Exchange – and Xetra®). This data package contains price information on German shares, German and international bonds, warrants and exchange-traded funds. In combination with the “Regional Exchanges Germany” package, this product covers the German cash market.

#### Indices

In fiscal 2002, demand for index-based products increased sharply. IP's sales revenue from licenses for index funds, index certificates, and index-based futures and options grew in the year under review. The DAX<sup>EX</sup> index fund managed by Indexchange Investment AG advanced to become the largest exchange-traded fund in Europe in 2002 with a fund volume of €1.1 billion. The successes of IP's partners are shared by the division:

## Products by IP's main business areas

Business area	Products	Sales revenue 2002 €m
<b>Real-time Information</b>	Price information on German equities, German and international bonds, options, and exchange-traded funds	99.4
<b>Indices</b>	Licenses for index products (index funds and index certificates, among others)	9.5
<b>Back-office Services</b>	Wertpapier-Service-System (securities service systems WSS and WSS Online) and service system for fulfilling notification requirements (TRICE) according to § 9 WpHG (German Securities Trading Law)	10.0

license income increases in line with the relevant fund's volume. This is why IP was able to boost 2002 license income by a healthy 12 percent to approximately €8.3 million.

In parallel with the restructuring of the stock exchange, the Information Products Division designed an index system oriented to investment strategies. In addition to selection indices, a series of benchmark indices offer investors yardsticks for use in assessing the performance of their portfolios. The new range of indices to be launched in March 2003, makes the German capital markets more transparent and therefore more attractive to German and international investors (see also p. 49f.).

### Research Services

Excellent service levels, data updated daily and regular information quality assurance form the cornerstones of the StatistiX data warehouse. Since 2002, products based on this data warehouse have been available to external clients. StatistiX combines current and historical price

and trading data from more than ten systems operated by Deutsche Börse Group and generates statistics and analyses on all aspects of the German financial markets from these sources. StatistiX clients are financial services providers who require this information for sales, investor relations, risk management, compliance, or financial management functions. The content of StatistiX data is comparable and can be structured as needed. As a result, financial services providers can analyse their in-house trading activities in detail thanks to StatistiX.

In the year under review, the first two products from the StatistiX product family were launched: the "Ranking" and "Internal" info cubes. The Ranking Info Cube calculates the market share and market position of a trading participant in all relevant market segments and periods as compared with other market participants. It documents the strengths and weaknesses of the market position of the relevant company's trading desks and supports the development of trading strategies. The Internal Info Cube is an interactive analysis tool for flexibly analysing companies' securities trading activities. It enables users to prepare sophisticated analyses of the activities of individual departments and traders.

### Back-office Services

In 2002, IP greatly simplified access to Deutsche Börse's information products for banks, thereby expanding the customer base for its back-office services. One example of this is "WSS Online via Internet", which was launched in October 2002. WSS Online provides access to real-time and historical information updated daily from the Wertpapier-Service-System (WSS) via the Internet. The information provided includes data from all German stock exchanges, WM Datenservice, Reuters and the International Securities Market Association (ISMA) on over 250,000 securities listed in Germany and abroad. No additional investments in technical infrastructure on the customer side are required for access to this information via the Internet.

For securities listed in Germany, the relevant cash settlement and closing prices, their time of origination and sales revenue according to order book statistics are available in addition to real-time information. Securities that are listed abroad are also included in "WSS Online via Internet". Users can access closing prices from foreign stock exchanges that are transferred to WSS after the bell on the American exchanges.

### Information Solutions

The acquisition of an equity interest in Infobolsa S.A. (Spain) enabled the Information Solutions business area to expand its value chain in fiscal 2002 and to take advantage of new potential for growth.

Infobolsa, which was formed in 1990, has quickly become the leading supplier of real-time financial information in Spain and Portugal, where the company reduced the market share of established providers. In November 2002, Deutsche Börse acquired a 50-percent interest in Infobolsa and appoints the chairman of the Supervisory Board. Deutsche Börse aims to penetrate the entire European market for financial information terminals and services in cooperation with the Madrid stock exchange, which owns the remaining 50-percent interest in Infobolsa. Infobolsa S.A. and its subsidiaries were fully consolidated as at 1 November.

Infobolsa's proven, stable business model also underpins this partnership. Infobolsa Deutschland processes real-time financial information and distributes it via terminals or a consolidated data feed. This service includes German and international stock, bond, and derivatives markets, money and commodities markets, as well as financial news. Moreover, Infobolsa supplies fund information, company master data, and analyses of more than 40,000 companies. It specially designs its information products to meet customer requirements and sells them at an attractive price-performance ratio. These products are mostly intended for professional end customers at banks and providers of financial services.

### International partnerships

The international orientation of the Information Products Division is also evident in the new product and service ideas developed in cooperation with highly qualified international partners. Examples from recent years are the iBoxx® index family (real-time bond prices and indices), which IP calculates with the help of leading investment banks, or the joint venture STOXX Ltd., in which Information Products now holds a one-third interest.

The iBoxx indices are successful the world over; so much so that the fund management company Xavex created a fund based on iBoxx in May 2002, which has generated an unusually high level of sales revenue. Its volume rose to around €1.8 billion in the year under review. Information Products signed an agreement on the development of ETFs (exchange-traded funds) based on iBoxx indices to be marketed globally in conjunction with Barclays Global Investors (BGI), the market leader in ETFs based on fixed-income securities in the USA. Initial products will be launched in the first six months of 2003.

### New information on fixed-income securities

The Information Products Division has been distributing data from the Eurex Bonds electronic trading platform on an exclusive basis since 1 September 2002. Eurex Bonds is a leading platform for electronic bond trading and has been operated jointly by Eurex and top bond market participants since October 2000 (see also p. 60).

The link between the Eurex Bonds trading platform and the Xetra and Eurex® system architecture connects the cash and derivatives markets so that bond trading and basis trading can be combined in a single centralized quote book.

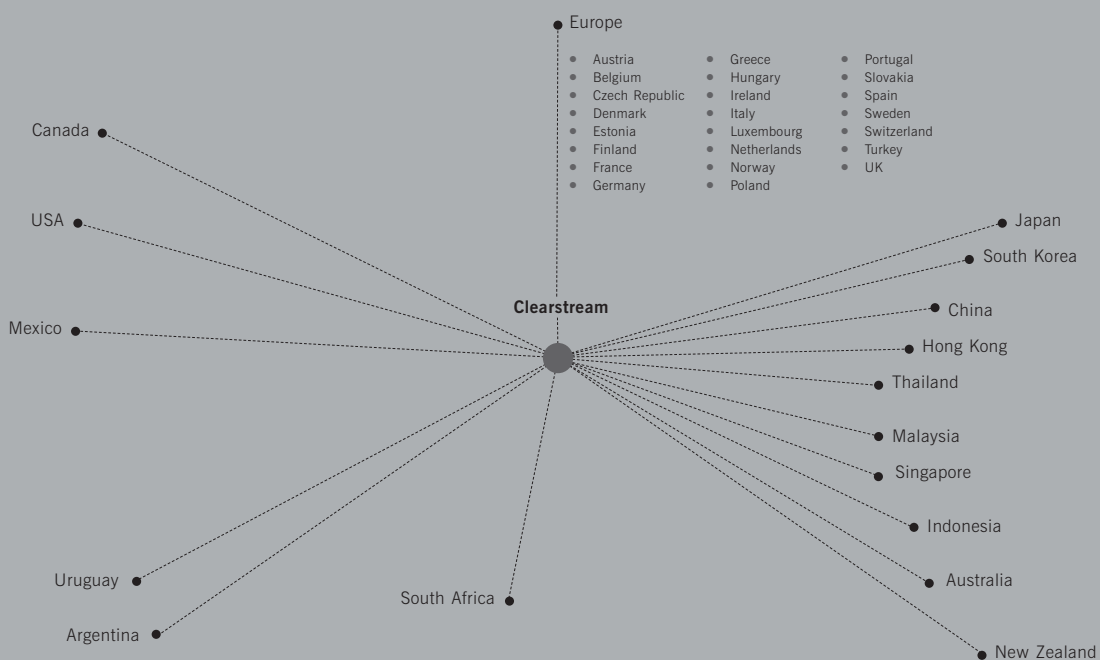
Mid-December 2002 marked the launch of eb.rexx®, a new index family for fixed-income securities. These indices are based on prices from the Eurex Bonds trading platform. eb.rexx is the world's first index family whose underlyings are publicly accessible, tradable and traded prices. The easily reproducible and transparent indices serve as the foundation for attractive financial market instruments such as exchange-traded funds on the institutional market.

### Growth prospects and further internationalization

Information Products continually aims to expand its data sources in order to provide all trading participants with information about as many markets as possible. The North American market in particular holds a great deal of potential, both as a source and as a consumer of data. IP plans to expand its central distribution system (Consolidated Exchange Feed, CEF) in order to optimally supply this target market. In addition to further pursuing internationalization of CEF, the division is working on alternative delivery channels to simplify access to high-quality data for end customers in particular.

- Integration of Clearstream makes Deutsche Börse only full-service securities infrastructure provider
- Clearstream's results fully consolidated since 1 July 2002
- Gross revenue of Clearstream International down 7 percent to €908.0 million for full-year 2002
- EBIT up 19 percent to €197.0 million thanks to increased efficiency
- Clearstream offers world's largest network of domestic links
- Further improvements in service and easier access

**39 markets worldwide linked to Clearstream**



## Clearstream: Efficient Processes

The acquisition of Europe's leading clearing and settlement organization Clearstream International in July 2002 marked a milestone for Deutsche Börse Group: thus, the Group has become the pre-eminent provider of integrated trading and settlement services for both fixed-income and equity instruments. With a fully integrated Clearstream, Deutsche Börse Group is the only securities service provider to offer access to all key products and services, from trading and information products through to clearing, settlement and custody of securities. Since 2002, Clearstream has been focusing on improving the efficiency of its processes and has systematically extended its functionality and network to markets and customers, as well as improving service levels and facilitating access.

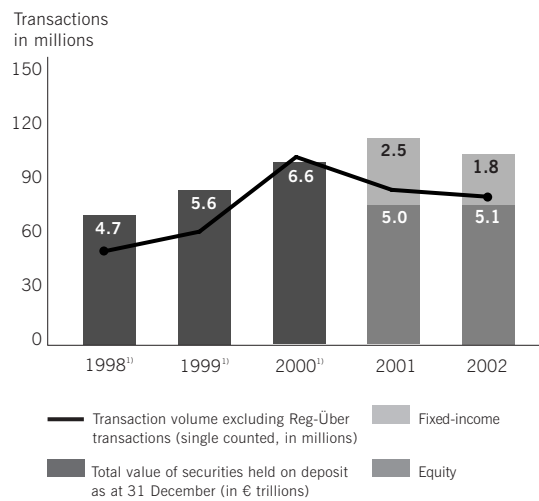
Due to difficult market conditions, the number of securities transactions in 2002 decreased by 4.2 percent to 82.1 million transactions, compared with 85.7 million in 2001 (excluding so called Reg-Über transactions). The value of the assets held on deposit at Clearstream declined by 8 percent to a total value of €6.9 trillion at 31 December 2002. The value of fixed-income securities remained stable – in fact increasing slightly by 0.3 percent to €5 trillion. In contrast, the slump in global equity markets led to a reduction of 26 percent in the value of equities held on deposit by Clearstream. The total number of equities held in custody, however, roughly remained the same.

In the year under review, Clearstream recorded gross revenue of €908.0 million, down 7 percent on the 2001 figure of €980.0 million. This means that the company has held its ground well in the face of difficult market conditions.

Clearstream launched a large-scale cost cutting program, improving productivity by increasing automation of tasks previously performed manually, for example. This focus on operational efficiency across all business areas allowed Clearstream to cut its operating expenses by 20 percent, to €462.1 million compared with €576.4 million in 2001.

The improved efficiency levels enabled Clearstream to record an EBIT for 2002 of €197.0 million, up by 19 percent compared with 2001 (€166.1 million). Before 30 June 2002, Clearstream International contributed €39.0 million to Deutsche Börse Group's earnings on an at equity basis; following the completion of the acquisition and consolidation in the second half of the year, the Clearstream segment contributed €86.4 million.

### Falling share prices cause decrease in value of securities held on deposit



The confirmation in 2002 of Clearstream's AA+ long-term rating by Standard & Poor's and the AA+ long-term rating by Fitch for Clearstream Banking Luxembourg is proof of the long-term stability of Clearstream's business.

### Expanding network reach and functionality

Clearstream has extended its network of domestic links and has expanded the functionality of its systems.

#### 39 markets worldwide linked to Clearstream

In addition to its main business centres in Frankfurt and Luxembourg, Clearstream has five regional offices in Dubai, Hong Kong, London, New York and São Paulo. As of year-end 2002, more than 2,500 customers – banks, custodians and broker/dealers – in 94 countries were connected to Clearstream's global network.

Clearstream's business is becoming more and more international. In January 2002, Clearstream launched automated domestic links via new depository banks to the domestic markets in China and South Korea, bringing the total number of markets covered to 39 and further extending its competitive lead.

Including the new links, Clearstream now serves a total of ten domestic markets in Asia and Pacific Rim countries.

#### Direct link to Hong Kong

In January 2003, Clearstream introduced a direct link to the Hong Kong Monetary Authority (HKMA). Asian investors can now overcome market barriers by clearing, settling and holding Clearstream eligible debt securities via their Central Moneymarkets Unit (CMU) accounts. In this way, Clearstream is strengthening the cross-border settlement infrastructure.

#### Optimizing the process chain for German equities

While European domestic markets are highly efficient, investors and issuers face high costs for cross-border trading and equity holdings. Clearstream has developed a solution targeted at the international market for German securities, CASCADE RTS (Real-Time Settlement). This new service provides an efficient gateway for the international investment community to settle domestic transactions with German securities through Clearstream's settlement system.



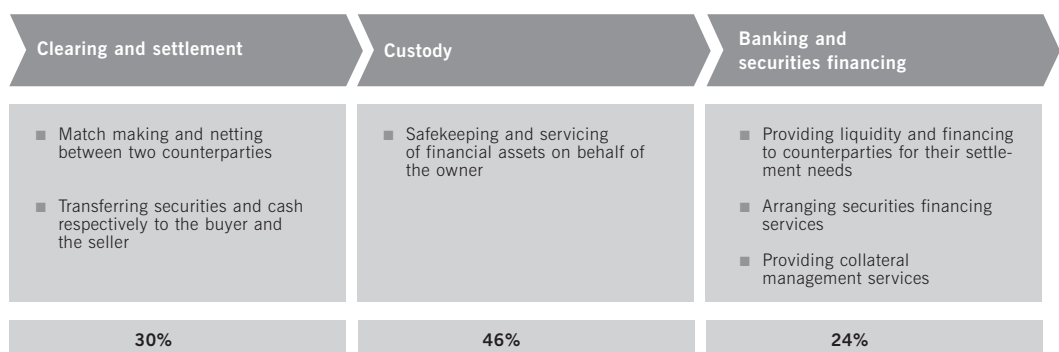
**Settlement and custody: an infrastructure for international capital markets**

The three core business areas of Clearstream are:

- Eurobond and international bond business, where Clearstream acts as an International Central Securities Depository (ICSD)
- the cross-border domestic securities business
- German and Luxembourg Central Securities Depository (CSD) business. As a CSD, Clearstream Banking Luxembourg implements monetary policy measures affecting Luxembourg for the European Central Bank and Banque centrale du Luxembourg.

Clearstream provides appropriate processing services required for each of these business areas (see chart below). Clearstream’s business focuses on fixed-income instruments – mainly international bonds. A major part of its domestic bonds business is in German government debt securities, which are among the most frequently traded instruments in Europe, and for which Clearstream has the specialist role of a Central Securities Depository. Clearstream has also achieved a strong position in providing services for government debt securities issued by other major European countries, such as France, Italy, Switzerland and the Benelux countries. Clearstream also provides the German market in particular with settlement and custody services for equities traded via Xetra, floor trading and cross-border trading.

**Main steps in the processing chain and their share in revenue**



It streamlines the processes between Clearstream’s ICSD platform (Creation) and the German CSD platform (CASCADE) for domestic securities. This makes it possible to use the full range of functionality, with or without accounting for

the countervalue. Clearstream is one of the first settlement organizations to apply the ISO 15022 standard, which was initiated by SWIFT, to its own systems. In addition, custody processes have been automated and are now available via SWIFT.

### **High quality and efficiency of custody services**

In the custody area, Clearstream is systematically increasing both customer benefit and its own efficiency. Optimized services allow customers to settle and process corporate actions, taxes and income payments more easily. This applies both to securities clearing and to the collective safe custody of Xetra Stars®. The improved services in these areas enable Clearstream to support Deutsche Börse Group's objective of offering customers high-quality straight-through processing (STP) capabilities. For example, new data feeds have been added to supplement information coverage for custody customers. Clearstream has also enhanced customer reporting by standardizing text input for custody management and the use of transaction reference numbers.

The market obviously appreciates Clearstream's quality initiative. The number of corporate actions in STP mode rose noticeably in 2002, and 2003 will see substantial improvements in this area.

### **New service provided for Bundesrepublik Deutschland Finanzagentur**

In September 2002, Bundesrepublik Deutschland Finanzagentur GmbH, the German government's finance agency, commissioned Clearstream exclusively to provide liquidity in German government debt securities via the Automated Securities Lending and Borrowing (ASL) program.

ASL is an integral part of Clearstream's settlement processing. It enables borrowers to avoid the consequences of settlement failures while allowing lenders to earn an additional return from their portfolios. Based on the daily liquidity requests from Clearstream's customers, the German government's finance agency effectively monitors and acts upon market conditions. Both customers and the whole market benefit from the ability to inject liquidity into German government bond trading with this innovative solution.

### **International issues now easier**

At the end of May 2002, Clearstream, Euroclear and the Depository Trust and Clearing Corporation (DTCC) launched a new service, called European Pre-Issuance Messaging (EPIM). It ensures the secure exchange of issuing information between market participants, including banks, dealers, issuing and paying agents, securities depositories and numbering agencies. EPIM automates the processing of new issues of European commercial paper and related money-market instruments in international capital markets. EPIM's central messaging hub links all parties involved in issuing European securities.

## Improving service quality

Clearstream's customers throughout the world benefit in many ways from the services offered by the company for equities and bonds:

- Via a single access point, they gain access to the infrastructure and the global network of 39 markets to which Clearstream maintains links.
- They can settle their transactions using commercial bank money (credit and liquidity provided by a bank, for example, Clearstream Banking), or central bank money (money provided by a central bank connected to Clearstream).
- They save time and money in their back offices because they can harmonize internal workflows for all financial instruments.
- They can use their cash collateral more efficiently since all their assets and transactions are pooled in Clearstream's systems.

By continually improving its services, Clearstream was able to halve the number of claims brought against it last year, for example.

In order to meet market requirements, Clearstream introduced additional functionality with its Customer Focus Initiative at the beginning of 2002. This has led to an increase in efficiency (STP) and improved risk management, on the one hand by passing on information regarding final beneficiaries and standardized reporting for corporate actions, and on the other hand by enabling back-to-back transactions in essential markets. In addition, an automatic conversion option for foreign currency transactions was introduced.

## Listening to the customer

In November 2002, Clearstream again held a meeting of the User Advisory Board, which brings together 15 key financial market players round a single table. The User Advisory Board provides market feedback and enables market players to discuss the strategic direction of the industry and suggest how Clearstream can further improve its process efficiency. Issues addressed during the past year include the consolidation of European capital markets, the daytime bridge, the new connectivity services and market liquidity.

In December 2002, Clearstream International announced changes to its Board of Directors. Each of the new members is a well-known industry expert. Clearstream has also changed its articles of association in order to be able to include further members from other countries, regions or industries in the Board (see also p. 96ff.).

## Awards for customer care and global securities financing

In 2002, Clearstream again provided the market with outstanding customer service. Clearstream came first in the ICSD category in last year's Global Custodian Survey, which regularly measures customer satisfaction, reaching the highest score on a raw data basis. Additionally, in April 2002, Clearstream received the award "Top Rated Provider in the 2002 Global Custodian Tri-Party Securities Financing Survey" and outranked all other custodians in 15 out of the 26 service categories.

Clearstream's success in the area of global securities financing is also reflected in its performance during 2002. In particular the area of Collateral Management Services showed continuous growth during 2001 and 2002 in terms of collateral management levels (the average value of loans granted per week).

#### Constant growth in global securities financing

Value of loans granted per week, on average  
in € billions



#### Providing easy access

Clearstream's goal is to ensure maximum efficiency of the securities infrastructure. This entails giving participants easy access to all services, regardless of whether the securities are held at Clearstream itself or another CSD or ICSD.

#### Daytime bridge initiated

In October 2002, Clearstream reached an agreement with Euroclear on the functional aspects of the daytime bridge between the two companies. The daytime bridge is a highly sophisticated link between Clearstream and Euroclear that allows trades to be settled between counterparties in different systems during the day.

Currently, only a night-time bridge is available to Clearstream's and Euroclear's customers. The combination of the daytime and night-time bridges offers customers greatly enhanced trading opportunities, by providing access to more counterparties and to a wider pool of securities.

Clearstream and Euroclear aim to provide participants with a fully automated 24-hour bridge in 2004. The manual daytime bridge that has already been implemented offers risk-free settlement. However, in order to optimize efficiency for customers, the daytime bridge now has to be automated, and Clearstream is currently performing the preparatory work for this.

#### New settlement model developed

Clearstream and the German Market Rules Committee have been working together with Deutsche Bundesbank (the German central bank) and twelve key financial institutions since November 2000 to deliver a new settlement model for the German securities business that is designed to change the cash settlement procedures for securities transactions. The model will be introduced in phases starting in autumn 2003. Its core advantages are:

- Finality will be achieved directly on opening of TARGET (Trans-European Automated Real-Time Gross Settlement Express Transfer System) on the settlement day, making securities and cash available much earlier.
- Liquidity management will become more efficient for all customers.
- The unwinding risk in the case of the default of a market participant will be eliminated.
- Collateral held at central banks during the night-time processing cycle on settlement will be utilized efficiently.

Clearstream is now working on the daytime processing aspects of the new model. Further central banks are expected to be included in 2004.

### **Service for investment funds extended**

In December 2002, Clearstream International acquired Filinks with the goal of further developing Vestima®, its investment funds service, in order to make the investment funds market as efficient as the securities market. Filinks has developed a unique technology that incorporates STP efficiencies in the order routing process for the investment funds industry and is complementary to Clearstream's existing Vestima service. Thanks to its broad customer base and location in Luxembourg, one of the main centres of the investment fund industry, Clearstream is in a position to offer high-quality services to this industry. Clearstream also intends to expand its services to all domestic European markets following its successful launch on the offshore market segment.

### **Improved access to international settlement**

Clearstream works continuously to improve the efficiency of its processes. This applies in particular to Creation, the central processing platform for international trading, and the electronic link provided by CreationConnect.

This provides customers with rapid, secure and efficient communication with Clearstream and its network of depository banks. Depending on their respective cost/benefit analyses, customers can choose between three complementary connection options: CreationDirect, Creation via SWIFT (an automated system-to-system interface based on the SWIFT network), and CreationOnline, the secure interactive browser interface introduced by Clearstream in September 2002. This gives customers real-time access to Clearstream's broad range of clearing, settlement and custody services as well as to a series of value-added services.

Customers can check the status of all pending and settled instructions, receive automatic warnings and perform specific queries, as well as downloading data from the network to their PCs for further processing. The system is fully compliant with the ISO 15022 standard and therefore offers maximum STP functionality.

CreationConnect allows customers to communicate quickly, securely and efficiently with Clearstream Banking and its network of depository banks. The key benefits offered by CreationConnect are the flexibility of the link provided, comprehensive reporting and the use of the ISO standard, as well as real-time validation.

Like all other measures designed to improve the efficiency of Clearstream's processes, CreationConnect is intended to improve flexibility, standardization and speed of processing. This allows customers to improve risk control and freer use of their cash funds.

- Clearstream TEC, entory and Xlaunch consolidated with Deutsche Börse Systems for the first time as IT Division
- IT Division (internal and external) sales revenue increases to €388.3 million (plus 6 percent)
- EBIT down by 39 percent to €53.0 million due to exceptional effects
- Synergies from integration of Clearstream TEC in the double-digit millions region
- Equity central counterparty (CCP) software successfully implemented
- Conversion of German securities code numbers to ISIN standard completed

#### Information Technology Division offers broad service range

Business area	Core competencies/functions	Products/services
<b>Deutsche Börse Systems and Clearstream TEC</b>	Developing, building and operating IT infrastructures for Deutsche Börse Group and third parties	Xetra, Eurex, Creation, CASCADE, CCP
<b>entory</b>	Developing customer-specific IT solutions, sales channel for the IT Division	Trading, post trading, asset management, risk management, customer management
<b>Xlaunch</b>	Organizing marketplaces for standardized goods and services	Technology and consulting services

## Information Technology: Infrastructure for Deutsche Börse and International Financial Markets

Deutsche Börse Group has been more than just a marketplace organizer for securities transactions for a long time now: it is a transaction service provider that uses cutting-edge technology to open up global capital markets to companies and investors. Developing, building and operating the technological infrastructure are among its core competencies and play a key role in the value chain. Deutsche Börse Group's IT Division comprises the wholly owned subsidiaries Deutsche Börse Systems AG, entory AG and Xlaunch AG, as well as the IT departments of Clearstream Services S.A. and Clearstream Banking AG Frankfurt (together: "Clearstream TEC"). A total of around 1,600 employees – around one half of all the people employed by the Group – implement business strategies in technology applications. In addition, they provide IT solutions for international financial services providers, including trading and settlement systems for 17 exchange organizations worldwide.

In fiscal 2002, Deutsche Börse Group's IT Division generated sales revenue totaling €388.3 million with internal and external customers (2001: €368.2 million). For the first time, the figures for Deutsche Börse Systems AG, entory AG, Xlaunch AG and Clearstream TEC (since 1 July 2002) have been fully consolidated, whereby sales revenue of Clearstream TEC has been recorded as other operating income. The division generated more than 42 percent of its sales revenue (€165.6 million) with services for customers outside Deutsche Börse Group, an increase of 20 percent

due to the consolidation of entory. Almost two thirds of this sales revenue was generated by Deutsche Börse Systems, and one third by entory. Taken individually, sales revenue of Deutsche Börse Systems declined by 11 percent, and that of entory by 28 percent. This drop as against the previous year is due to the difficult market environment, falling trading volumes and the consolidation of previously external revenue from entory services and the operation of Clearstream systems, which are both now recorded as internal revenue.

Lean cost management made a significant contribution to the success of the IT Division. As against the previous year, Deutsche Börse Systems, for example, cut its costs by a total of 11 percent. Operating costs for computing centres, network and technical customer support, which at 59 percent represent the largest cost item, also fell by 11 percent, communication costs by 38 percent. In addition, the division cut its expenses for external consultants by an average of 7 percent per consultation hour.

The IT Division also increased its profitability as against the previous year, with the initial synergies from Clearstream's integration having a positive effect on earnings. At €89.4 million before goodwill, the division's earnings increased by 2 percent as against 2001. However, goodwill amortization totaling €36.4 million, including an exceptional impairment loss of €33.0 million, had to be made relating to the acquisition of entory. Due to the goodwill write-down, EBIT of the IT Division reached €53.0 million, corresponding to a contribution of 15 percent to total Group EBIT.

## Process-oriented IT organization

The structure of the IT Division is strictly process-oriented. The individual subsidiaries and business areas fulfil clearly defined functions along the Deutsche Börse Group value chain:

- Deutsche Börse Systems AG and Clearstream TEC primarily design, build and operate Deutsche Börse Group's trading and settlement systems. In addition to internal business, Deutsche Börse Systems also develops and operates complex IT infrastructures for third parties, thereby generating a substantial share of the IT Division's external revenue.
- Xlaunch AG, the practical "research laboratory", specializes in the organization of marketplaces for standardized goods and services above and beyond the finance industry. It operates as the "spearhead" of the IT Division for the marketing of IT services.
- entory AG combines technology and finance market expertise, extending Deutsche Börse's value chain to include IT for financial instruments. Together with Deutsche Börse Systems, it develops customized solutions for insurance companies, banks and financial services providers. As a result of its established market position, entory operates as the sales channel for the entire division.



**IT Division operates 17 exchanges worldwide**

Exchange	Type of market	Launch	Participants	Countries
<b>Eurex</b>	Derivatives market	1/90	424	17
<b>Xontro<sup>1)</sup></b>	Spot market	6/92	500	4
<b>Frankfurt Stock Exchange (Xetra)</b>	Spot market	11/97	352	15
<b>Helsinki Exchanges</b>	Derivatives market	9/99	424	19
<b>Vienna Stock Exchange</b>	Spot market	11/99	58	4
<b>Irish Stock Exchange</b>	Spot market	5/00	17	2
<b>a/c/e</b>	Derivatives market	8/00	92	7
<b>Eurex Bonds</b>	Spot market	10/00	22	3
<b>EEX</b>	Spot and derivatives market	8/00 + 3/01	113	12

<sup>1)</sup> Electronic, broker-supported trading system for floor trading at the Berlin, Bremen, Dusseldorf, Frankfurt, Hamburg, Hanover, Munich and Stuttgart stock exchanges

**Synergies from Clearstream integration**

The integration of Deutsche Börse Systems and Clearstream TEC enables the two companies to leverage a large number of synergies, as they are very similar to one another in terms of technology and organization. For example, the joint use of platforms such as Unix systems and IBM mainframes generates economies of scale in the operation of trading, settlement and information systems. Thanks to the technological parallels, the IT Division can also improve and harmonize its software development processes substantially. The division has identified concrete synergies in the use of software components and tools in particular, as well as in the consolidation of operating departments and locations. Central procurement of hardware, software and consulting services will also lower purchase prices further.

In fiscal 2002, cost synergies were already generated in the IT Division of more than €6 million. The division will continue exploiting these poten-

tials, gradually raising the cost synergies to €45 million per year from 2006. Altogether, the group will generate synergies from 2006 of some €80 million p.a.

**Manifold synergies from integration of Clearstream**

<b>Applications</b>	<ul style="list-style-type: none"> <li>■ Joint utilization of software components/tools</li> <li>■ Standardization of software inventory</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>■ Consolidation of computing centres</li> <li>■ Consolidation of operating units and platforms</li> <li>■ Joint operations of networks</li> </ul>
<b>Organization</b>	<ul style="list-style-type: none"> <li>■ Bundling of competencies and the relating resources</li> </ul>
<b>Purchasing</b>	<ul style="list-style-type: none"> <li>■ Optimization of purchasing power through consolidation of purchasing units</li> </ul>

## Research and development

With its subsidiary Xlaunch AG, Deutsche Börse Group is tapping new growth fields in electronic markets. Thanks to its Research and Innovation Center, the IT Division benefits from the advantages of a powerful in-house consulting team.

Xlaunch specializes in organizing and operating young electronic markets with high development potential. It offers market operators an attractive cost and risk profile. The opportunity to utilize the Deutsche Börse Group network guarantees market participants efficient access and the highest level of system security.

From Q2/2003, Xlaunch will operate a marketplace for standardized interest rate derivatives for the English financial services provider Swapstream. Its trading participants are banks and brokers. In addition, the IT Division builds and operates the participant network and provides the technical helpdesk.

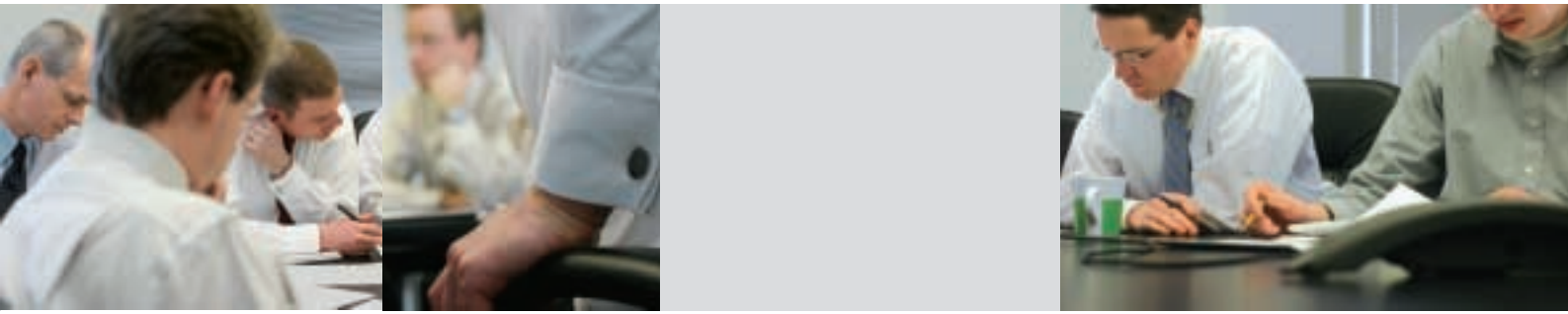
Xlaunch was also involved in the "Hesse Tender" project for CO<sub>2</sub> emissions certificates. The joint initiative by the Hesse Ministry of Environment, Agriculture and Forestry and a group of renowned companies is preparing the ground for trading in CO<sub>2</sub> emission rights.

In 2002, the Research and Innovation Center drove forward the introduction of various Web technologies, e. g. in connection with development of the central counterparty (CCP) and the Wertpapier-Service-System WSS (securities service system). In addition, the EXOTIC (EXchange cOmpeTitive IntelligenCe) system was developed ready for production. Above all, EXOTIC supports competition and technology analyses, thereby significantly improving Deutsche Börse Group's knowledge management.

One service level of EXOTIC is the "Xpider" search engine, which combines three functions: users can search for documents, categorize files found by topic areas and download them in various formats. Xpider has been available internally to all Deutsche Börse employees since Q1/2003. In Q2, the IT Division will also supply the tool to the Bundesamt für Finanzen (German Federal Finance Office); together with entory, the division beat off several international competitors in a pan-European tender.

## Expertise in building and operating systems

As providers of complex IT solutions, Deutsche Börse Systems and Clearstream TEC once again demonstrated the superior performance of their systems in fiscal 2002. For example, the Xetra® and Eurex® platforms were able to handle even large trading volumes reliably and quickly. At the same time, Systems and TEC made significant progress with one of their key cash market projects, construction of the central counterparty, and converted their applications from Wertpapierkennnummer (WKN), the German securities code number standard, to the International Securities Identification Number (ISIN) standard.



**Reliable and fast: Trading and settlement systems continue to set standards**

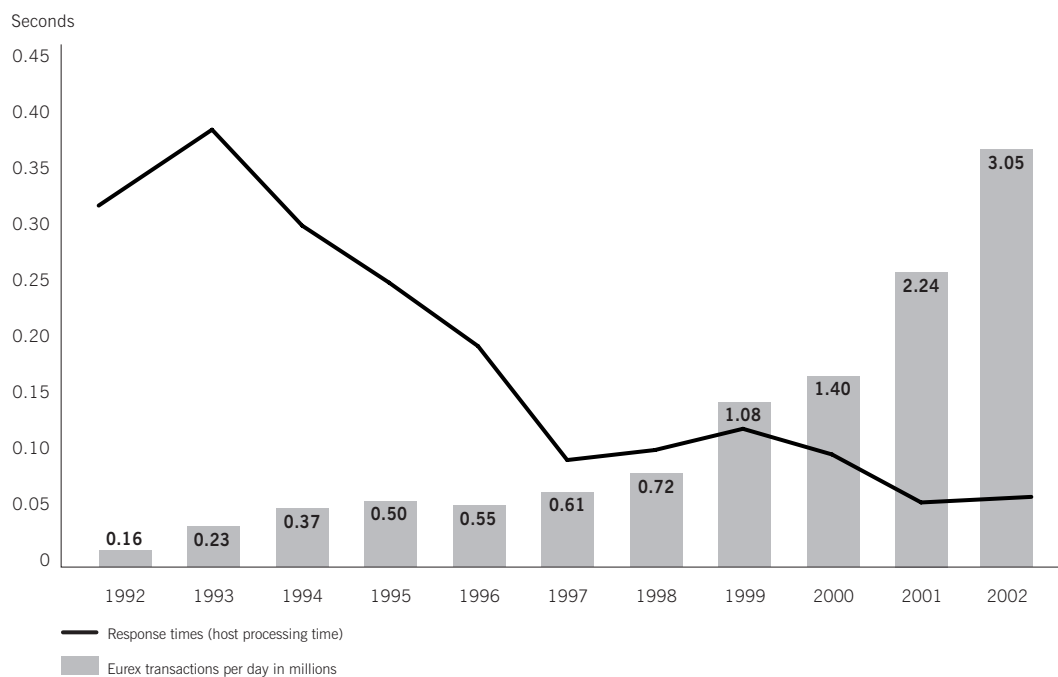
With its modern system architecture, maximum availability and extremely low transaction costs, Eurex sets the international benchmark for the trading and settlement of derivatives market products such as futures and options. In 2002, the derivatives exchange once again clearly exceeded the record volumes it achieved in 2001. The highest daily volume to date – 6.1 million contracts – was recorded on 24 July.

The growth of the derivatives market is also reflected in the continuous increase in the amount of price information provided by the

Eurex system in real-time to all exchange participants around the world. The amount of price information has risen roughly 25-fold over the last ten years; over the same period, contract volume has risen by a factor of 23. In 2002, despite the high level of growth, the system was available to participants for a monthly average of 99.98 percent of the time. This corresponds to average downtime per month of a mere three minutes or so. Response times were kept to below 0.1 seconds at all times.

In order to cope with the expected further rise in transaction volumes, particularly on Eurex, Deutsche Börse Systems will consistently increase its system capacity over the coming years.

**Eurex: Consistently fast performance despite sharp rise in transactions**



In fiscal 2002, Xetra, like Eurex, was able to meet rising demands reliably. Although the average number of Xetra trades per day rose by around 20 percent, the average host response time was reduced by 36 percent to 0.05 seconds. The system had an average availability of 99.92 percent.

The reason why the systems work so reliably despite rising volumes is the performance monitoring tool, which was implemented in 2002. This tool monitors and documents the availability and performance of all components in the entire system, from the host through the network to the customer. It can localize potential bottlenecks and incidents, which makes it a key component in monitoring the systems' infrastructure, both as a precautionary measure and in the event of a disruption.

The new S.W.I.F.T. ISO 15022 standard is a milestone on the way to straight-through processing in the finance industry. Clearstream TEC played a significant role in its development and has converted all its relevant applications, such as the settlement systems Creation and CASCADE.

In addition, the new access infrastructure for Creation (Creation Online), offers customers a cutting-edge, graphics-oriented human-machine interface for Deutsche Börse Group's international clearing and settlement systems. The enhanced-functionality customer front end is based on state-of-the-art Internet technology and combines the latest security mechanisms with a high degree of flexibility. At the end of 2002, more than 2,500 customers in over 90 countries were connected to the global Clearstream network.

### **ISIN conversion**

Even before the ISIN system is officially introduced by Wertpapier-Mitteilungen – Germany's central institution for issuing and managing securities – on 22 April 2003, Deutsche Börse Group has completed the conversion of its trading, information and settlement systems. The twelve-digit ISIN will replace the six-digit German securities code number WKN. The uniform international format will allow investors to identify securities quickly and reliably all over the world. The introduction of the ISIN will make cross-border securities trading, clearing, and settlement as well as the admission of securities to trading significantly easier.

An ISIN number consists of three elements: a two-character country code, e.g. DE for Germany, followed by a national ID with nine digits; the third element is a single-digit numerical check number. ISIN numbers are issued centrally in each country.

Deutsche Börse began its ISIN project in November 2000. Following a preliminary study of all relevant systems and interfaces, step-by-step conversion started at the end of Q4/2001. A smooth transition to the new code numbers was guaranteed by extensive internal and external testing with customers. Since the end of November 2002, the ISIN has been the relevant identification number for the entire process chain – from trading through to settlement. Customers will still be able to use WKNs in parallel to the new ISINs until Wertpapier-Mitteilungen implements the changeover on 22 April 2003.

For the securities sector, the complexity, the scope and the effects of this conversion are comparable to those of the Y2K conversion for the IT industry as a whole.

#### **Central counterparty in development**

The central counterparty was Deutsche Börse Systems' largest and most demanding project in 2002. On 19 December 2001, the Exchange Council of the FWB® Frankfurter Wertpapierbörse (the Frankfurt Stock Exchange) had resolved to introduce a central counterparty (CCP) for German equities. Deutsche Börse uses this functionality to act as a counterparty for buyers and sellers on the cash market (see also p. 50f.).

A total of around 180 employees designed and implemented a system architecture that takes all functional requirements into consideration, and that is compatible with the existing Xetra, Eurex and Clearstream system environments. The IT specialists at Systems designed a CCP architecture that combines the advantages of a high-performance transaction system with the latest in database technology. Deutsche Börse Systems delivered the software on 31 October 2002, after a development phase of just six months.

The successful implementation of the software is further proof of Systems' core competence in major application and system development projects.

#### **Customized technology solutions for financial services providers**

In fiscal 2002, the IT environment in the finance sector was characterized by high cost pressure, falling margins and significantly greater reluctance to make investments. In recent years, most companies invested in the latest hardware and software and acquired a complex IT infrastructure. Many of these companies now have to cut costs, simplify their existing systems and generally reduce vertical integration by outsourcing

**Deutsche Börse Systems Inc.:**  
**North American market presence**

Early in 2000, Deutsche Börse Systems was commissioned to adapt the Eurex system to the requirements of the American market; in addition, it was to establish a trading network and ensure the operational readiness of market participants at a technical level. Seven months later “a/c/e” – the “alliance/cbot/Eurex” – went live with 86 participants from the US, Europe and Asia. After just four days, a/c/e was trading over 108,000 contracts – two and a half times the average daily volume on CBOT’s previous system, “Project A”. Today, nearly 70 percent of key US financial contracts are traded on a/c/e.

Since a/c/e trading began, Deutsche Börse Systems has been successively bundling its US activities in its newly founded American subsidiary Deutsche Börse Systems Inc. (DBS Inc.). DBS Inc. employs nearly 30 people, predominantly Americans, who do not just operate the a/c/e platform, but also manage

IT activities in the US, provide support for the Xetra and Eurex systems and act as a technical helpdesk for German cash market participants after close of trading in Frankfurt. Depending on the time of day, operating responsibility for the network, the technical helpdesk and back-end operations switches between the teams in Frankfurt and Chicago. 24-hour operation is already a reality for these sectors; thanks to the time difference, expensive and unpopular night shifts are avoided at both locations. At the same time, the exchanges and their trading participants appreciate receiving support from a local contact during standard office hours in their own time zone.

In future, the distribution of labor between Chicago and Deutsche Börse Group’s other IT operational locations will continue to leverage new synergies. Systems’ technical infrastructure in Chicago and its experience with US trading participants and suppliers is a key strategic advantage in the technical realization of new initiatives on the US capital market.

and using standard software. By providing technical solutions to precisely these challenges, entory AG – a wholly owned subsidiary of Deutsche Börse Group – was able to consolidate its strong position with major financial services providers in this difficult market environment.

The following sample projects provide an insight into entory’s work in fiscal 2002:

- The foreign subsidiary of a major German bank commissioned entory to reduce the heterogeneity of media and communications used in its different IT applications. Prior to doing this, entory analysed the individual tools and conducted trial runs in different departments of the bank.

- entory implemented the company-wide administration of user rights as part of a leading insurance company's Internet/intranet portal for office and field staff. It was based on the entory UPM (user permission management) component with the additional implementation of a public-key infrastructure for the portal. The central and unambiguous administration of user rights allowed entory to increase access and data security while at the same time cutting its customer's administrative costs.
- A European administrative authority commissioned entory to develop a new smart-card-protected Internet portal for an online connection for authorities and applicants. Several existing and new Web services had to be bundled under a uniform interface. The aim was to design a common look-and-feel standard for internal and external applications and to improve software interfaces.
- Working for a data centre serving a network of banks, entory is completely redeveloping the interface between the bank system and the portfolio management system. To do this, entory is using a component developed in-house that makes it possible to implement integration projects with a fast return on investment for the customer and on a fixed-price basis. The redevelopment will improve data quality and increase processing speed significantly.

**entory combines technology and financial markets know-how**

<b>Market/customers</b>	<ul style="list-style-type: none"> <li>■ Focus on the financial sector</li> <li>■ Large number of reference products</li> <li>■ Focus on customer satisfaction</li> </ul>
<b>Business processes/business areas</b>	<ul style="list-style-type: none"> <li>■ Trading, post trading, asset management, risk management, customer management</li> <li>■ Utilization of the skills of Deutsche Börse Group</li> </ul>
<b>Services</b>	<ul style="list-style-type: none"> <li>■ Project management</li> <li>■ IT solutions</li> <li>■ Business consulting, process management</li> <li>■ Sourcing</li> </ul>
<b>Competencies</b>	<ul style="list-style-type: none"> <li>■ Know-how focus on financial markets</li> <li>■ Reliability</li> <li>■ Tried-and-tested technology</li> <li>■ Guaranteed solutions</li> </ul>

The situation on the IT market remains tense in fiscal 2003. entory is continuing to focus its activities on segments such as investment companies, the insurance sector and private banks. entory is increasingly offering solutions and competences that can be deployed cross-sector to non-financial services providers. The focus lies on the notion of being able to reuse solutions and on the innovation transfer between sectors. In doing this, entory will not just be marketing its own developments; it is also increasingly using its sales expertise for products and services from Deutsche Börse's IT Division.

## Customer Governance: The Closest Possible Cooperation with Customers

Deutsche Börse's predecessor was a public law institution with an obligation to benefit its members, and hence its owners – who were also its customers. When Deutsche Börse AG was founded ten years ago, a lot of customers still also numbered among the owners, but it became possible to be a customer without holding any shares in the stock corporation. However, customers' interests became increasingly divergent, and finding the greatest common denominator grew more and more difficult. In 2001, Deutsche Börse took the only logical decision: it floated itself on the equities market. The IPO unbundled originally interwoven relations with owners and customers. Financial investors now account for a majority of the owners, with more than 80 per cent of shares in Deutsche Börse AG.

However, the IPO was not intended to influence customer relations, nor did it. On the contrary, it is only by wholly devoting itself to its customer interests that Deutsche Börse Group can also create value added for its shareholders. The suspicion often voiced by interested parties that user governance is neither desired nor possible in the case of listed exchanges or settlement organizations is not true.

Deutsche Börse Group promotes customer governance more than ever, because if you aim to increase the efficiency of the markets, you have to understand the markets. If you aim to offer customers long-term superior cost/benefit, you have to understand their business models and strategies. This is why Deutsche Börse Group maintains a closely woven network of customer relations, which is expressed in the form of supervisory and advisory committees in particular. This is not restricted to the supervisory boards prescribed by the Aktiengesetz (AktG – German Stock Corporation Act) or the public law exchange councils where a large number of customers have a voice; rather, Deutsche Börse Group initiated by far the greater share of its executive bodies and working committees itself.

Some of the committees are formed to fulfil functions for a limited period of time, others meet regularly on a permanent basis to work together on products and services. One thing they all have in common is that their members reflect the increasingly international customer base of Deutsche Börse Group, that more and more nationalities are represented – and that they are increasingly choosing English as the language of negotiation. Of course, the fact that Deutsche Börse Group is working together with international customer representatives does not mean that it is turning its back on its roots:



the Chairman of the Advisory Board of Deutsche Börse AG, for example, is the Frankfurt-based broker Dieter Heinemann, and the President of the Netherlands Bankers' Association and member of the executive board of the ING Group, Hessel Lindenberg, has a seat on Deutsche Börse's Supervisory Board; Jean Meyer, Président du Comité de Direction of the Banque Générale du Luxembourg is also an advisor on the Board of Directors of Clearstream International, as is Charles S. McVeigh of Schroder Salomon Smith Barney; Allianz's Dr. Joachim Faber sits on the Primary Markets Advisory Committee as an investor, as does Alexander von Witzleben of Jenoptik as an issuer. However, law firms, auditors, venture capital companies, asset managers, central banks, academics, supervisory authorities, other exchanges and data vendors also play their part in the committees.

The fact that key decisions are subject to intensive consultation with customers is shown by a recent example: during the planning phase of the restructuring of the equities market, Deutsche Börse discussed the topic in several committees and at various levels with its customers. The Exchange Council discussed the regulatory framework of the General Standard and the Prime Standard from a public law perspective, while the Primary Markets Advisory Committee (PMAC) mainly dealt with the topic from a market viewpoint; finally, in the Working Committee for

Equity Indices, Deutsche Börse and market participants considered the index environment needed to model the equities market's new structure. In addition, Deutsche Börse contacted the CFOs of leading German companies to discuss the details of the new concept in person.

The list of committees and represented customers on the following pages of this annual report reflects our conviction that customers are the number one priority in Deutsche Börse Group's thoughts and actions. Deutsche Börse Group would like to thank all the companies which have sent delegates and all the members of the committees for their work and commitment.

# Working Committees and Executive Bodies as at 31 Dec. 2002

## **Supervisory Board of Deutsche Börse AG**

Statutory supervisory body

Dr. Rolf-E. Breuer (Chairman), Deutsche Bank  
 Friedrich von Metzler, B. Metzler seel. Sohn & Co.  
 Sandra S. Jaffee, Citibank  
 Klaus M. Patig, Commerzbank  
 Manfred Zaß, DGZ DekaBank  
 Uwe E. Flach, DZ Bank  
 Leonhard H. Fischer  
 Fritz Nols, Fritz Nols Global Equity Services  
 Harold Hörauf, HSBC Trinkaus & Burkhardt  
 Dr. Stefan Jentzsch, HypoVereinsbank  
 Rainer Roubal, ICF Intermediär Center Frankfurt  
 Kursmakler  
 Hessel Lindenbergh, ING Group  
 Dr. Peter Coym, Lehman Brothers  
 Gerhard Roggemann, WestLB

## **Advisory Board of Deutsche Börse AG**

Further development of stock exchange concept

B. Metzler seel. Sohn & Co.  
 Commerzbank; Deutsche Bank  
 DGZ DekaBank; Dresdner Bank  
 DZ Bank; HSBC Trinkaus & Burkhardt  
 HypoVereinsbank; ING BHF-Bank  
 Kursmakler Service Gesellschaft  
 WestLB

## **Exchange Council of the Frankfurt Stock Exchange**

Supreme control and supervisory body of the public stock exchange

Dr. Lutz Raettig (Chairman), Morgan Stanley  
 Friedrich von Metzler, B. Metzler seel. Sohn & Co.  
 Jürgen Walter, Baader Securities  
 Dirk Schaper, Concord Effekten  
 Dr. Manfred Gentz, DaimlerChrysler  
 Hermann-Josef Lamberti, Deutsche Bank  
 Axel Weber, DGZ DekaBank  
 Heinrich Linz, Dresdner Bank  
 Ulrike Diehl, DVFA Deutsche Vereinigung für Finanzanalyse und Anlageberatung  
 Uwe E. Flach, DZ Bank  
 Dr. Hans-Jörg Frantzmann, Frankfurt-Trust  
 Investment-Gesellschaft  
 Harold Hörauf, HSBC Trinkaus & Burkhardt  
 Dr. Stefan Jentzsch, HypoVereinsbank

Rainer Roubal, ICF Intermediär Center Frankfurt  
 Kursmakler

Jörg D. Reuter, Jörg D. Reuter Wertpapierhandels-gesellschaft  
 Dr. Heiner Hasford, Münchener Rückversicherungsgesellschaft  
 Henning von der Forst, Nürnberger Beteiligungs AG  
 Peer M. Schatz, Qiagen  
 Ralph Ristau, Resource Trading Group RTG  
 Heinz-Joachim Neubürger, Siemens  
 Stefan Winter, UBS Warburg  
 Prof. Dr. Wolfgang Gerke, University of Erlangen-Nuremberg – Chair of Banking and Stock Markets  
 Gerhard B. Roggemann, WestLB

## **Primary Markets Advisory Committee (PMAC)**

Design of the primary market, in particular reflecting changes in the Exchange Rules and Regulations

Aixtron; Allianz; Apax Partners; BASF  
 Credit Suisse First Boston; Deutsche Bank  
 Deutsche Lufthansa  
 Deutsche Schutzvereinigung für Wertpapierbesitz  
 Dresdner Bank; DWS; DZ Bank; equinet  
 Ernst & Young Wirtschaftsprüfungsgesellschaft  
 Goldman Sachs; HypoVereinsbank  
 Invesco; Jenoptik; Loewe; Merrill Lynch  
 Qiagen; SAP; Shearman & Sterling; Techem  
 T-Online International; UBS Warburg  
 Union Asset Management Holding  
 WestLB Asset Management

## **Secondary Markets Advisory Committee (SMAC)**

Functions and service levels of the Xetra platform

BNP Paribas; Commerzbank; Concord Effekten  
 Consors Discount Broker; DGZ Deka Bank  
 Deutsche Bank; Dresdner Bank; DZ Bank  
 Goldman Sachs; Hesse Ministry of Economics, Transport and Regional Development; HypoVereinsbank  
 ICF Intermediär Center Frankfurt Kursmakler  
 Merrill Lynch; Morgan Stanley; N.M. Fleischhacker  
 UBS Warburg; Van der Moolen Training; WestLB

### **Working Committee for Practices and Rules for Price Determination in Floor Trading**

Details of and amendments to the rules for price determination in floor trading on the Frankfurt Stock Exchange

Commerzbank; Deutsche Bank; Deutsche Bundesbank  
Dresdner Bank; ICF Intermediär Center Frankfurt  
Kursmakler; Fritz Nols Global Equity Services  
Hesse Ministry of Economics, Transport and Regional  
Development; KS Privat Consult

### **Designated Sponsors Workshop**

Further development of the Designated Sponsor model, discussion of new models and clarification of current issues at an operational level

Archelon Deutschland; Commerzbank  
Concord Effekten; Deutsche Bank  
Dresdner Bank; equinet Securities  
HypoVereinsbank, N.M. Fleischhacker  
Seydler; Timber Hill Europe  
UBS Warburg; WestLB

### **Investors Advisory Committee**

(First meeting in January 2003)

Further development of the product and service portfolio of Deutsche Börse Group for institutional investors

Allianz Dresdner Asset Management  
BVI Bundesverband Investment und Asset Management<sup>1)</sup>  
Cleary, Gottlieb, Steen & Hamilton<sup>1)</sup>  
Credit Suisse First Boston; Deka Investment  
Deutsche Bank; DWS; FEFSI, Fédération Européenne  
des Fonds et Sociétés d'Investissement<sup>1)</sup>  
FERI Trust; Fidelity Investments International  
Freshfields Bruckhaus Deringer<sup>1)</sup>  
Gassner Stockmann & Kollegen<sup>1)</sup>  
Goldman Sachs  
Hengeler Mueller Weitzel Wirtz<sup>1)</sup>  
Linklaters O&R Oppenhoff & Rädler<sup>1)</sup>  
Morgan Stanley; Morley Fund Management  
Schroders Investment Management  
T. Rowe Price International  
Threadneedle Investment Managers  
UBS Global Asset Management  
Union Investment Luxembourg

### **Administrative Board of Eurex Zürich AG Supervisory Board of Eurex Frankfurt AG Supervisory Board of Eurex Clearing AG**

Statutory supervisory bodies

Dr. Markus Granzio (Chairman)  
Mehmet Dalman, Commerzbank  
Walter Berchtold, Credit Suisse First Boston  
Dr. Hugo Bänziger, Deutsche Bank  
Leonhard H. Fischer  
Jacques de Saussure, Pictet & Cie.

### **Exchange Council of Eurex Deutschland**

Supreme control and supervisory body of the public stock exchange

Dr. Peter Coym (Chairman since March 2003),  
Lehman Brothers  
Horst Marschall, Baden-Württembergische Bank  
Friedrich v. Metzler, B. Metzler seel. Sohn & Co.  
Rolf Birkert, Birkert & Fleckenstein Wertpapier-  
handelshaus  
Eric Martin, BNP Paribas  
Klaus M. Patig, Commerzbank  
Norbert Dülks, Delta Wertpapierhandel  
Hermann-Josef Lamberti, Deutsche Bank  
Axel Weber, DGZ DekaBank  
Heinrich Linz (since March 2003), Dresdner Bank  
Ulrike Diehl, DVFA Deutsche Vereinigung für  
Finanzanalyse und Asset Management  
Uwe E. Flach, DZ Bank  
Christian Schaffer, First Futures  
Rudolf Reil, Fritz Nols Global Equity Services  
Hans Joachim Goetz, Garban Intercapital Securities  
Deutschland  
Gustav Gass, Gass Capital Markets  
Stephan Bub, HypoVereinsbank  
Prof. Dr. Christian Schlag, J.W. Goethe Universität  
Frankfurt, Chair of Derivatives and Financial  
Engineering  
Matthias Hofinger, MH Trading Wertpapierhandel  
Dietrich Heidtmann, Morgan Stanley  
Christoph Lampert, Salomon Brothers  
Gerhard Roggemann, WestLB

<sup>1)</sup> Guest

**Working Committee for Equity and Index Products (Eurex)**

Eurex equity and index products

Archelon Deutschland; Aurel Leven  
 Bank of America; Bear Stearns International  
 BNP Paribas; CMT Capital Markets Trading  
 Commerzbank; Credit Suisse First Boston  
 Deutsche Bank; Dresdner Bank  
 DTS Derivative Trading System  
 EXANE; Fimat International Banque  
 HEX Helsinki Stock Exchange  
 Hull Trading; HSBC Trinkaus & Burkhardt  
 HypoVereinsbank; JP Morgan Securities  
 Mako Global Derivatives Trading  
 Morgan Stanley; Société Générale  
 Timber Hill; Warburg Dillon Read  
 WestLB

**Working Committee for Interest Rate Products (Eurex)**

Eurex interest rate products

ABN Amro; Barclays  
 Cargill Investors Services  
 Commerzbank; Credit Suisse First Boston  
 Deutsche Bank; Dresdner Bank  
 DZ Bank, Fimat International Banque  
 Fortis; Goldenberg, Heymeyer & Co.  
 Goldman Sachs; HypoVereinsbank  
 JP Morgan; Lehman Brothers  
 Mako Global; Marquette Proprietary  
 Morgan Stanley; Tradition Securities  
 UBS Warburg; WestLB

**Working Committee for Clearing (Eurex)**

Eurex clearing infrastructure

ABN Amro; Bank Vontobel  
 Barclays; BNP Paribas  
 Commerzbank  
 Credit Suisse First Boston  
 Deutsche Bank; Dresdner Bank  
 DZ Bank; Fimat International Banque  
 Fortis; HypoVereinsbank  
 Morgan Stanley; Salomon Brothers  
 UBS Warburg; WestLB

**Working Committee for Equity Clearing (Eurex)**

Clearing of cash market products

BNP Paribas; Citibank; Commerzbank  
 Credit Suisse First Boston  
 Deutsche Bank; Dresdner Bank  
 DZ Bank; Fimatex; Fortis  
 HSBC Trinkaus & Burkhardt  
 HypoVereinsbank; Instinet  
 Landesbank Hessen-Thüringen  
 Lehman Brothers  
 Morgan Stanley; WestLB

**Working Committee for Equity Indices**

Index rebalancing and index changes

BNP Paribas; Commerzbank  
 Deutsche Bank; Dresdner Bank  
 DZ Bank; HypoVereinsbank  
 ING BHF-Bank; Sal. Oppenheim  
 UBS Warburg; WestLB

**Clearstream International Board of Directors**

Anglo-American-style single board

Robert B. Douglass (Chairman), Milbank, Tweed, Hadley & McCloy  
 Gordon Sangster, Bank of America  
 Jean Meyer, Banque Générale du Luxembourg  
 Andrew Bruce, Barclays  
 Roberto Vicario Montoya, BBVA  
 David Van Pelt  
 Dominique Hoenn, BNP Paribas  
 Renato Tarantola, Cassa di Compensazione e Garanzia  
 Ernst-Wilhelm Contzen, Deutsche Bank  
 Marc Hoffmann, Dexia-BIL  
 Eric Hollanders, ING Group  
 Dr. Lutz Raettig, Morgan Stanley  
 Gian Franco Mattei, San Paolo/IMI  
 Charles S. McVeigh, Schroder Salomon Smith Barney  
 Josef Landolt, UBS

**Clearstream Banking Luxembourg**

Anglo-American-style single board

Gordon Sangster, Bank of America  
 Pierre Ahlborn, Banque de Luxembourg  
 Jean Thomazeau, BNP Paribas  
 Susan C. Livingston, Brown Brothers Harriman & Co.  
 Joachim von Eiberg, Commerzbank  
 Marc Hoffmann, Dexia-BIL  
 Eric Hollanders, ING Group

**User Advisory Board –****Clearstream Banking Luxembourg**

Discussion forum for leading Clearstream customers

ABN AMRO Mellon; Banca Intesa BCI  
 Banque de Luxembourg; Barclays; BNP Paribas  
 CDC IXIS; Crédit Agricole  
 Credit Suisse Financial Services; Citigroup  
 Dexia-BIL; Dresdner Bank  
 Financial Markets Service Bank; Fortis  
 ING Group; Kredietbank Luxembourgoise; UBS

**Credit Advisory Group –****Clearstream Banking Luxembourg**

Market development and credit risk

Banca Intesa Spa; Barclays; BNP Paribas  
 Citibank; Dresdner Bank

**Advisory Board – Clearstream Banking Frankfurt**

All key projects

Bayerische Landesbank  
 BNP Paribas; bws bank  
 Commerzbank; Dresdner Bank  
 etb european transaction bank  
 Financial Markets Service Bank  
 ING BHF-Bank; Morgan Stanley  
 Word Wide Securities Services Citibank  
 WPS WertpapierService Bank

**Straight-Through Processing Committee**

Vertical integration issues

Archelon; BNP Paribas  
 bws bank; Citibank  
 Deutsche Bank; Dexia-BIL  
 Dresdner Bank; DWS  
 Fimat International Banque  
 Fortis; HypoVereinsbank  
 ING BHF-Bank; JP Morgan  
 Morgan Stanley; Reuters  
 Seydler; TXB LB Transaktionservice  
 UBS

**Technical Advisory Committee**

Further development of the IT infrastructure

BNP Paribas; bws bank  
 Commerzbank  
 Credit Suisse First Boston  
 DGZ DekaBank; Deutsche Bank  
 Dresdner Bank; DZ Bank  
 EEX European Energy Exchange  
 Fimat International Banque  
 Goldman Sachs  
 HSBC Trinkaus & Burkhardt  
 HypoVereinsbank Systems; ING BHF-Bank  
 JP Morgan; Morgan Stanley  
 SWX Swiss Exchange  
 UBS Warburg; WestLB Systems  
 Vienna Stock Exchange

**Technology Advisory Board**

Strategic IT development

Bayerische Landesbank  
 Commerzbank; Deutsche Bank  
 dvg Hannover Datenverarbeitungsgesellschaft  
 Dresdner Bank; DZ Bank  
 HypoVereinsbank  
 ING BHF-Bank; WestLB

## Corporate Governance: Transparency and Responsible Management

In February 2002, a government commission appointed by the German Ministry of Justice presented the German Corporate Governance Code. Deutsche Börse AG was a member of this commission from the outset, and actively campaigned for improved codes of conduct and disclosure requirements.

Corporate Governance means the responsible management and simultaneous supervision of companies. It includes factors such as efficient cooperation between executive boards and supervisory boards, transparency in corporate communications and the safeguarding of shareholders' interests. These principles have always been a top priority at Deutsche Börse, which is why the Executive Committee (which corresponds to the Executive Board in the terms of the Aktiengesetz, the German Stock Corporation Act) and the Supervisory Board of Deutsche Börse AG resolved to implement the recommendations and suggestions of the German Corporate Governance Code, insofar as this is possible without a resolution by the General Meeting.

Deutsche Börse AG will therefore implement the following recommendations, among other things:

- The compensation for members of the Executive Board of Deutsche Börse AG will include both fixed and variable, performance-related components. The variable components are based on predefined comparative parameters; performance targets may not be altered retroactively (see p. 199).
- The Supervisory Board will establish an Audit Committee to replace the existing Finance Committee. The Audit Committee will assume additional responsibilities, relating to accounting and risk management, the independence of the auditor, the engagement of the auditor, the definition of focal points of the audit and the agreement on the audit fee in particular.
- The dates of regular publications (such as interim reports) and General Meetings will be published sufficiently in advance in a financial calendar (see p. 211).
- Deutsche Börse AG has taken out a D&O (Directors and Officers') liability insurance policy for members of the Executive Board and the Supervisory Board. The deductible for each member amounts to 50 percent of his or her fixed annual compensation.
- Deutsche Börse AG supports shareholders wishing to exercise their rights personally. Shareholders' voting rights in the General Meeting may be exercised in person, by a proxy of their own choosing, or by a proxy appointed by the company and acting on the instructions of the shareholders.

Deutsche Börse AG complies with the following suggestions of the German Corporate Governance Code in particular:

- Details of the compensation received by individual members of the Executive Board are included in the notes to the consolidated financial statements (see p. 199).
- The Chairman of the Audit Committee may neither be the Chairman of the Supervisory Board nor a former Executive Board member of Deutsche Börse.
- As in 2002, excerpts of the Annual General Meeting 2003 will be transmitted via the Internet.
- As before, information on the company will also be published in English.

Deutsche Börse AG cannot yet implement some of the provisions of the German Corporate Governance Code, as a resolution on these issues must first be passed by the General Meeting. On 10 December 2002, Deutsche Börse AG published these exceptions on its web site in a declaration of conformity in accordance with section 161 of the German Stock Corporation Act.

#### **Wording of the declaration of conformity**

“Deutsche Börse AG complies with the recommendations of the Government Commission on the German Corporate Governance Code with the following exceptions:

- To date, the chair and members of the Supervisory Board committees have not received separate compensation for their activities.
- To date, the members of the Supervisory Board have not received performance-related compensation.
- Furthermore, there is no stipulated upper age limit to date for membership of the Executive Board or the Supervisory Board.

The Executive Board and the Supervisory Board will propose the following additions to the Articles of Association of Deutsche Börse AG at the next Annual General Meeting:

- A provision governing the compensation of the chair and members of the Supervisory Board committees (Code section 5.4.5 (1) sentence 3) will be added to Article 13 (6).
- A provision governing the performance-related compensation of Supervisory Board members (Code section 5.4.5 (2)) will be added to Article 13 (5).
- Provisions for an upper age limit for membership of the Executive Board and the Supervisory Board (Code section 5.1.2 and Code section 5.4.1) will be added to Articles 6 and 9”.

# Report of the Supervisory Board

In the year under review, the Supervisory Board performed its duties in accordance with the law and the Articles of Association. We monitored the Executive Board's work and regularly advised it on the management of the Company. We were directly involved in all key decisions affecting the Company.

The Executive Board provided detailed, comprehensive and timely information on the course of business, the position of the Company as well as its strategy and planning in a total of five meetings. Individual issues were also addressed in discussions between these meetings and reported on by the Executive Board in writing. In addition, the Chairman of the Executive Board maintained regular contact with the Chairman of the Supervisory Board and informed him of current developments in the Company's position, key transactions and upcoming decisions. The Supervisory Board thoroughly examined, discussed and voted on all proposals made by the Executive Board requiring the approval of the Supervisory Board as stipulated by law or the Articles of Association. All members of the Supervisory Board participated in more than half of the Supervisory Board meetings held during their term of office in 2002.

## **Focus of discussion by the Supervisory Board**

Our discussions focused mainly on Deutsche Börse Group's strategic orientation and internationalization. In particular, the legal, financial and strategic aspects of the acquisition of Clearstream International S.A. were discussed in depth. We granted our approval for the acquisition of 100 percent of the shares in Cedel International S.A., which – alongside Deutsche Börse AG – held a 50-percent holding in Clearstream International S.A. In this context, we formed a "Capital Increase 2002" Supervisory Board Committee. In addition, we granted our approval for the acquisition of 50 percent of the shares in Infobolsa S.A., a subsidiary of Bolsa de Madrid (the Spanish Stock Exchange). We were comprehensively informed about the reorganization of Deutsche Börse Group in connection with the integration of Clearstream International S.A. and entory AG. Finally, we addressed human resources issues concerning the Executive Board in two meetings.

## **Work of the committees**

In the year under review, a total of five committees were formed. Their task is to prepare the issues to be dealt with in the plenary meetings and our resolutions. In addition – to the extent that this is legally permissible – we have delegated individual decision-making powers to committees, in order to increase our efficiency. For example, the Staff Committee is responsible for completing, amending and terminating contracts of service with Executive Board members, defining annual bonuses, making allocations under the stock option program and making occupational pension commitments in place of the Supervisory Board. A list of the members of the individual committees can be found on p. 209 of this Annual Report. The Chairman of the Supervisory Board also chairs the Staff Committee and the Strategy Committee.



- The Supervisory Board's Staff Committee met three times in 2002. It primarily dealt with compensation for Executive Board members and the reorganization of the Company's management structure. In addition, the Committee resolved to convert retirement provisions for the Executive Board and senior executives from a defined benefit plan to a performance-oriented defined contribution plan. In addition, pension assets are to be transferred to a trustee.
- The Supervisory Board's Strategy Committee advises the Executive Board on issues relating to fundamental business policy and corporate orientation, as well as on key projects for Deutsche Börse Group. Particular subjects of discussion at the Committee's three meetings were the strategy and development of the Xetra and Eurex business areas, as well as growth options for the Information Products business area. In addition, the Executive Board presented Deutsche Börse Group's strategic planning for the coming years. In its first two meetings, the Committee also addressed the acquisition of Clearstream International S.A. in depth.
- The Supervisory Board's Finance Committee, which had already performed the functions of an accounting and auditing committee in the past, was renamed the Audit Committee by way of a resolution by the Supervisory Board on 9 December 2002. The Committee convened four times in the period under review. It closely examined the Group's financial and economic situation and discussed the annual and the consolidated financial statements, and the proposal for the appropriation of the unappropriated surplus, in particular. The members made recommendations for the Supervisory Board plenary meeting dealing with budget planning for the new fiscal year and gained an overview of Deutsche Börse Group's value-at-risk management.
- The Supervisory Board's Committee for IT Issues met twice to discuss preparations for the introduction of the central counterparty for equity trading and the coordination of cooperation between the Group's IT companies Deutsche Börse Systems AG, entory AG and Clearstream Services S.A., in particular.
- A Supervisory Board's Committee formed in the context of the capital increase in 2002 convened twice and approved the Executive Board's utilization of the capital authorized by the Annual General Meeting (authorized capital II), including the details of the conditions for issuing new shares. This Committee was dissolved again after the completion of the capital increase.

Regular reports on the work of the Supervisory Board's Committees were in each case provided at the subsequent plenary meeting of the Supervisory Board.

### **Corporate Governance and Declaration of Compliance**

The Supervisory Board sees the German Corporate Governance Code, published by the Government Commission in February 2002, as a vital step in the ongoing development of corporate management and control in practice. We discussed the implementation of the Code at Deutsche Börse AG in two meetings. On 9 September 2002, we declared our fundamental approval of the Code's recommendations and suggestions, and – together with the Executive Board – we issued our first declaration of

conformity in accordance with section 161 of the Aktiengesetz (German Stock Corporation Act) on 9 December. This declaration has been published on the Company's Internet page.

The by-laws of the Supervisory Board and the Executive Board were revised and adopted by us, in order to reflect the provisions of the Code and the changes in our general situation (e.g. the acquisition of Clearstream International S.A. and entory AG in particular). For example, the by-laws of the Supervisory Board now oblige members to declare to the plenary meeting any conflicts of interest, particularly those that could arise as a result of an advisory function or executive body position at a customer, supplier, lending body, or other business partner. In addition, we undertake to provide information about conflicts of interest that arise, and the way they are handled, in our report to the Annual General Meeting. No such conflicts of interest arose during the period under review. In addition, the remuneration of the Executive Board and the Supervisory Board will be disclosed separately in the notes to the consolidated financial statements. Further details on corporate governance and the exact wording of our declaration of conformity are included in a separate section of this Annual Report on p. 102f.

### **Adoption of the Annual Financial Statements**

The Annual General Meeting 2002 appointed KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Berlin and Frankfurt/Main, as the auditor. KPMG audited Deutsche Börse AG's accounting principles, its annual financial statements and management report, as well as the consolidated annual financial statements and the Group management report. The auditor issued unqualified audit opinions for each of these.

The financial statement documents and reports by KPMG were presented to us for examination in a timely manner. The auditor was present at the relevant meetings of the Audit Committee as well as at the meeting of the entire Supervisory Board convened to adopt the accounts. The auditor reported on the key results of the audit, and elaborated on the net assets, financial position and results of operations of the Company and the Group in particular, and provided us with supplementary information.

On the basis of our own audit of the annual financial statements, the consolidated financial statements, the management report and the Group's management report, we agreed with the findings of the audit performed by the auditor. No objections were raised. The Supervisory Board today approved the annual financial statements prepared by the Executive Board; they are thereby adopted. We also approve the proposal for the appropriation of the unappropriated surplus.

### Changes in the Executive Board and the Supervisory Board

In its meeting on 9 September 2002, the Supervisory Board appointed Mr. André Roelants to the Executive Board as its Deputy Chairman with immediate effect. In addition, the Supervisory Board appointed Mr. Matthias Ganz to the Executive Board in its meeting on 9 December 2002, with effect from 1 January 2003.

Messrs. Frank Gerstenschläger (a member of the Executive Board since 1 January 2001), Christoph Lammersdorf (a member of the Executive Board since 1 January 1999) and Volker Potthoff (a member of the Executive Board since 1 April 2000) resigned from the Executive Board by mutual agreement as of 31 December 2002. They have now assumed other executive responsibilities within the Group. We would like to thank them for their unwavering commitment and successful work on the Executive Board. They will continue to contribute to the success of the Company in their new capacities.

There were also changes in the Supervisory Board. Dr. Norbert Juchem resigned from the Board with effect from 15 May 2002, Dr. Peter Gloystein and Dr. Claus Löwe with effect from 9 September 2002 and 19 September 2002 respectively. We would like to thank these gentlemen for their valuable contribution. In the Annual General Meeting on 15 May 2002, Dr. Stefan Jentzsch was appointed to the Supervisory Board. Ms. Sandra S. Jaffee and Mr. Jan Hessel Marie Lindenbergh were appointed to the Supervisory Board by way of a court ruling, with effect from 22 November 2002.

The term of office of the current Supervisory Board ends with the Annual General Meeting on 14 May 2003. I would personally like to thank all Board members for their commitment and their constructive support of the Company and the Executive Board over the years. In addition, the Supervisory Board would like to thank the Executive Board and all the employees and employee representatives for their work in the year under review.

Frankfurt/Main, 26 March 2003

On behalf of the Supervisory Board:



Dr. Rolf-E. Breuer  
Chairman

## Deutsche Börse Group: Five-year review

		1998	1999	2000	2001	2002
<b>Consolidated income statement ratios</b>						
Sales revenue	€m	455.1	599.0	648.9	760.3	1,106.5
Earnings before interest and taxes (EBIT)	€m	106.3	106.2	216.5	278.1	351.2
DVFA/SG earnings	€m	53.4	70.0	142.9	203.7	235.1
EBIT margin (excl. income from equity investments)	%	24	19	24	31	29
CF1 ROI	%	36	32	35	20	20
CF2 ROI	%	37	32	35	21	19
DVFA/SG earnings per share	€	0.73	0.95	1.95	2.04	2.18
Return on equity	%	27	29	40	16	13
<b>Consolidated balance sheet ratios</b>						
Trade creditors days 1	days	28.2	37.2	33.0	28.1	32.7
Trade creditors days 2	days	32.4	42.0	39.4	33.2	37.8
Trade creditors ratio	%	20	24	27	29	47
Equity ratio 1	%	30	23	41	203	42
Equity ratio 2	%	68	64	56	220	61
Debt/equity ratio	%	31	36	30	14	22
Cash ratio	%	37	46	27	372	37
Current ratio	%	117	121	86	430	72
Debt coverage	%	66	55	70	101	67
Equity/net tangible assets		6.4	6.6	8.5	37.1	7.9

**DVFA/SG earnings** are the net profits calculated according to the methodology published by the Deutsche Vereinigung für Finanzanalyse und Anlageberatung e.V. and the Schmalenbach-Gesellschaft.

**EBIT margin** The EBIT margin is calculated by dividing EBIT (less income from equity investments and write-downs of noncurrent financial assets) by the sales revenue for the year.

**CF1 ROI** "Cash Flow 1 Return on Investment" is calculated as the pre-tax earnings according to the methodology published by DVFA/SG, plus depreciation and amortization expenses, divided by total assets, less technical closing date liabilities.

**CF2 ROI** "Cash Flow 2 Return on Investment" is calculated as for CF1 ROI, but adds back to the numerator the increase in pension liabilities charged to net profit.

**Return on equity** The return on equity is calculated as net profit, calculated in accordance with the methodology published by DVFA/SG, divided by average equity for the year, based on the quarter-end equity balances.

**Trade creditors days 1** The first measure of trade creditors days is calculated as trade payables divided by total sales revenue, multiplied by 360 days.

**Trade creditors days 2** The second measure of trade creditors days is calculated as trade payables divided by sales revenue and net interest income from banking business, multiplied by 360 days.

**Trade Creditors ratio** The creditors ratio is calculated as current liabilities, including bank liabilities, trade payables and other current liabilities, divided by sales revenue.

**Equity ratio 1** Equity ratio 1 is calculated as the ratio of equity less intangible assets, land and buildings, to total assets including intangible assets, land and buildings and cash assets, less technical closing date liabilities.

**Equity ratio 2** Equity ratio 2 is calculated as for Equity ratio 1, but with the inclusion of noncurrent provisions in the nominator.

**Debt/equity ratio** The debt/equity ratio is calculated as the ratio of current liabilities to total assets (excluding technical closing date liabilities).

**Cash ratio** The cash ratio is calculated as the ratio of unrestricted cash balances to current liabilities (excluding technical closing date liabilities).

**Current ratio** The current ratio is calculated as the ratio of unrestricted cash balances and other current assets to current liabilities (excluding technical closing date liabilities).

**Debt coverage** Debt coverage is calculated as the DVFA/SG pre-tax earnings plus depreciation and amortization (cash earnings) divided by total liabilities.

**Equity/net tangible assets** Economic capital divided by plant and equipment.

# Group Management Report

Deutsche Börse AG's consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRSs) and the International Accounting Standards (IASs) and supplemented by a group management report in accordance with section 315 of the HGB (Handelsgesetzbuch – German Commercial Code). These are exempting consolidated financial statements as defined by section 292a of the HGB. This management report contains additional disclosures on the course of business of Deutsche Börse Group.

## Business review 2002

2002 saw the financial markets feeling the effects of the growing deterioration in the global economy. The upturn predicted for the western European markets at the beginning of the year failed to materialize, and economic growth in the USA also lost momentum during the course of the year. GNP growth in most markets was far lower than expected. The slow pace of economic growth was accompanied by declining capital market expectations for mid-term corporate profits – one of the prime reasons why the world's major cash markets suffered a sharp drop in prices for the third year in succession.

## Financial markets impacted by poor state of the global economy

The recovery in the global economy that many had predicted for the beginning of 2002 did not emerge, and preliminary estimates put growth in global economic output at a mere 1.5 percent, with some key industrial nations – especially in the euro zone – falling well short of this figure. Full-year US GNP grew by an estimated 2.1 percent, although the growth curve flattened rapidly after a strong first quarter. In the first three quarters of 2002, euro-zone GNP grew by less than 1 percent year-on-year. According to preliminary figures released by the Federal Statistical Office, the German economy recorded a paltry 0.2 percent growth – the lowest rise in nine years.

The worsening economic prospects, coupled with increasingly negative overall sentiment, took their toll on all the major stock markets. During the course of the year, the US Dow Jones lost 17 percent, for example, the UK FTSE fell by 25 percent, the Japanese Nikkei was off 19 percent and the French CAC 40 ended the year 34 percent down. The DAX®, the German blue chip index, lost 44 percent of its value, causing strong volatility and low valuations. At the same time, new issues of German stocks fell to their lowest level since 1990. Private investors demonstrated their uncertainty about future market developments by almost ceasing trading altogether. This had a particularly adverse effect on floor trading, whose activity indicators have dropped continuously since March 2000.

### Cash and derivatives markets diverge

Business development at Europe's leading stock exchange operators was uneven last year. Investor trading activity fell on all major cash markets to below 2001 levels. The market operated by Deutsche Börse is heavily dependent on trading in German blue chips, so it suffered particularly from the slide in the leading index for German standards, the DAX, which recorded a very sharp fall by international standards. Trading volume – measured by order book turnover – declined by 36 percent.

#### Trading volume on the major European cash markets

	Order book turnover 2002 vs. 2001 %
Deutsche Börse	-36
Euronext	-16
London Stock Exchange	-21
Stockholmsbörsen (OM Gruppe)	-39

Source: FESE

By contrast, trading activity on the European derivatives markets recorded strong growth to reach new record levels. In particular the increased need for hedging by institutional investors, especially insurers, resulted in buoyant derivatives exchange trading. Growth was further boosted by the general increase in the use of derivatives and the gain in market share by exchange-traded derivatives at the expense of OTC derivative products.

### Trading activity on major derivatives exchanges

	Increase in contract volumes 2002 vs. 2001 %
Eurex	19
Euronext.Liffe	14
CME	35
CBOT	32

Source: The exchanges listed

### Overall positive course of business

Despite the weak macroeconomic environment, Deutsche Börse Group succeeded in reaching its ambitious growth targets last year. Now that the Group has broadly diversified its business activities and focused its business model primarily on the turnover activity of financial products, it was able to successfully build on the growth achieved in previous years: sales revenue rose by 46 percent in 2002 to €1,106.5 million (2001: €760.3 million). Organic growth, i. e. excluding the sales revenue of the newly acquired companies Clearstream, entory and Infobolsa, was 3 percent in this period.

Earnings before interest and taxes (EBIT) rose by 26 percent to €351.2 million (2001: €278.1 million). Strong demand for derivatives and information products more than offset the weaker development in the Xetra and Information Technology segments, where Deutsche Börse was unable to escape recessionary trends.

### Deutsche Börse's key performance figures

	2002	2001	Change %
Sales revenue (€m)	1,106.5	760.3	46
EBIT (€m)	351.2	278.1	26
DVFA/SG earnings (€m)	235.1	203.7	15
DVFA/SG earnings per share (€)	2.18	2.04	7
Employees as at 31 Dec.	3,318	1,123	195

<sup>1)</sup> Excluding entory

The business activities of Deutsche Börse Group are classified under the Xetra (cash market: electronic order book and floor trading), Eurex (derivatives market), Information Products (sales of price information and information distribution), Information Technology (systems and service provider) and Clearstream (settlement of transactions and custody of securities) segments.

The Xetra (cash) and Eurex (derivatives) markets operated by Deutsche Börse are closely interlinked. In the cash market, equities are traded and indices are calculated that then form the basis for trading on the derivatives market. The level of activity on the two markets tends to diverge, for example because high volatility on the cash market on the one hand unsettles investors, leading to lower order flows from certain investor groups. On the other hand, however, this results in higher order volumes on the derivatives market.

Trading activity in the Xetra cash market segment in 2002 fell short of the previous year's level primarily because of the sharp decline in transactions by private investors. At the same time, though, trading activity grew on the Eurex derivatives market segment. This resulted in more widespread demand for derivative trading data and additionally boosted the business of the Information Products segment.

The Information Technology segment was also hit by the cyclical weakness and the difficult situation on the stock markets: the earnings position of most German financial service providers deteriorated considerably, forcing them to implement far-reaching cost-cutting measures. As a result, order books fell sharply at entory, the subsidiary which specializes in providing services to the German finance industry; the average margin generated from IT consulting also declined appreciably. Because the operations of the former Xlaunch segment are now allocated to Information Technology, its sales revenue is no longer reported separately, but under Information Technology.

The impact on the business of the Clearstream segment was minor. The segment felt the effects of its partial dependence on short-term US and euro-zone interest rates, plus lower volumes of new equity and bond issues: the number of securities transactions fell by 4 percent. At the same time, the value of the securities held in deposit by Clearstream fell by 8 percent, due in the most part to the sharp slide in stock prices.

### Sales revenue by segment

	2002 €m	2001 €m	Change %
Xetra	210.8	243.1	-13
Eurex	331.6	268.8	23
Information Products	121.5	109.9	11
Information Technology	165.6 <sup>1)</sup>	138.5 <sup>2)</sup>	20
Clearstream	277.0	0	-
<b>Total</b>	<b>1,106.5</b>	<b>760.3</b>	<b>46</b>
Internal revenue Information Technology	222.7 <sup>1)</sup>	229.7 <sup>2)</sup>	-3

<sup>1)</sup> Deutsche Börse Systems, entory, Clearstream TEC and Xlaunch

<sup>2)</sup> Deutsche Börse Systems and Xlaunch

## Business development in the segments

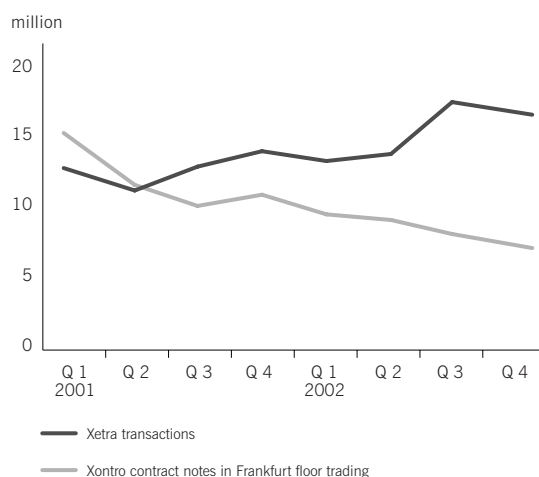
Business development in the segments was heterogeneous. The weak state of the economy, coupled with low trading activity by investors, depressed business in the Xetra and Clearstream segments, while hedging considerations boosted business in the Eurex segment.

### Xetra segment

Gloomy economic forecasts and an increasingly pessimistic underlying sentiment led to high volatility on all major international equities markets in 2002. Uncertainty about future developments and a correspondingly low level of interest from private investors cast a shadow over the German equities market, whose leading index, the DAX, fell by 44 percent. Revenue in the Xetra cash market segment dropped by a total of 13 percent to €210.8 million (2001: €243.1 million).

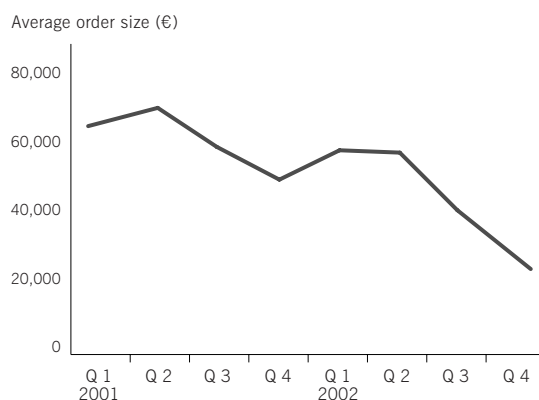
In floor trading, which is predominantly used by private investors, trading activity (measured by the number of contract notes), the main revenue driver in the Xetra segment, fell 32 percent year-on-year. Because the volume of floor trading fees depends solely on the number of contract notes, to the exclusion of any volume-related component, revenue from floor trading fell by 33 percent to €59.4 million (2001: €88.7 million).

### More transactions on Xetra, less transactions in floor trading



At the Xetra® electronic order book, the lower turnover rate of institutionally managed assets, a higher percentage share of small volume private investor orders and the sharp slide in valuation levels led to a decline in average trading volumes. Due to the partly volume-driven fee model, the average revenue recorded by Deutsche Börse per transaction also declined.

### Volume of trades executed on Xetra

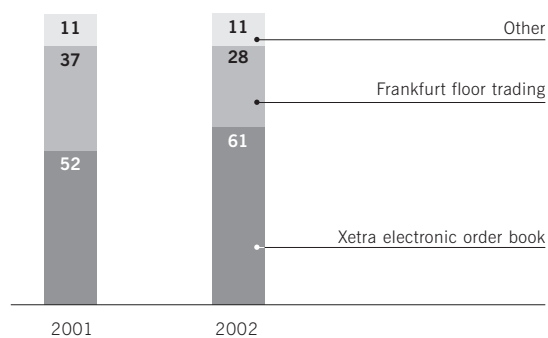




By contrast, the number of trades on Xetra rose by 21 percent over the same period. In addition to the splitting of orders into several sub-orders in pursuit of certain trading strategies, the growing shift in the private investor business (with substantially lower order sizes) away from floor trading towards the Xetra electronic order book also played a role. The growing uncertainty on the cash market starting in July reinforced this trend, which has been observed for some time now. The higher number of transactions more than offset the lower trading volume: the revenue generated from the operation of the Xetra trading system rose slightly by 1 percent to €127.5 million.

#### Xetra: Revenue share of electronic order book goes up

Distribution of sales revenue (%)

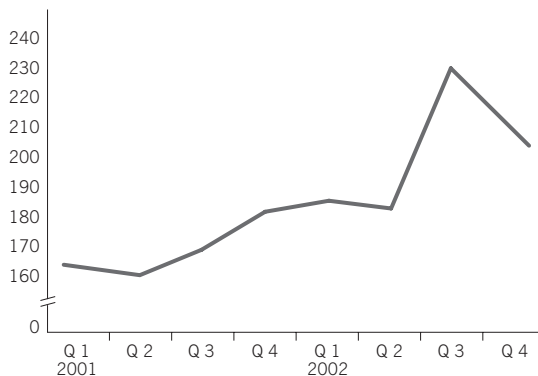


#### Eurex segment

Trading activity on Eurex grew by 19 percent in the year under review to 801 million traded contracts (2001: 674 million). This growth was attributable primarily to international orders, whose share of the total trading volume rose to 75 percent (2001: 69 percent). Overall, the Eurex derivatives exchange grew its sales revenue by 23 percent to €331.6 million (2001: €268.8 million).

#### Eurex: Increasing trading volume

Turnover in millions of contracts



Following modest growth in the first half of the year, exchange volumes rose sharply starting in July, repeatedly reaching new record levels in the months to October. Both capital market and index products recorded particularly high growth rates in this period, with the latter reaching good double-digit year-on-year growth rates in every month of the year.

The growth in trading activity on Eurex is due to a variety of factors, some of which overlap. First, volumes on the Eurex derivatives exchange, where derivatives contracts on euro-denominated underlyings are traded, have been rising steadily for years.

Second, the overall market for trading “European” derivatives contracts, which includes bilateral or over-the-counter (OTC) trading in addition to exchange trading on Eurex and other European derivatives exchanges, is also recording strong growth. The primary reason for this is the fact that the European capital market is “catching up”, as derivatives products were used far less in Europe in the past than, for example, in the North American market. Thirdly, Eurex is gaining significant market share from the OTC market because in addition to high transparency, trading on an exchange platform also offers the advantage that all trades are automatically settled via the Eurex clearing house as the central counterparty (CCP). Compared with OTC trading, the CCP reduces the risk that a counterparty will default; this risk has grown due to the volatility of the markets in the second half of the year.

#### Contract volumes in individual Eurex segments and products

	2002 milions	2001 milions	Change %
Index products	211	132	60
Stock options	143	133	8
Capital market products	447	409	8
Euro Bund futures	191	178	7
Euro Bobl futures	115	100	15
Euro Schatz futures	109	93	17
Other capital market products	32	39	-18
<b>Total</b>	<b>801</b>	<b>674</b>	<b>19</b>

A broad-based product range and high liquidity in a number of benchmark products have enabled Eurex to extend its leading position in derivatives trading in this market environment and to expand its lead over Euronext.Liffe, the second largest exchange.

#### Information Products segment

The Information Products segment increased its sales revenue by 11 percent year-on-year to €121.5 million (2001: €109.9 million). Growth in this segment is due primarily to the positive development of sales of real-time prices, which accounted for 82 percent of total revenue. The data, which is distributed via Reuters and Bloomberg, among others, not only contains information about cash markets, but increasingly also about derivatives markets. Around 70 percent of the data packages went to international customers in 2002.

#### Information Technology segment

The Information Technology segment comprises the Deutsche Börse Systems subgroup and Xlaunch (both of which were separate segments until 2001), the entory subgroup (new in 2002), and the IT services of the Clearstream subgroup in the form of Clearstream TEC (since H2/2002). This segment increased its sales revenue in 2002 by 20 percent to €165.6 million (2001: €138.5 million).

The external sales revenue generated by the Deutsche Börse Systems subgroup declined year-on-year. One of the reasons for this is the collapse in trading activity at the regional stock exchanges, whose trading systems are operated by Deutsche Börse Systems. The fees for this service depend on trading volumes, and fell considerably as these volumes slid. The second half of the year also saw the loss of external sales revenue from the IT services provided by Deutsche Börse Systems for Clearstream. Because Clearstream is now fully consolidated, these services are now classified as internal revenue.

Business development at entory, whose customers include a number of major German banks, was also hit by the situation in the financial services industry. 2002 saw high cost pressures, falling margins and a growing reluctance to invest. The industry had invested heavily in its IT in the preceding years, and now held back clearly from launching new projects. This also resulted in an appreciable decline in sales revenue at entory, which was fully consolidated for the first time in 2002. In this troubled market environment, entory generated its new business primarily from projects to cut IT costs.

### Clearstream segment

The Clearstream segment generated sales revenue of €277.0 million in 2002. This figure relates solely to the consolidated external sales revenue of the second half of the year. Until 30 June 2002, Deutsche Börse held half the shares of Clearstream International; only the Group's interest in Clearstream's after-tax earnings was reported in the Group's income from equity investments.

The settlement business was hit by the lower level of trading activity, in particular by private investors: the number of international settlement transactions fell by 51 percent year-on-year. The settlement of German equity transactions suffered especially from the slide in floor trading volumes. By contrast, the rising number of transactions on the Xetra electronic trading system led to an equivalent increase in the volume at Clearstream Banking AG, Frankfurt, from the settlement of these trades. Overall, this saw the domestic settlement volume remain more or less unchanged.

However, the full consolidation of the Clearstream subgroup's earnings meant that the share of external sales revenue from the settlement of Xetra trades was no longer included in the second half of the year. Trading participants pay a standard trade and settlement fee for this to Xetra, which is forwarded in part by Xetra to Clearstream as payment for settlement. This cash flow represented external sales revenue for Clearstream in the first half of the year, and is now fully consolidated as internal sales revenue.

The value of the securities deposited, which is the main factor for sales revenue in the custody business, fell by 8 percent to €6.9 trillion (at 31 December 2002). The value of fixed-income securities rose slightly by 0.3 percent to €5 trillion, but the value of equities deposited – mostly German – fell by 26 percent.

### Clearstream segment: Key indicators

	Q1 2002 €bn	Q2 2002 €bn	Q3 2002 €bn	Q4 2002 €bn
Average cash funds	3,714	3,562	2,839	3,217
Value of securities deposited	7,633	7,410	7,183	7,145
Clearstream Banking S.A., international	2,565	2,454	2,513	2,501
Clearstream Banking AG, international	235	226	234	237
Clearstream Banking AG, domestic	4,833	4,730	4,436	4,407

Transactions	millions	millions	millions	millions
Clearstream Banking S.A., international	2.9	2.9	2.7	2.8
Clearstream Banking AG, international	1.2	1.1	0.9	0.8
Clearstream Banking AG, domestic	16.1	15.9	18.0	17.1

## Sustained earnings growth

Deutsche Börse AG's earnings before interest and taxes (EBIT) rose by 26 percent year-on-year to €351.2 million (2001: €278.1 million). 2002 EBIT contains write-downs on the goodwill generated from the acquisition of the entry IT subsidiary and, for the first time, goodwill amortization from the acquisition of Clearstream; together, this reduced earnings by €68.7 million. EBITA, which excludes this goodwill amortization, rose in the same period by 51 percent to €419.9 million (2001: €278.3 million). The like-for-like EBIT margin fell slightly from 29 percent in 2001 to 28 percent in the year under review (comparison excluding the net profit of Clearstream – for the period when Clearstream was not fully consolidated, this figure is contained in Group EBIT).

### EBIT and profitability

	EBIT	2002 EBIT margin	EBIT	2001 EBIT margin
	€m	%	€m	%
Xetra	17.4	8	38.4	16
Eurex	158.3	48	99.3	37
Information Products	34.5	28	17	15
Information Technology <sup>1)</sup>	53.0	14 <sup>3)</sup>	87.5	24
Clearstream <sup>2)</sup>	125.4	31 <sup>4)</sup>	56.2 <sup>5)</sup>	n. a.

<sup>1)</sup> Figures for 2001 relate to the Systems segment which was renamed "IT" in 2002

<sup>2)</sup> Figures contain the Settlement segment until Q2/2002; this was renamed "Clearstream" in Q3/2003

<sup>3)</sup> EBIT/(internal + external sales revenue)

<sup>4)</sup> Includes H2 only, when Clearstream International S.A.'s earnings were fully consolidated

<sup>5)</sup> Deutsche Börse AG's share in the after-tax earnings of Clearstream International S.A.

## Xetra

Xetra segment EBIT fell to €17.4 million, primarily because of the lower volume in floor trading. However, the increase in trades on the Xetra segment also had a negative impact. The substantial decrease in order sizes there resulted in lower sales revenue per order, although the settlement fee forwarded to Clearstream remained constant, at €0.40. This saw margins fall for Deutsche Börse, despite almost constant sales revenue for business on the Xetra system.

## Eurex

Eurex segment EBIT rose by 59 percent to €158.3 million (2001: €99.3 million). The sharp rise in the EBIT margin to 48 percent demonstrates the economies of scale that can be achieved as trading activity increases. Segment costs fell despite the strong revenue growth. For Eurex trading system operation, only higher license fees for trading certain derivatives were incurred. By contrast, the increase in network costs was disproportionately low.

## Information Products

The Information Products segment also recorded a significant increase in its EBIT margin to 28 percent, while EBIT itself soared by 102 percent to €34.3 million. This reflected the investment in the Consolidated Exchange Feed (CEF) system: after its launch in 2001, costs fell appreciably in 2002, and the higher revenue due to the economies of scale inherent in this segment resulted in strong profit growth.

## Information Technology

Information Technology segment EBIT fell to €53.0 million in 2002 (2001: €87.5 million). The reason for this decline was the entory subsidiary, which recorded an operating loss as a result of the collapse of the market for IT services. Because of the difficult software development market environment, in particular in the financial services sector, entory's sales revenue and profitability fell well short of expectations. Contingent earn-out payments to former entory shareholders amounting to €15.9 million that would have been due in September 2003 under certain conditions will not be paid now because the criteria were not met. The provision established for these payments was therefore released directly to equity. Although entory's business model and its position in Deutsche Börse Group's portfolio remains stable, the company will have to grow from a considerably lower base. For this reason, an impairment loss was charged on the goodwill resulting from the acquisition of entory, which depressed earnings in the Information Technology segment by €33.0 million in 2002.

By contrast, profits rose at Deutsche Börse Systems, where the cost base was lowered through consistent cost management, for example by a substantial reduction in the average hourly rates paid to external service providers.

## Clearstream

The Clearstream segment generated an EBIT contribution of €125.4 million. Deutsche Börse Group's share in Clearstream's after-tax earnings reported in the Settlement segment for the first half of the year is contained in this figure. Profitability rose further in the second half of the year, when Clearstream was fully consolidated, thanks to the rigorous management of external service providers and IT costs.

## Profitability growth

Deutsche Börse's return on equity, the ratio of after-tax earnings to the average equity available to the company in 2002, fell to 12.7 percent (2001: 15.9 percent). The lower ratio in 2002 is due to the goodwill write-downs that depressed earnings in the second half of 2002 for the first time.

## Cost of capital

	2002 %	2001 %
Risk-free rate	5.0	5.0
Risk premium	5.0	5.0
Beta <sup>1)</sup>	0.9 <sup>2)</sup>	0.9 <sup>2)</sup>
Cost of equity (after taxes)	9.5	9.5
Cost of debt (before taxes)	3.3	5.6
Tax shield (36%) <sup>3)</sup>	1.2	2.0
Cost of debt (after taxes)	2.1	3.6
Equity ratio	88.0	95.0
Debt/equity ratio	12.0	5.0
WACC (after taxes)	8.6	9.2
WACC (before taxes)	8.8	9.3

<sup>1)</sup> A statistical measure of the sensitivity of the price of an individual share to changes in the entire market. A beta of 1.0 means that the performance of the share is moving strictly parallel to the reference market. A beta above 1.0 denotes greater volatility than the overall market, while a beta below 1.0 is less volatile.

<sup>2)</sup> Estimate; the actual value is calculated from 50 consecutive monthly data points. Because Deutsche Börse has only been listed on the Frankfurt Stock Exchange for around two years, the necessary data is not yet available.

<sup>3)</sup> Tax shield denotes and quantifies the reduction in tax paid that arises from the deductibility of interest payments on debt and is factored into the calculation of the cost of capital.

Deutsche Börse Group is highly profitable. This is also evident from its return on capital employed ("ROCE"). The ROCE of 38.5 percent exceeded the WACC (weighted average cost of capital) of 8.6 percent several times over. WACC represents the minimum return on equity and debt contributed to the Company by investors. The year-on-year decline is due primarily to the fact that the 2001 value was affected by high cash reserves of €752.2 million excluding restricted bank balances (at 31 December 2001).

#### Return on Capital Employed (ROCE)

	2002 €m	2001 €m
EBIT	351.2	278.1
+ Goodwill depreciation/write-downs	68.7	0.2
<b>= EBITA</b>	<b>419.9</b>	<b>278.3</b>
Intangible assets, property, plant and equipment <sup>1)</sup>	1,008.7	267.6
+ Equity investments <sup>1)</sup>	245.6	366.3
+ Cumulative goodwill amortization/write-downs <sup>1)</sup>	24.8	0
+ Trade receivables and other non-interest-bearing current assets <sup>1)</sup>	204.1	175.3
- Non-interest-bearing provisions <sup>1)</sup>	207.5	135.9
- Non-interest-bearing liabilities <sup>1)</sup>	184.5	120.8
<b>= Capital employed</b>	<b>1,091.3</b>	<b>552.5</b>
<b>ROCE: EBITA / Capital employed</b>	<b>38.5%</b>	<b>50.3%</b>

<sup>1)</sup> Average values for the year

#### Dividend

The dividend is distributed from the unappropriated surplus of Deutsche Börse AG, which rose by 19 percent year-on-year to €138.2 million in 2002 (2001: €116.6 million). A proposal will be put to the Annual General Meeting to pay a dividend of €0.44 (2001: €0.36) per no-par value share for 2002, a 22 percent increase as against the previous year. For 111,802,880 issued shares carrying dividend rights for 2002, this produces a total distribution of €49.2 million.

#### Sharp rise in operating cash flow

Deutsche Börse AG generated cash flows from operating activities of €466.2 million in 2002 (2001: €248.8 million). In addition to the 15 percent increase in consolidated net profit, the complete acquisition of Clearstream International S.A., whose earnings have been consolidated since the second half of the year, made a particular contribution to this increase. In the first six months of the year, when Clearstream's earnings were not consolidated, only the dividend payment to Deutsche Börse AG from the 50 percent interest reported in the Clearstream segment affected Group cash flow. Cash flows from operating activities in H1 were €180.1 million. Following the consolidation of Clearstream's earnings, cash flows from operating activities in H2 were €286.1 million, an increase of 59 percent.

Investing activities resulted in cash payments of €1,734.1 million, of which €1,515.0 million was attributable to the net acquisition cost (purchase price of €1,758.6 million less cash and cash equivalents acquired of €243.6 million) for Cedel International S.A. (including its 50 percent interest in Clearstream International S.A.). Investments were funded in part by cash generated from financing activities amounting to €555.6 million. These cash receipts resulted from the placement of shares in the amount of €390.8 million following the capital increase, and from a commercial paper program. Investments were also funded from cash resources. These amounted to around €1,062 million at 1 January 2002 and were generated largely by the placement of shares at the time of the IPO on 5 February 2001.

#### Cash flow statement (condensed)

	2002 €m	2001 €m
Cashflow from operating activities	466.2	248.8
Cashflow from investing activities	-1,734.1	-160.3
Cashflow from financing activities	555.6	921.0
Cash and cash equivalents at 31 Dec. 2002	104.8	1,062.0

Cash and cash equivalents amounted to €104.8 million at the end of 2002. Group liquidity is assured by strong cash flows from operating activities and the existing commercial paper program, whose refinancing is also secured by a backup facility.

Deutsche Börse AG's noncurrent assets amounted to €2,656.4 million at 31 December 2002. Shareholders' equity at the same date amounted to €2,152.2 million, plus debt from the commercial paper program at €288.1 million. Deutsche Börse AG has a €400 million credit facility to refinance the current commercial paper program, if required. It also allows us to borrow additional funds if required. This credit facility was made available by a banking syndicate and gives us access to a sufficient level of debt.

The following ratios illustrate Deutsche Börse AG's healthy financial position:

#### Financial indicators

	2002 %	2001 %
Equity/net tangible assets	7.9	37.1
Equity ratio 1	42.0	203.0
Equity ratio 2	61.0	220.0
Debt/equity ratio	22.0	14.0
Cash ratio	36.8	372.4
Current ratio	72.0	430.2
Debt coverage	67.0	101.0

Since 2001, Deutsche Börse AG has commissioned the rating agencies Standard & Poor's and Moody's to rate its creditworthiness. Moody's has awarded Deutsche Börse AG a long-term rating of Aa1, and Standard & Poor's has given a rating of AA+. These exceptional good ratings underscore the high financial strength of Deutsche Börse AG.

As in the previous year, Deutsche Börse AG received no government grants or other assistance in 2002.

## Deutsche Börse shares

As in 2001, Deutsche Börse shares substantially outperformed the German equity market in 2002, beating the DAX by 32 percent and the MDAX® by 18 percent. This put Deutsche Börse firmly in the top tier of German blue chips. However, its share price also fell by 12 percent over the course of the year, closing 2002 at a price of €38.16 (2001 year-end close: €43.21). The high for the year was recorded on 12 March at €51.50, and the low on 1 October at €32.40 (Xetra closing prices). The relative price performance shows that Deutsche Börse shares performed well in a weak market environment.

In June 2002, Deutsche Börse implemented a capital increase, authorized by the Annual General Meeting, to fund the acquisition of Cedel International S.A. and its 50 percent share at Clearstream International S.A. and placed just over 9 million new shares on the capital market. In a difficult market environment, the offering met substantial interest from institutional investors and was three times oversubscribed. This capital increase and the placement proceeds of around €390 million enabled Deutsche Börse to maintain its high financial flexibility.

Deutsche Börse was included in the DAX equity index effective 23 December. Deutsche Börse met the inclusion criteria in the market capitalization (€4.3 billion at 31 December 2002) and trading volume categories. The shareholder structure has also changed successively. Originally, it was mostly strategic, especially German, investors who were invested in the shares, but interest from international, mainly institutional, investors has grown steadily since the IPO. These latter investors now hold 53 percent of Deutsche Börse shares.

## Broad-based product and systems development

In its core business, Deutsche Börse AG develops infrastructure services for the capital markets and operates the technical systems needed to do this. Expanding the product portfolio and continuously developing the trading and settlement systems are critical success factors. Research and development spend is targeted mostly on developing new products, with research only taking a minor share. Product innovations mainly demand modifications to existing IT systems, or the development of new ones, so product development and investment in software are closely linked.

Deutsche Börse invested €151.0 million in 2002 (2001: €106.9 million) in product and systems development. Under the IFRSs/IASs, the share of costs directly attributable to internal development of new software is capitalized and normally amortized over five years. €110.1 million of development costs was capitalized in 2002 (2001: €62.6 million). The Information Technology segment incurred pure research costs of €6.2 million (2001: €17.7 million) that do not relate to the development of specific products and are not capitalized.



### Development costs and own expenses capitalized per segment

	Development costs		thereof: own expenses capitalized	
	2002 €m	2001 €m	2002 €m	2001 €m
Xetra software	17.4	16.7	12.1	11.6
Central Counterparty	40.4	4.3	24.4	0
Common Internet Access	0	2.3	0	0
<b>Xetra</b>	<b>57.8</b>	<b>23.3</b>	<b>36.5</b>	<b>11.6</b>
Eurex software	28.2	36.7	22.5	27.2
Integrated Clearer	10.3	21.6	3.3	11.6
<b>Eurex</b>	<b>38.5</b>	<b>58.3</b>	<b>25.8</b>	<b>38.8</b>
Consolidated Exchange Feed	6.2	9.6	5.8	5.6
Xebos/Fixed Income Benchmark	1.6	2.2	1.5	2.2
Index-Engine releases	1.1	1.8	0.9	1.6
Internet and Xetra Live	0	1.8	0	1.1
StatistiX	3.0	3.5	0	0
Consolidation Engine	0.4	2.3	0	0
<b>Information Products</b>	<b>12.3</b>	<b>21.2</b>	<b>8.2</b>	<b>10.5</b>
Components business	0.3	0	0.3	0
Xentric	3.9	2.1	1.1	0.7
Integriertes Aktienbuch <sup>1)</sup>		2.0	0	1.0
<b>Information Technology</b>	<b>4.2</b>	<b>4.1</b>	<b>1.4</b>	<b>1.7</b>
Connectivity	13.1	–	13.1	–
Customer Focus	8.1	–	8.1	–
Custody	4.7	–	4.7	–
Creation 24	7.3	–	7.3	–
Daytime Bridge	0.5	–	0.5	–
NCB Link	2.2	–	2.2	–
Other	2.3	–	2.3	–
<b>Clearstream</b>	<b>38.2</b>	–	<b>38.2</b>	–
<b>Total</b>	<b>151.0</b>	<b>106.9</b>	<b>110.1</b>	<b>62.6</b>

<sup>1)</sup> Integrated Share Register

Product development is not centralized but is implemented throughout the company. In the case of critical or substantial new or further developments, the individual measures are combined to form cross-segment projects under uniform management and supervision.

The trading systems were again developed further in the Xetra and Eurex trading segments in 2002. The Xetra segment saw two significant innovations: with Xetra BEST®, Xetra received an additional service that allows intermediaries to execute matching buy and sell orders of their customers internally, but without dispensing with execution in a regulated market. The expenses for Xetra BEST are contained in the Xetra software development costs of €17.4 million. The functions of Eurex software were also developed further at a cost of €28.2 million, including investments in the Eurex Bonds trading system.

The most significant development project was the development of the Central Counterparty (CCP) for the cash market. The development costs of €40.4 million were allocated to the Xetra segment. There had already been preliminary work on this project in 2001 and 2000, which was mostly allocated to the Eurex segment.

Overall, Deutsche Börse Group invested €199.7 million (2001: €107.9 million) in 2002, for an 85 percent increase over the previous year. The sharp increase is due largely to the first-time consolidation of Clearstream International S.A. In addition, investments in the Corporate Services segment grew to €66.0 million, primarily to equip the new Clearstream headquarters in Luxembourg.

#### Investments by segment

	2002 €m	2001 €m
Xetra	38.5	28.5
Eurex	26.0	39.5
Information Products	8.4	14.7
Information Technology	21.3	19.7
Clearstream	39.5	n. a.
Corporate Services	66.0	5.5
<b>Total</b>	<b>199.7</b>	<b>107.9</b>

## Employees

The number of employees in Deutsche Börse Group rose sharply in 2002. Deutsche Börse Group had 3,318 employees at 31 December 2002, 2,195 more than a year before. This strong increase is due largely to the first-time consolidation of Clearstream, entory and Infobolsa, whose employees (Clearstream: 1,738, entory: 336, Infobolsa: 74) were not contained in the prior-year figure. However, the orientation on information technology was maintained: following the consolidation of these companies, 43 percent of all employees work in IT. 44 percent of the employees now work outside Germany.

#### Employees by segment

	2002	2001	Change %
Xetra	179	194	-8
Eurex	142	116	22
Information Products	161	84	92
Information Technology	1,448	-	-
Deutsche Börse Systems	533	536	0
Clearstream TEC	571	n. a.	-
entory	336	388	-13
Xlaunch	8	8	0
Corporate Services	449	185	143
Clearstream	939	n. a.	-
<b>Total</b>	<b>3,318</b>	<b>1,123 <sup>1)</sup></b>	<b>195</b>

<sup>1)</sup> Excluding entory

Human resources management is strategically important for Deutsche Börse AG, because its critical innovative strength as a capital market services provider depends solely on the employees and the level of their qualification. Good advanced training and continuing professional development opportunities, a high level of job security and a chance to work in a successful company give us an image as an employer that enables Deutsche Börse Group to recruit highly qualified staff worldwide.

The outcome is a young, highly qualified team: 68 percent of employees are graduates, and the average age last year was 36. Most of the graduate employees have degrees in business studies, law, IT or physics. The fluctuation rate in 2002 was 8.7 percent.

Deutsche Börse Group offers a highly attractive compensation package and above-average benefits. An integrated human resources system will make compensation even more transparent starting in 2003. In addition, starting this year, the compensation of all employees will be even more heavily linked to individual performance and the achievement of corporate targets. Among other things, this will see the introduction of an employee stock option plan.

The acquisition of Clearstream has brought Deutsche Börse a network of international representative offices in which a growing number of employees are available on-site for the global customer base.

Deutsche Börse Group places great emphasis on the thorough continuing professional development of its employees. More than 270 seminars were held in 2002 on such diverse topics as software training, foreign languages, interpersonal competence and stock-exchange know-how. Starting in 2003, an internal professional development program will be available on the intranet via the electronic "Staff Training Portal".

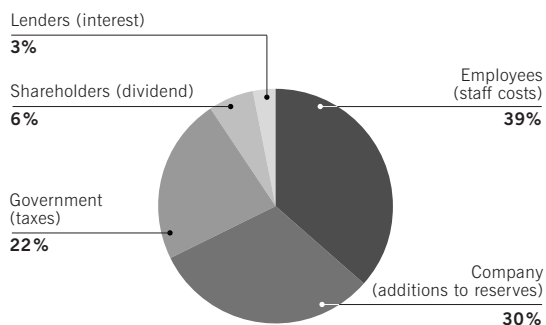
Promoting management development is another key concern of Deutsche Börse Group. 80 percent of management positions are recruited internally. Promising young managers are selectively trained in a fast-track "High Potentials" program.

In 2003, Deutsche Börse Group will again use targeted recruitment measures to attract qualified employees, in particular for customer relationship development.

#### Net value added

	2002 €m	2001 €m
Employees (staff cost)	245.3	112.0
thereof: salaries	209.0	94.4
social security contributions	36.3	17.6
Lenders (interest)	18.1	7.3
Government (taxes)	141.2	116.2
Deutsche Börse shareholders (dividend)	37.0	30.8
Company (additions to reserves)	188.1	154.7
<b>Total</b>	<b>629.7</b>	<b>421.0</b>

#### Utilization of net value added in 2002



## End-to-end environmental protection

Caring for the environment and its natural resources has always been a core component of Deutsche Börse Group's activities. Its business operations – developing, building and operating electronic systems and networks – do not entail any direct environmental risk. All environmental protection measures therefore relate to the infrastructure of its office buildings in Frankfurt, Ettlingen and Luxembourg, and to the selection and monitoring of suppliers.

The Frankfurt headquarters of Deutsche Börse AG that opened in 2000, as well as entory AG's new head office (opened in early 2003) and the head office of the Luxembourg subsidiary Clearstream International S.A., that is currently under construction, were all designed to take advantage of state-of-the-art energy saving concepts. Environmental protection also plays a role in day-to-day operations, in particular through consistent waste separation and the specific selection and monitoring of supply and disposal companies. Deutsche Börse Group chooses office materials on the basis of their suitability for recycling and re-use in return systems.

## Diverse social and cultural commitment

Deutsche Börse Group is aware of its responsibility to its employees and its locations. It communicates its corporate values and culture to the outside world through its involvement in the areas of arts/culture and education/training.

The occasion of the move into the new "Neue Börse" head office in Frankfurt-Hausen in 2000 was used to start building up a collection of contemporary photography. The works are accessible to all employees and visitors as a permanent exhibition. For the new buildings in Ettlingen (entory AG) and Luxembourg (Clearstream International S.A.), Deutsche Börse Group will extend its art collection as part of this concept. Frankfurt as a city of culture is promoted by supporting individual museums and galleries (the Städel and Schirn art galleries, the Museum of Modern Art) and their projects. The employees benefit from these alliances in the form of free special guided tours and reduced tickets to the museums and galleries supported.

Deutsche Börse Group also supports top-ranking academic institutions such as Duke University or the European Business School. The main focus of its charitable donations is on education for children and youths.

Deutsche Börse Group takes its responsibility as an expert partner, adviser and opinion leader very seriously. It promotes national and international frameworks that ensure investor protection and competition through maximum transparency and fairness. That is why experts from the Group are involved as advisers in the development of standards, laws and directives for stock exchanges and capital markets. Examples of this are the participation in the German Government Commission on Corporate Governance or the support for the Committee of Stock Exchange Experts.

## Risk report

Deutsche Börse reports on operating environment risks, industry and information technology risk, as well as financial and other risks. A risk management function has been established for this purpose.

### Operating environment risks, industry risks

#### (a) General risks

Deutsche Börse currently operates systems for 17 cash and derivatives markets. Its commercial success is thus contingent upon the development of activities on the capital markets. In the Xetra, Eurex and Clearstream segments, sales revenues are directly linked to activity on the capital markets, while the sales revenues of the Information Products and Information Technology segments are indirectly linked. Trading and settlement-related revenue in these segments may also decline if liquidity migrates to other financial marketplaces, or if a prolonged bear market results in a sharp downturn in trading.

Market structures and their business environment are also constrained by the regulatory environment, changes which may adversely affect the business, financial and earnings position of Deutsche Börse Group. Any legal or tax changes may effect the behavior of participants and thus its financial position and results of operations. This indirect impact means that Deutsche Börse Group cannot quantify the effects of individual scenarios.

#### (b) Risk of loss of institutional liquidity

Deutsche Börse Group's core business involves the operation of highly liquid markets, primarily for the institutional trading of standardized investment instruments. From the perspective of an investor issuing trading orders, these trading platforms offer the particular advantage of low transaction costs. The difference between bid and ask prices (the spread), which accounts for the bulk of actual trading costs, is very low because of the high – mostly institutional – liquidity on all the systems. Price discovery is also highly transparent, particularly for investors: automatic order execution in an open order book, meaning that it is visible to all parties. Because of the crucial unique selling points from the perspective of the market – neutrality, i.e. independence from individual intermediaries, and efficient, transparent price discovery in Deutsche Börse Group's trading systems – the risk that significant institutional liquidity will be lost is very low.

#### (c) Product innovation risk

The launch of new products is always accompanied by the risk that they will be rejected by customers. If this risk were to materialize, it would reduce projected revenues and require the investments made, which may be considerable, to be written down or off. At present, these comprehensive new products include the introduction of the Central Counterparty for equities, and the possible move into the US derivatives market. To reduce the market risk from these expansion projects, all activities are implemented only after comprehensive consultation and agreement with the market participants, i.e. the subsequent customers.

### Information technology risks

Information technology risks arise from the operation of Deutsche Börse Group's computer-based markets, and from the operation of applications for customers by the IT segment.

Both Eurex, the world's largest derivatives exchange, and Xetra, the cash market system via which, among other things, over 96 percent of DAX equity trading volumes are executed, are fully computerized. The other exchanges operated by Deutsche Börse Systems AG (CBOT, Vienna Stock Exchange, Helsinki Exchanges, Irish Stock Exchange, etc.), ECNs (Eurex Bonds, Eurex Repo) and the clearing and settlement systems of Clearstream Banking AG, Frankfurt, and Clearstream Banking S.A., Luxembourg, are computerized. This requires analysis of the information technology risks – i. e. the availability risk, integrity risk and confidentiality risk. These risks could give rise to obligations to pay compensation, as well as revenue shortfalls.

In addition to these direct adverse effects, system problems may also have indirect effects in the form of loss of reputation and the resulting loss of customers and their business.

#### (a) Availability risk

Availability risk arises because the systems required for smooth operations must be continuously available. However, this availability may be impaired by hardware failure, operator errors or the physical destruction of the data centre facilities. The overall systems availability of Deutsche Börse Group's host systems was again over 99.9 percent in 2002, and thus complied with the high standards specified for security and reliability. Certain systems even achieved an availability of 99.99 percent.

Deutsche Börse Systems AG and Clearstream Services S.A., the systems providers of Deutsche Börse Group, protect themselves from availability risk through the redundant design of all their systems.

#### (b) Integrity risk

The risk of processing errors, data loss or data storage errors due to software errors (integrity risk) did not result in major interruptions in market trading or settlement processes for participants in 2002. The impact of software errors is minimized by comprehensive testing and simulations in the run-up to each release, as well as by 24x7 availability of IT specialists.

**(c) Confidentiality risk**

Confidentiality risk incorporates the risk of data interception and penetration of the systems environment of Deutsche Börse Systems AG and Clearstream Services S.A. Deutsche Börse Group uses a special network, firewall and authentication architecture to thwart potential attempts to obtain unauthorized access to the data in its systems. For example, access to the Xetra and Eurex trading systems via the Internet is controlled by a state-of-the-art smartcard-based architecture for logon, encryption and digital security. Deutsche Börse Systems AG and Clearstream Services S.A. also invest permanently and heavily to ring-fence their network and systems: for instance, the systems are examined regularly for weak points by specialist external agencies.

**Financial risks****(a) Funding risks**

Deutsche Börse Group has a low debt/equity ratio. Because its debt is covered by a commercial paper program, the funding risk is low.

**(b) Credit risks**

Investing cash and cash equivalents entails a risk that a debtor will not repay the funds made available to it. Deutsche Börse Group's debtors are prime-rated banks (direct), governments, and public- and private-sector enterprises (indirect in the case of investments via mutual funds).

As an ICSD, Clearstream International provides short-term credit facilities to its customers to maximize settlement efficiency. The exposure per counterparty and per country is monitored centrally by the Credit Group in Luxembourg. Most lending activities are secured by collateral and are legally based in Luxembourg, where the legal framework is favorable to secured lenders. Clearstream has never experienced any credit losses since its establishment.

## (c) Liquidity risks

Sufficient liquidity must be available at all times to meet Deutsche Börse Group's payment obligations. Clearstream Banking S.A. and Eurex Clearing AG bear the most important liquidity risks in Deutsche Börse Group. Clearstream Banking S.A., a subsidiary of Clearstream International S.A. that focuses on the treasury business, faces the largest liquidity risk and has an average monthly liquidity ratio in excess of 70 percent. To reduce the liquidity risk, Clearstream Banking S.A. has established a revolving credit facility of US\$1 billion that has never been used. Clearstream Banking S.A. also benefits from uncommitted short-term inter-bank lines that amount to €16.3 billion and are regularly used to ensure their availability.

Eurex Clearing faces liquidity risk as the cash deposits by clearing members (the variation margins for settling daily transactions) and the premium payments, which may be as much as several hundred million euros, are due at sight. Such variation margins are held on overnight deposit at a number of banks of very high financial credit quality. The business operations of Group companies result in timing and monetary differences, especially on an intra-month basis.

## (d) Risk from operating a central counterparty in the Eurex derivatives market

Material risks may arise from Eurex Clearing AG's function as the central counterparty for all trades executed on Eurex. Counterparty risk denotes the risk that one of the two parties involved in a transaction will default. However, Eurex Clearing's counterparties are exclusively Eurex market participants who are also approved clearing members. The risk that one of these clearing members will default is covered by the margins deposited by clearing members in the form of cash or securities. These margins ensure that all positions of a defaulting clearing member will be closed out on the following market day, assuming the 99 percent worst-case movement in prices. If these margins were to prove insufficient in the event that a counterparty defaults, Eurex Clearing AG could have recourse to the clearing fund established for this purpose, to the reserves of Eurex Clearing AG earmarked for such cases, to equity, and, finally, to the comfort letters issued by Deutsche Börse AG and SWX Swiss Exchange.

Simulations have established that even in an exceptional crisis, these collateral systems would be sufficient to assume in full the obligations from trading activities.

On 17 May 2002, the first Eurex Clearing member defaulted. Thanks to the above-mentioned security measures, Eurex Clearing did not suffer losses on the elimination of open derivative positions. The margins deposited by the market participant were sufficient to cover all open positions. The clearing fund, as the next "line of defense", thus remained unaffected.



## Other risks

### (a) Risks from participant support and market supervision

Although the trading and settlement processes are automated as far as possible and come close to the ideal of straight-through processing, manual intervention in market and system management is necessary in special cases. These rare occasions entail a risk of errors and omissions and can consequently lead to claims by affected customers.

### (b) Dependence on key accounts

Deutsche Börse Group provides its services to around 3,000 customers overall. In the Xetra and Eurex segments, a substantial proportion of trading volumes is accounted for by a few key accounts. Clearstream has over 2,000 customers, and its key accounts differ from those of Eurex and Xetra. This leads to diversification and thus to a reduction in dependencies. However, the Group would expect to suffer revenue shortfalls if these key accounts were to default, with a consequent loss of business.

### (c) Litigation risks

Due to the nature of its business, Deutsche Börse Group is involved in litigation and arbitration proceedings in Germany arising in the ordinary course of business. While it is not feasible to predict or determine the ultimate outcome of all pending or threatened legal proceedings, the Group does not believe that the outcome of these proceedings will have a material adverse affect on the Group's financial condition or results of operations. The total number of proceedings as well as the amounts in dispute do not entail significant risks.

## Risk management

### General risk management

In line with the risk classification, risk management at Deutsche Börse Group is broken down into strategic competition and regulatory risks, project risks and operating risks.

At weekly meetings with internal and external experts, the Executive Board is kept informed about the development of core competition risk indicators on the basis of business developments. Organizational units that liaise with the bodies involved in the legislative process identify and report at an early stage on potential regulatory risks.

The Executive Board is also kept informed on a weekly basis and in meetings of the project steering committees about the project risks resulting from Deutsche Börse Group's strategic projects.

The operating risk is measured, analysed and reported regularly or on an ad-hoc basis to the Executive Board by the central Group Risk Management. This process ensures that the managers responsible are continuously and comprehensively informed about the risk position.

Risk assessments track the business process and indicate where risks arise. In the risk analysis phase, scenarios and process analysis are used to determine the probability and impact of the associated risk. Moreover, a Group-wide value-at-risk model provides quantitative evaluation of risks, established mitigation measures such as insurances, and the possible impact on profitability. Early-warning indicators are developed and established in the course of risk identification.

A database is used to produce statistical reports and to provide near-real time identification of both direct increases in risk and medium- to long-term trends. If such a development is identified, the process manager immediately initiates risk control measures.

Eurex Clearing AG initially limits the risk of default by a counterparty that arises from its function as central counterparty by ensuring that only institutions with substantial liable capital are admitted as clearing participants.

The risk borne by Eurex Clearing AG is further reduced by the fact that clearing members who are liable for the performance of trades executed via them on Eurex are subject to margin calls. Eurex Clearing recalculates the margins to be provided by the participants to the trades executed during the course of the day in near-real time, and can thus reduce its residual risk. Eurex Clearing AG can calculate margins every fifteen minutes. The advantage of this is that the level of any potential shortfall in the cover of counterparty risk can be continuously established and eliminated, if required, by intraday margin calls and the margin provisions. If this collateral should prove insufficient in the case of the insolvency of a participant, Eurex Clearing can also call on a clearing fund established for this purpose.

Deutsche Börse's own funds are invested in euros, US dollars and Swiss francs. These investments are mostly in money market instruments with counterparties of very high credit quality (at least investment grade) and AA rated bonds. The principal money market instruments used comprise term money deposits with prime-rated banks protected by German deposit insurance funds or third-party bank guarantees. The systematic use of market information systems and the analysis of the Clearstream credit department enables Deutsche Börse Group to take countermeasures at an early stage if risks arise.

The company's liquidity is projected on a monthly basis for the current and the following year. This in turn determines the maturity structure of cash investments. In the event of liquidity crises, term deposit investments may be liquidated (against payment of early repayment interest penalties). In addition, Deutsche Börse AG has a €400 million loan facility from a syndicate of banks, which serves as a backup liquidity facility in case the Group is unable to raise short term funding in the commercial paper market.

Eurex Clearing AG has intraday credit facilities amounting to €700 million, and an overnight line of credit amounting to €350 million is maintained at banks. These are earmarked specifically to hedge the liquidity risks from the management of Eurex Clearing AG's accounts used to settle the activities of Eurex Frankfurt AG, Eurex Bonds GmbH and Eurex Repo GmbH handled by Eurex Clearing AG.

## Clearstream International

Clearstream International's risk management procedures, particularly as they relate to banking operations, are detailed below.

### Risk measurement and monitoring

Clearstream International measures and monitors the level of risk arising throughout its activities; the risk management process of the company currently classifies risk into these major categories: market and liquidity risk, credit risk and compliance risk.

### Risk governance

While the overall responsibility for the setting and monitoring of risk policy remains with the executive management of Clearstream International, each risk segment is delegated to sub-committees of the executive management of Clearstream International as follows:

(a) Market and liquidity risk: Assets and Liabilities Committee ("ALCO")

The ALCO is responsible for the enforcement of risk policy in the area of market and liquidity risk and includes representatives of the banking business, treasury, finance, operations, customer relations and risk management departments. It meets monthly.

Clearstream International's 2002 month-end average capital adequacy ratio (closely linked to the size of the balance sheet) is close to 50 percent – well above the internal target of 15 percent and the minimum regulatory requirement of 8 percent.

Clearstream International's 2002 average liquidity reached 70 percent, well above the regulatory requirement of 30 percent.

In accordance with Luxembourg and German law, Clearstream Banking S.A., Luxembourg, and Clearstream Banking AG, Frankfurt ("the Banks"), are required to ensure they have sufficient 'eligible' capital, as defined by applicable regulation, to cover the credit and the market risks arising from their activities. Since the Banks do not enter into trading activities, the 'simplified' ratio is applied.

(b) Credit risk: Internal Credit Group ("ICG")

The ICG is responsible for the enforcement of risk policy in the area of credit risk and includes representatives of the banking business, credit, operations, customer relations and risk management departments. It meets monthly.

The amount of unsecured (uncollateralized) credit lines was reduced by almost one third in 2002, with an average utilization rate slightly above 1 percent. Clearstream International kept its zero credit default record.

Due to the nature of Clearstream's business, it experiences large swings in its short-term liquid assets. In order to alleviate the associated risks, Clearstream maintains a substantial surplus of capital at all times against which the financial position is reviewed. This process is defined in accordance with the principles proposed by the Bank for International Settlements (BIS) in its draft revision of the Basel Capital Accord.

(c) Compliance risk: Compliance Steering Committee ("CSC")

The CSC is responsible for the enforcement of risk policy in the area of compliance. It includes representatives of compliance, legal, operations, customer relationships, credit and risk management departments. It meets monthly.

Review of NCCTs (Non-Cooperative Countries and Territories) and high-risk country transactions have been continuously performed, and no OTC market nor suspicious customer transactions have been detected. Only one account has been added to the watch list.

No event relating to insider dealing or breach of data protection has been reported.

Following the acquisition of 100 percent of Clearstream International, the Group's risk monitoring and reporting will be harmonized in 2003.

### **New management structure effective 1 January 2003**

Deutsche Börse Group's management structure changed on 1 January 2003. The Executive Board was reduced to six members, nine Managing Directors complement the leadership team. The aim of this restructuring is to ensure the stronger functional orientation of the Group, whose management structure was formerly classified along formal divisional lines. This aims to integrate the new subsidiary Clearstream International into the Group structure, as well as achieve the greater integration of Xetra, Eurex and Clearing. Strategic decisions will be made by the Executive Board, and operating decisions will be made by functionally driven, cross-functional committees.

## Outlook for 2003

### **Ambivalent environment for further business growth**

Activity on the cash market grew appreciably in the first few weeks of 2003 compared with Q4/2002. The derivatives market also started the new year with very strong growth.

Political risks and the muted prospects for any economic recovery in the near future suggest that the environment for the European and global financial markets will continue to be difficult in 2003. As in 2002, Deutsche Börse AG's economic development is contingent on how activity on the markets develops, and this is something that is very difficult to predict in any level of detail. However, broadly diversified revenue sources and a range of linear and stable mid-term trends allow us to make certain fundamental assumptions for future activity developments. For example, the trend away from OTC business and towards regulated trading platforms in both the cash and the derivatives markets continues unabated in many European markets.

Based on experience at other trading centres from the introduction of a Central Counterparty (CCP), which gives buyers and sellers total anonymity before and after the transaction, Deutsche Börse Group believes that the launch of the CCP on the German cash market will further enhance the attractiveness of exchange trading.

In the Information Technology segment, on the other hand, the current level of order books and the low hourly rates in the consulting business will see a sideways or even declining trend.

The Information Products has plans to move into the terminal business this year via its Infobolsa joint venture, which should further reinforce the pace of growth in this segment.

By contrast, stable growth in Clearstream's settlement and custody business is expected, driven primarily by growth in the eurobond segment because of the low short-term interest rates expected in the near to mid-term. Another factor will be the decline in settlement transactions from the launch of the CCP and the expected netting efficiency. Management factored this estimate into the valuation of Clearstream at the time of the acquisition of the outstanding shares in early 2002, and reiterates this opinion in view of actual market developments.

**Stable growth through diversification**

Deutsche Börse AG expects to be able to achieve its ambitious growth targets in 2003. Given the market conditions outlined above, revenue growth is expected to continue in the mid-term target corridor of between 10 and 15 percent in the core Group – excluding the newly added subgroups Clearstream and entory. In view of the more modest revenue growth at Clearstream and entory, this produces overall revenue growth of an expected 5 to 8 percent. However, the ongoing cost-cutting programs at Clearstream and entory, the cost synergies expected in 2003 from the integration of settlement and custody services, coupled with the economies of scale generated by the business model, should enable us to maintain earnings growth at Group level in the order of 15 to 20 percent.

**Employees**

Due to normal fluctuation rates, the number of employees in the Group is likely to drop slightly in 2003.

**Investment and financing**

It is expected that planned capital projects in 2003 will be financed from Group cash flow while existing indebtedness may be refinanced on a longer term basis. The main focus of capital spending in the first quarter will be on introducing the Central Counterparty for the cash market in the Xetra segment, and in the rest of the year, on investments needed for Eurex's market entry in the USA.

# Consolidated Income Statement

for the period 1 January to 31 December 2002

	Note	2002 €m	2001 €m
Sales revenue	6	1,106.5	760.3
Net interest income from banking business	7	64.4	0
Own expenses capitalized	8	110.1	62.6
Other operating income	9	70.6	77.3
		<b>1,351.6</b>	<b>900.2</b>
Fee and commission expenses from banking business		-66.3	0
Staff costs	10	-245.3	-112.0
Depreciation and amortization expense	11	-223.6	-83.3
Other operating expenses	12	-500.0	-471.6
Income from equity investments	13	41.0	58.0
Write-downs of noncurrent financial assets	14	-6.2	-13.2
<b>Earnings before interest and taxes (EBIT)</b>		<b>351.2</b>	<b>278.1</b>
Net financial income	15	23.2	41.1
<b>Profit before tax from ordinary activities (EBT)</b>		<b>374.4</b>	<b>319.2</b>
Income tax expense	16	-141.2	-116.2
Minority interests		1.9	0.7
<b>Net profit for the period and DVFA/SG earnings</b>	44	<b>235.1</b>	<b>203.7</b>
<b>DVFA/SG earnings per share (€)</b>	44	<b>2.18</b>	<b>2.04</b>

# Consolidated Balance Sheet

as at 31 December 2002

ASSETS	Note	2002 €m	2001 €m
<b>NONCURRENT ASSETS</b>			
<b>Intangible assets</b>			
Software		337.4	207.7
Goodwill		1,248.6	51.3
Payments on account		110.4	0.8
		<b>1,696.4</b>	<b>259.8</b>
<b>Property, plant and equipment</b>			
Land and buildings		27.7	0
Leasehold improvements		20.4	15.2
Computer hardware, operating and office equipment		80.2	41.7
Payments on account and construction in progress		192.6	0.4
		<b>320.9</b>	<b>57.3</b>
<b>Noncurrent financial assets</b>			
Investments in subsidiaries		0	1.2
Investments in associates		10.3	382.8
Other equity investments		12.8	2.5
Noncurrent receivables and securities from banking business		335.8	0
Other noncurrent financial instruments		8.1	32.1
Other long-term loans		261.4	1.5
Investment property		10.7	0
		<b>639.1</b>	<b>420.1</b>
<b>Total noncurrent assets (excl. miscellaneous and deferred tax assets)</b>	17	<b>2,656.4</b>	<b>737.2</b>
<b>Miscellaneous and deferred tax assets</b>			
Deferred tax assets	18	13.2	11.2
Other noncurrent assets		8.8	6.3
		<b>22.0</b>	<b>17.5</b>
<b>Total noncurrent assets</b>		<b>2,678.4</b>	<b>754.7</b>
<b>CURRENT ASSETS</b>			
<b>Receivables and other assets</b>			
Current receivables and securities from banking business	19	3,085.0	6.9
Trade receivables	20	139.3	112.7
Intragroup receivables		0	0.8
Associate receivables		2.3	2.2
Receivables from other investors		4.3	2.9
Other current assets	21	83.1	35.1
		<b>3,314.0</b>	<b>160.6</b>
Current financial instruments		0	302.9
Restricted bank balances	22	303.7	164.7
Other cash and bank balances	23	248.1	752.2
<b>Total current assets</b>		<b>3,865.8</b>	<b>1,380.4</b>
<b>Total assets</b>		<b>6,544.2</b>	<b>2,135.1</b>



SHAREHOLDERS' EQUITY AND LIABILITIES	Note	2002 €m	2001 €m
<b>SHAREHOLDERS' EQUITY</b>	24		
Subscribed capital		111.8	102.8
Share premium		1,330.2	945.5
Legal reserve		0.4	0.3
Other retained earnings		630.8	446.0
Revaluation surplus		9.0	5.7
Unappropriated surplus		70.0	60.0
		<b>2,152.2</b>	<b>1,560.3</b>
<b>Minority interests</b>	26	<b>23.1</b>	<b>10.6</b>
<b>PROVISIONS AND LIABILITIES</b>			
<b>Noncurrent provisions</b>	27		
Provisions for pensions and other employee benefits	28	64.5	31.2
Deferred tax liabilities	29	99.3	47.6
Other noncurrent provisions	30	37.9	26.3
		<b>201.7</b>	<b>105.1</b>
<b>Current provisions</b>	27		
Tax provisions	31	124.1	26.9
Other current provisions	32	28.6	25.4
		<b>152.7</b>	<b>52.3</b>
<b>Noncurrent liabilities</b>	33		
Interest-bearing liabilities		9.2	0
Other noncurrent liabilities		8.3	11.1
		<b>17.5</b>	<b>11.1</b>
<b>Current liabilities</b>	33		
Liabilities from banking business	34	3,257.9	0
Cash deposits by Eurex participants	35	217.2	164.7
Other bank loans and overdrafts		0	90.0
Other commercial paper		288.1	0
Trade payables		122.9	70.2
Payables to other investors		6.2	12.6
Other current liabilities	36	104.7	58.2
		<b>3,997.0</b>	<b>395.7</b>
<b>Total provisions and liabilities</b>		<b>4,368.9</b>	<b>564.2</b>
<b>Total shareholders' equity and liabilities</b>		<b>6,544.2</b>	<b>2,135.1</b>

# Consolidated Cash Flow Statement

for the period 1 January to 31 December 2002

	Note	2002 €m	2001 €m
Net profit for the period excluding minority interests		233.2	203.0
Depreciation and amortization expense		229.8	96.5
Decrease in noncurrent provisions		-3.1	-0.7
Deferred tax expense/income		16.4	19.8
Other non-cash income and expense		-8.6	-36.0
<b>DVFA/SG cash flow</b>		<b>467.7</b>	<b>282.6</b>
Change in working capital, net of non-cash items:			
Decrease in receivables and other assets		80.5	4.7
(Decrease)/increase in current provisions		-2.3	13.3
(Decrease)/increase in noncurrent liabilities		-16.5	1.5
Decrease in current liabilities		-47.1	-21.3
Adjustments for interest and taxes contained in net profit for the period		101.6	55.3
Interest and income received from other noncurrent financial instruments and long-term loans		32.9	48.4
Interest paid		-14.3	-7.3
Income tax paid		-134.2	-128.9
Net loss on disposal of property, plant and equipment		-2.1	0.5
<b>Cash flows from operating activities</b>	40	<b>466.2</b>	<b>248.8</b>
Payments to acquire noncurrent assets		-189.2	-113.0
Payments to acquire subsidiaries <sup>1)</sup>		-1,569.0	-41.0
Payments to acquire noncurrent financial instruments		-8.0	0
Proceeds from disposal of noncurrent assets		24.5	1.2
Proceeds from net disposals of available-for-sale financial instruments		7.6	0
<b>Cash flows from investing activities</b>	41	<b>-1,734.1</b>	<b>-152.8</b>
Net proceeds from capital increases		390.8	961.8
Net cash received from other shareholders		8.1	0
Dividends paid		-37.0	-30.8
Proceeds from short-term financing		286.7	0
Repayment of long-term borrowings		-93.0	-10.0
<b>Cash flows from financing activities</b>	42	<b>555.6</b>	<b>921.0</b>
Net change in cash and cash equivalents		-712.3	1,017.0
Cash and cash equivalents at beginning of period		1,062.0	45.0
First-time consolidation of current receivables and liabilities from banking business		-244.9	0
<b>Cash and cash equivalents at end of period</b>	43	<b>104.8</b>	<b>1,062.0</b>
<b>DVFA/SG earnings per share (€)</b>		<b>4.35</b>	<b>2.83</b>

<sup>1)</sup> Purchase prices of first-time consolidated subsidiaries net of cash and cash equivalents acquired amounting to €254.2 million (2001: €7.9 million).

# Consolidated Statement of Changes in Shareholders' Equity

for the period 1 January to 31 December 2002

	2002 €m	2001 €m
<b>Subscribed capital</b>		
Balance as at 1 January	102.8	18.8
Issue of new shares	9.0	7.5
Capital increase from share premium and retained earnings	0	76.5
<b>Balance as at 31 December</b>	<b>111.8</b>	<b>102.8</b>
<b>Share premium</b>		
Balance as at 1 January	945.5	44.8
Issue of new shares	388.8	976.1
Cost of capital increases	-7.0	-36.8
Deferred taxes on cost of capital increases	2.9	15.1
Capital increase from share premium	0	-53.7
<b>Balance as at 31 December</b>	<b>1,330.2</b>	<b>945.5</b>
<b>Retained earnings</b>		
Balance as at 1 January	446.3	306.6
Appropriations from unappropriated surplus (incl. any IAS adjustments)	188.1	154.7
Measurement of interest rate swaps	3.8	-3.8
Adjustments from deferred taxes	0.8	2.4
Change in carrying amount of equity-accounted investments taken directly to equity	-2.4	9.0
Change due to purchase of and purchase rights for shares of employees of Clearstream Banking S.A.	-4.0	0
Partial spin-off of Integriertes Aktienbuch (Integrated Share Register)	-1.4	0
Capital increase from retained earnings	0	-22.8
Other adjustments	0	0.2
<b>Balance as at 31 December</b>	<b>631.2</b>	<b>446.3</b>
<b>Revaluation surplus</b>		
Balance as at 1 January	5.7	7.8
Remeasurement of noncurrent financial assets	6.5	-2.1
Deferred taxes on remeasurement of noncurrent financial assets	-3.2	0
<b>Balance as at 31 December</b>	<b>9.0</b>	<b>5.7</b>
<b>Unappropriated surplus</b>		
Balance as at 1 January	60.0	41.8
Dividends paid	-37.0	-30.8
Net profit for the period	235.1	203.7
Appropriation to retained earnings (incl. any IAS adjustments)	-188.1	-154.7
<b>Balance as at 31 December</b>	<b>70.0</b>	<b>60.0</b>
<b>Shareholders' equity as at 31 December</b>	<b>2,152.2</b>	<b>1,560.3</b>

Net profit for the period, including gains and losses recognized directly in equity, amounted to €234.6 million (2001: €186.8 million).

# Notes to the Consolidated Financial Statements

## Basis of preparation

### 1. General principles

The consolidated financial statements of Deutsche Börse AG, Frankfurt/Main, for the year ended 31 December 2002 were prepared in accordance with the International Financial Reporting Standards (IFRSs) and International Accounting Standards (IASs) issued by the International Accounting Standards Board (IASB), and comply with the significant accounting policies of the company as presented in these Notes.

Deutsche Börse AG's IFRS/IAS consolidated financial statements for the year ended 31 December 2002 contain the following significant differences in accounting policies and presentation compared with those used in the previous year:

#### Balance sheet structure

To enhance the distinction between current and noncurrent items in accordance with IAS 1.53 (Presentation of Financial Statements), receivables and other assets are presented in separate categories in the balance sheet. To comply with IAS 1.54, receivables and other assets are presented as current and noncurrent items if it is expected that they will be monetarized within or after a period of twelve months from the reporting date. The amounts in the prior-year balance sheet as at 31 December 2000 have been restated accordingly.

The balance sheet items affected were restated as follows:

	Reported in 2001 €m	Restatement €m	Comparatives for 2001 in this report €m
<b>Miscellaneous and deferred tax assets</b>			
Other noncurrent assets	–	6.3	6.3
<b>Current assets</b>			
Other current assets	41.4	–6.3	35.1

### First-time consolidation of Clearstream International

Cedel International S.A., Cedel's 50 percent interest in Clearstream International S.A. and its subsidiaries, acquired in July 2002 (see note 2), apply IFRSs/IASs and mainly use the same accounting policies as the other companies of Deutsche Börse Group. The assets, liabilities, equity and profit or loss of companies acquired have been fully consolidated since 1 July 2002. The accounting policies are described in note 4.

The following new headings are presented in the consolidated balance sheet and consolidated income statement as a result of the acquisitions:

- Receivables and securities from banking business
- Liabilities from banking business
- Net interest income from banking business
- Fee and commission expenses from banking business
- Investment property

Receivables and securities from banking business comprise term deposits, equities, fixed-rate instruments and derivatives held by Clearstream Banking S.A. and Clearstream Banking AG.

Liabilities from banking business comprise deposits by other banks and amounts owed to other depositors, commercial paper issued by Clearstream Banking S.A. and derivative financial liabilities.

Net interest income from banking business is recognized in the income statement as it arises on the basis of the effective yield of the asset or a corresponding variable rate of interest. Net interest income from banking business also contains the amortization of any premium or discount or other differences between the initial carrying amount of an interest-bearing instrument and its amount at maturity calculated using the effective interest method.

Fee and commission expenses from banking business are recognized in the income statement for settlement services and for securities custody and related services when the expenses are incurred. Fee and commission income from banking business is contained in sales revenue.

Interest income and expenses from banking business is presented as a net amount because the corresponding amounts are closely linked. By contrast, fee and commission income and expenses from banking business are closely separately because the corresponding transactions are not directly linked. As a rule, the contracting parties from whom fee and commission income is generated are different to those to whom fee and commission expenses are paid.

Investment property consists of undeveloped land that was not used as at 31 December 2002.

## 2. Basis of consolidation

Deutsche Börse AG's interests in subsidiaries, associates and joint ventures as at 31 December 2002 are presented in the following tables:

Company	Domicile	Equity interest at 31 Dec. 2002 direct (indirect) %
<b>Fully consolidated subsidiaries as at 31 December 2002</b>		
Cedel International S.A.	Luxembourg	100.00
Clearstream International S.A.	Luxembourg	(100.00)
Clearstream Banking S.A.	Luxembourg	(100.00)
Clearstream Banking AG	Germany	(100.00)
Clearstream Services S.A.	Luxembourg	(99.93)
Clearstream Services (UK) Ltd.	UK	(99.93)
Clearstream Properties S.A.	Luxembourg	(100.00)
Filinks S.A.S.	France	(100.00)
Immobilière Espace Kirchberg A S.A.	Luxembourg	(100.00)
Immobilière Espace Kirchberg C S.A.	Luxembourg	(100.00)
Immobilière Espace Kirchberg D S.A.	Luxembourg	(100.00)
Deutsche Börse Systems AG	Germany	100.00
Deutsche Börse Systems Inc.	USA	(100.00)
Deutsche Börse IT Holding GmbH <sup>3)</sup>	Germany	100.00
entory AG	Germany	(100.00)
entory (UK) Ltd.	UK	(100.00)
Finnovation GmbH	Germany	(100.00)
Silverstroke AG	Germany	(100.00)
atec GmbH	Germany	(100.00)
entory ventures GmbH	Germany	(100.00)
projects IT-Projektbörse GmbH	Germany	(100.00)
Xlaunch AG	Germany	(100.00)
Xlaunch Erste Verwaltungsgesellschaft mbH	Germany	(100.00)
Xlaunch Zweite Verwaltungsgesellschaft mbH	Germany	(100.00)
Eurex Zürich AG	Switzerland	49.97
Eurex Frankfurt AG	Germany	(49.97)
Eurex Beteiligungen AG	Switzerland	(49.97)
Eurex Clearing AG	Germany	(49.97)
Eurex Repo GmbH	Germany	(49.97)
Eurex Bonds GmbH	Germany	(38.28)
Deutsche Gesellschaft für Wertpapierabwicklung mbH	Germany	100.00
DeuBö Vermögensverwaltungs AG	Germany	100.00
Fördergesellschaft für Börsen und Finanzmärkte in Mittel- und Osteuropa mbH	Germany	100.00
Deutsche Börse Computershare GmbH	Germany	51.00
Infobolsa S.A.	Spain	50.00
Infobolsa Internet S.A.	Spain	(50.00)
Difubolsa, Serviços de Difusão e Informação de Bolsa S.A.	Portugal	(50.00)

<sup>1)</sup> Thousands

<sup>2)</sup> Before profit transfer or loss absorption

<sup>3)</sup> Beta Centaurus Vermögensverwaltungs GmbH was renamed Deutsche Börse IT Holding GmbH on 17 January 2003

Ordinary share capital	Equity	Total assets	Sales revenue 2002	Net profit/loss 2002	First consolidated
€ thousands	€ thousands	€ thousands	€ thousands	€ thousands	
88,507	2,034,477	2,040,095	0	13,538	1 July 2002
150,000	581,457	797,977	3,491	81,794	1 July 2002
56,056	451,041	3,983,540	402,227	112,319	1 July 2002
25,000	88,176	618,858	208,859	32,620	1 July 2002
30,000	43,883	284,576	5,091	2,652	1 July 2002
GBP 2	10,102	12,785	151	86	1 July 2002
1,700	37,755	101,467	0	189	1 July 2002
4,449	-1,542	1,960	94	-3,187	31 Dec. 2002
73	-92	28,170	0	-16	1 July 2002
54	-72	30,281	0	-15	1 July 2002
52	-72	17,960	0	-16	1 July 2002
2,000	2,415	62,173	339,971	96,623 <sup>2)</sup>	1993
USD <sup>1)</sup> 400	862	2,055	7,723	356	2000
1,000	59,339	59,352	0	-36,910	30 Nov. 2002
8,000	8,964	22,566	68,819	-4,513	17 Dec. 2001
GBP <sup>1)</sup> 50	9	10	176	1,385	17 Dec. 2001
25	25	35	10	10 <sup>2)</sup>	17 Dec. 2001
300	788	2,151	3,637	280	17 Dec. 2001
26	82	90	468	2	17 Dec. 2001
462	0	1	0	108	17 Dec. 2001
511	49	54	79	575	17 Dec. 2001
500	4,000	4,370	0	-4,243 <sup>2)</sup>	2000
25	25	25	0	0	31 Dec. 2002
25	25	25	0	0	31 Dec. 2002
CHF <sup>1)</sup> 10,000	21,119	36,626	30,474	315	1998
6,000	19,380	33,743	1,076	2,876	1998
CHF <sup>1)</sup> 100	535	535	0	0	2000
5,113	8,823	232,350	62,648	1,002 <sup>2)</sup>	1998
50	50	1,299	508	-4,826 <sup>2)</sup>	27 Feb. 2001
3,600	5,900	6,691	3,615	-2,512	1 Nov. 2001
540	556	783	0	6	31 Dec. 2002
50	42	42	0	-8	31 Dec. 2002
256	256	712	0	0	31 Dec. 2002
50	4,830	6,236	2,773	-1,511	1 Oct. 2002
331	9,966	11,994	10,002	1,666	1 Nov. 2002
60	74	164	821	16	1 Nov. 2002
50	43	675	849	2	1 Nov. 2002

Subsidiaries that were carried at cost until 2001 because of their insignificance for the presentation of a true and fair view of the Group's net assets, financial position and results of operations, have been fully consolidated starting in 2002.

Company	Equity interest at 31 Dec. 2002 direct (indirect) %	Ordinary share capital € thousands	Equity € thousands	Total assets € thousands	Sales revenue 2002 € thousands	Net profit/loss 2002 € thousands
<b>Associates and joint ventures carried at equity as at 31 December 2002 in accordance with IAS 28 or IAS 31</b>						
FDS Finanz-Daten-Systeme GmbH & Co. KG	50.00	19,451	2,766	4,288	1,455	-110
FDS Finanz-Daten-Systeme GmbH	(50.00)	26	35	39	0	1
NEWEX Kapitalmarktberatungs- gesellschaft m.b.H.	50.00	70	847	1,083	540	-772
STOXX Ltd.	33.33	612	8,591	17,174	20,360	6,041
a/c/e Alliance CBOT/Eurex, LLC <sup>1)</sup>	(24.99)	1,047	1,047	6,668	24,586	0
European Energy Exchange AG	(11.60)	40,050	30,196	52,984	6,649	-19,854
iBoxx Ltd.	19.997	7,000	3,610	4,142	410	-1,625

<sup>1)</sup> Amounts from the annual financial statements as at 31 December 2001

Company	Equity interest at 31 Dec. 2002 direct (indirect) %	Ordinary share capital € thousands	Equity € thousands	Total assets € thousands	Sales revenue 2002 € thousands	Net profit/loss 2002 € thousands
<b>Other associates carried at cost due to their insignificance for the presentation of a true and fair view of the Group's net assets, financial position and results of operations</b>						
IX International Exchanges Ltd. <sup>1)</sup>	50.00	19	96	96	0	0
Deutsches Börsenfernsehen GmbH	35.11	51	30	33	0	-35
Deutsche Gesellschaft für Ad hoc-Publizität mbH <sup>2)</sup>	33.33	330	892	2,354	3,676	556

<sup>1)</sup> Amounts from the annual financial statements as at 31 December 2001

<sup>2)</sup> Preliminary figures

Changes in the basis of consolidation (number of companies consolidated) are presented in the following table:

Fully consolidated subsidiaries	Germany	Foreign	Total
As at 1 January 2002	12	5	17
Additions	9	13	22
Disposals	-1	-1	-2
<b>As at 31 December 2002</b>	<b>20</b>	<b>17</b>	<b>37</b>



Deutsche Börse AG successfully completed the acquisition of Cedel International S.A. and of Cedel's 50 percent interest in Clearstream International S.A. on 11 July 2002. Deutsche Börse thus now holds all shares of Cedel International S.A., which it purchased for €1,742.9 million, plus transaction costs of €15.7 million. Cedel International S.A., Clearstream International S.A. and its subsidiaries have been fully consolidated since 1 July 2002. On 30 December 2002, Deutsche Börse AG contributed its direct 50 percent interest in Clearstream International S.A., less one share, and Cedel International S.A. now holds 100 percent (less one share) of Clearstream International S.A.

The consolidation of Cedel International S.A., Clearstream International S.A. and its subsidiaries effective 1 July 2002 materially affects Deutsche Börse Group's consolidated financial statements. Receivables and securities, and liabilities from banking business, amount to €3,420.8 million and €3,257.9 million respectively as at 31 December 2002, and are reported separately in the balance sheet. The acquisition cost of €1,758.6 million was paid in cash, which resulted in a corresponding reduction in the Group's cash reserves. In addition, Deutsche Börse AG issued commercial paper for the first time in conjunction with this acquisition, which resulted in corresponding liabilities of €288.1 million as at 31 December 2002. The consolidation produced acquisition-related goodwill of €1,215.8 million.

The effects on the income statement were also significant in the second half of 2002. The Clearstream subgroup's gross fee and commission income (less intercompany revenue) amounted to €277.0 million and is contained in consolidated sales revenue, while net interest income from banking business amounting to €64.4 million was reported separately. Net fee and commission expenses from banking business totaling €66.3 million were also reported separately. In addition, the costs of the Clearstream subgroup were fully consolidated in the corresponding headings in the consolidated financial statements.

The Clearstream subgroup contributed €100.0 million to Deutsche Börse Group's EBIT in the second half of 2002, as well as goodwill amortization of €30.4 million. In the first half of 2002, the then 50 percent interest in Clearstream International S.A. was measured at equity, generating income from equity investments of €39.0 million for Deutsche Börse Group. The total contribution to earnings was thus €108.6 million.

If Cedel International S.A. had not been acquired, the Group would have reported its 50 percent interest in the after-tax profit of Clearstream International S.A. for the second half of 2002. This interest would have amounted to around €36.1 million.

During the course of 2002, Deutsche Börse AG increased its interest in entory AG by 48 percent to 100 percent at a cost of €43.6 million, generating goodwill of €33.2 million. Since 1 January 2002, all income and expenses of the entory subgroup have been fully consolidated in Deutsche Börse Group's consolidated income statement. Sales revenue in 2002 amounted to €71.0 million, and the net loss after taxes was €4.4 million. The entory subgroup's balance sheet has been fully consolidated since 31 December 2001.

To expand its activities in the Information Products segment, Deutsche Börse AG acquired 50 percent of the Spanish financial information vendor Infobolsa S.A. from Bolsa de Madrid S.A. in November 2002. The purchase price was €20.0 million. This transaction generated goodwill amounting to €15.2 million. Infobolsa S.A. and its subsidiaries were fully consolidated as at 1 November 2002. Sales revenue in the final two months of the year amounted to €1.9 million, while the net profit after taxes was €0.2 million.

In December 2002, Clearstream International S.A. purchased all shares of Filinks S.A.S. for €1.0 million from the French financial services company CDC Ixis Capital Markets S.A., resulting in negative goodwill of €0.9 million. This negative goodwill will be amortized to income over the average useful life (five years) of the depreciable assets acquired. The company was fully consolidated as at 31 December 2002.

Deutsche Börse AG's direct equity interest in Eurex Zürich AG, including the 0.02 percent interest held by members of its Executive Board, amounts to 49.97 percent. On the basis of the profit participation rights granted to Deutsche Börse AG – comprising not only a threefold dividend right, but also a corresponding share in any liquidation proceeds – its actual beneficial interest in Eurex Zürich AG's profit or loss is 79.99 percent. Capital consolidation is based on this figure. After allowance for voting trust and pooling arrangements, the share of voting rights is 50 percent.

The reporting date of the single-entity financial statements of the companies consolidated is the same as the reporting date of the consolidated financial statements.

### **3. Consolidation methods**

#### **Capital consolidation**

Capital consolidation uses the purchase method of accounting by eliminating acquisition costs against the acquiree's equity attributable to the parent company at the acquisition date. Consolidation differences are allocated to the subsidiaries' balance sheet items at their fair value, and a corresponding item for minority interests is recognized. Any remaining excess of acquisition costs over net assets acquired is recognized in intangible assets as goodwill and amortized against income over its expected useful life. Any negative goodwill from first-time consolidation is allocated to reserves or provisions, depending on its origin. In the event of permanent impairment, any goodwill already carried as an intangible asset is immediately written down to income.

#### **Other consolidation adjustments**

Intragroup receivables and liabilities are eliminated. Income from intercompany transactions is eliminated against the corresponding expenses during the consolidation of income and expense. Intercompany profits or losses from deliveries of intragroup goods and services are eliminated. Deferred tax assets or liabilities are recognized for consolidation adjustments where these are expected to reverse in subsequent years.

Interests in equity and earnings attributable to minority shareholders are carried under "Minority interests".

#### 4. Accounting policies

The annual financial statements of certain consolidated subsidiaries have been prepared on the basis of different accounting policies; these have been largely adjusted during the course of consolidation. The single-entity financial statements of associates were not adjusted to comply with uniform Group accounting policies.

##### Revenue recognition

Trading and settlement fees on cash and derivatives markets are recognized immediately at the trade date and billed on a monthly basis. Custodian and settlement fees and fees from the sale of information products and system operation services are generally billed and recognized ratably on a monthly basis. That portion of the revenue of the entity subgroup that is due to fixed-price contracts negotiated for software development is recognized using the percentage of completion method. Interest income from banking business is recognized when it arises and accrued.

##### Intangible assets

Purchased intangible assets are carried at cost and reduced by systematic amortization. Amortization is charged using the straight-line method over the expected useful life or until the proprietary right in question has expired. Assumed useful lives are presented in the following table. The custom software developed since 2000 is amortized uniformly over five years, with the exception of training programs.

Asset	Amortization method	Useful life	Recognition
Purchased goodwill	Straight-line	6 or 20 years	Ratable
Standard software	Straight-line	3 years	Ratable
Custom software	Straight-line	3 to 6 years	Ratable

Purchased goodwill, including goodwill from the first-time consolidation of subsidiaries, is capitalized and reduced by straight-line amortization. The goodwill that can be recognized is regularly estimated in accordance with IAS 36, and impairment losses are charged where required.

Research costs are expensed in the period in which they are incurred. Development costs are capitalized at production cost, provided that they satisfy all the recognition criteria set out in IAS 38. Such development costs include direct labor (internal staff and external consultants) and workstation costs, including proportionate overheads and software development environment costs. Borrowing costs are not included in production costs.

Capitalized development costs are reduced by straight-line amortization over the expected useful life amounting to three to five years, starting on the date of first use. Internally developed software that is no longer used, or whose future useful life is shorter than originally assumed, is written down.

### Property, plant and equipment

Property, plant and equipment is carried at cost and reduced by depreciation for wear and tear. Depreciation of property, plant and equipment is based largely on the following useful lives:

Asset	Amortization method	Useful life	Recognition
Computer hardware	Straight-line	3 years	Simplification option
Office equipment	Straight-line/ declining balance	Based on useful life of 5 to 25 years	Simplification option
Leasehold improvements	Straight-line	Based on lease term	Ratable

Low-value assets are written off immediately. Repair and maintenance costs are expensed when they are incurred. The cost of refurbishment and significant improvements is capitalized.

Leased plant and equipment is capitalized and depreciated in accordance with IAS 17 if the criteria for finance leases are satisfied.

### Noncurrent financial assets

There are seven categories of noncurrent financial assets: investments in subsidiaries; investments in associates; other equity investments; receivables and liabilities from banking business; other noncurrent financial instruments; other long-term loans; and real property.

Investments in subsidiaries are those investments not consolidated in accordance with IAS 27.11 because they are insignificant for the presentation of a true and fair view of the Group's net assets, financial position and results of operations. In accordance with IAS 27.13 in conjunction with IAS 39.69 (c), investments in unconsolidated subsidiaries are carried at cost. All subsidiaries were fully consolidated as at 31 December 2002.

In the case of investments in associates, we make a distinction between joint ventures and other associates, depending on the equity interests held. Joint ventures and other associates are generally carried at equity in accordance with IAS 31.32 or IAS 28.8. Where joint ventures or other associates are not measured at equity, they must be carried at their fair values in accordance with IAS 39.69. Other associates are carried at cost because of their insignificance and because it is not possible to measure their fair value reliably.

Other equity investments are equity interests of less than 20 percent that are designed to establish a permanent relationship with the company concerned. In accordance with IAS 39.69, financial assets are generally measured at their fair values. An exception to this rule arises in the case of financial assets that do not have a quoted market price in an active market, and whose fair value cannot be reliably measured. Because no reliable fair value can be established for Deutsche Börse Group's interests in other equity investments, they are measured at cost.

Receivables and securities from banking business are described in further detail below.

Other noncurrent financial instruments are classified as available-for-sale financial assets and carried at their fair values in accordance with IAS 39.69. In accordance with IAS 39.103, gains or losses on noncurrent financial instruments are therefore taken directly to the revaluation surplus in the statement of changes in shareholders' equity until the financial asset is sold, collected or otherwise disposed of, or until the financial asset is determined to be impaired, at which time the cumulative gain or loss previously recognized in equity is included in net profit or loss for the period. Changes in the fair values of noncurrent financial instruments are therefore taken directly to the revaluation surplus.

Other long-term loans relate to reverse repurchase agreements with remaining maturities of between one and five years; these form part of a structured product that also contains a cross-currency swap and two matching forward currency swap transactions. The difference between the purchase price and the repurchase price of these reverse repurchase agreements is accrued over the period of the transaction and is contained in interest and similar expenses.

In accordance with IAS 40.24 und 40.50, investment property is carried at the lower of cost less accumulated depreciation and the recoverable amount. As at 31 December 2002, investment property related exclusively to unused land that is not depreciated.

Based on the expected future cash flows, noncurrent assets are examined to establish whether their market or fair value is lower than their carrying amount. If this is the case, the assets are written down to their market or fair value in accordance with IAS 36.

#### **Receivables, securities, and liabilities from banking business**

The financial instruments contained in the receivables and securities from banking business and in the liabilities from banking business are accounted for in accordance with IAS 39. In particular, the available-for-sale assets (financial assets not held for trading) and originated loans (loans created by providing funds to a debtor, excluding loans originated with the intent of generating a profit immediately or in the short term) are recognized at the settlement date. Financial assets held for trading (instruments held for the purpose of generating a profit immediately or in the short term, or derivatives not to be classified as hedging instruments according to IAS 39) are recognized at the trade date. Reverse repurchase agreements (securities purchase agreements under which essentially identical securities will be sold again at a certain date in the future at an agreed price) are not recognized. The amounts paid are reported as loans to banks or to customers. The difference between the purchase price and the repurchase price is accrued over the period of the transaction and is contained in interest and similar income.

All financial instruments are initially measured at cost, including transaction costs. Subsequent to initial recognition, all financial instruments held for trading and available-for-sale financial assets are remeasured at their fair values. Exceptions to this rule relate to assets whose fair value cannot be reliably determined. Such assets must be recognized at cost, less any write-downs for impairment. All financial liabilities not held for trading, originated loans and receivables and held-to-maturity investments are carried at amortized cost, less any write-downs for impairment. Amortized cost is determined using the effective interest method. Premiums and discounts are contained in the carrying amount of the instrument concerned, and are amortized using the effective interest method.

Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to set off the recognized amounts and the intention to settle on a net basis.

#### **Other current assets**

Receivables, other assets, and cash and cash equivalents are carried at their principal amount. Adequate valuation allowances take account of identifiable risks.

Current financial instruments are classified as financial assets held for trading and are carried at their fair values in accordance with IAS 39.69. Gains or losses on current financial instruments are recognized in net financial income in accordance with IAS 39.103.

#### **Provisions**

Provisions for pension obligations are measured using the projected unit credit method on the basis of actuarial reports, in accordance with IAS 19. The obligations are measured at the balance sheet date each year using actuarial methods that conservatively estimate the relevant parameters. The pension benefits expected on the basis of projected salary growth are spread over the remaining length of service of the employees. Staff turnover trends are not reflected.

The calculations were based on the 1998 mortality tables produced by Prof. Dr. Klaus Heubeck. The following assumptions were applied in the calculation of the actuarial obligations for the pension plans:

	31 Dec. 2002 %	31 Dec. 2001 <sup>1)</sup> %
Discount rate	5.75	6.0
Salary growth	3.5	3.5
Pension growth	2.0	2.0

<sup>1)</sup> The entity subgroup applied different rates.

Retirement provision for Group employees is ensured by a variety of retirement benefit plans, the use of which varies from country to country.

To standardize retirement provision for employees of Deutsche Börse Group in Germany (excluding entry subgroup employees), a deferred compensation plan was introduced effective 1 July 1999. Since this date, new commitments are only entered into on the basis of this deferred compensation plan; the existing pension plans were closed as at 30 June 1999. Employees with pension commitments on the basis of the old retirement benefit arrangements were given an option to participate in the deferred compensation plan by converting their existing pension rights.

entry AG established a defined benefit occupational pension plan for its employees and members of its executive board in 1986. The provision for pension obligations was measured on the basis of an actuarial report by Gerling Pensionsmanagement GmbH using the projected unit credit method. The employees of the Clearstream subgroup in Luxembourg participate in an occupational pension plan. The provision for pension obligations was calculated on the basis of the actuarial report by Mercer HR Consulting S.A.

Deutsche Börse Group does not use an external fund to finance its pension obligations; rather, it establishes a provision in the amount of the annual net pension expense for which the Group companies are liable on the basis of their pension obligations. The pension obligations of Deutsche Börse Group are secured in part by reinsurance policies. The capitalized surrender value of these reinsurance policies is carried under other noncurrent assets.

There are defined contribution pension plans for employees working in Switzerland, the UK or the USA. Contributions are paid to the employees' private pension funds.

In accordance with IAS 37, the other provisions take account of all identifiable risks and uncertain obligations and are measured in the amount of the probable obligation.

#### **Deferred tax assets and liabilities**

Deferred tax assets and liabilities are computed using the balance sheet approach in accordance with IAS 12. The deferred tax calculation is based on temporary differences between the carrying amounts in the tax accounts and the carrying amounts in the IFRS/IAS financial statements that lead to a future tax liability or benefit when assets are used or sold or liabilities are settled. The deferred tax assets or liabilities are measured using the tax rates currently expected to apply when the temporary differences reverse. They are recorded as deferred tax assets or in provisions for deferred tax liabilities.

### Liabilities

Liabilities are generally carried at their redemption amount. One exception to this rule involves the commercial paper issued that is reported under "Other commercial paper" and in liabilities from banking business. These instruments are treated as non-trading financial liabilities and are therefore carried at their redemption amount less accrued interest expenses. Derivatives, which with one exception are used solely to hedge recognized underlying instruments, are carried at their fair values. This exception relates to the hedge of a loan that was repaid in full in January 2002, and for which interest rate swap agreements with a notional volume of €80 million and a maturity of no later than 11 January 2010 were still reported as at 31 December 2002. To offset the interest rate risk from these agreements, Deutsche Börse AG entered into matching interest rate swap agreements in January 2002. These additional interest rate swap agreements eliminate the risk from the original agreements. Receivables and liabilities under all these interest rate swap agreements are carried in other assets or other noncurrent liabilities at their fair value of €6.5 million at the reporting date.

### Currency translation

In accordance with IAS 21, foreign currency transactions are translated at the middle rate prevailing at the transaction date. At the balance sheet date, monetary balance sheet items are measured at the exchange rate at the balance sheet date, while non-monetary balance sheet items are measured at historical cost. Currency translation differences are recorded as income or expense in the period in which they arose unless the underlying transactions were hedged. Such income or expenses are contained in other operating expenses.

For reasons of materiality, the single-entity financial statements of the consolidated foreign subsidiaries are also translated at the closing date for the consolidated financial statements. Currency translation differences from capital consolidation are taken directly to other retained earnings.

The following euro exchange rates were used:

	Closing date 31 Dec. 2002	Closing date 31 Dec. 2001
Swiss francs (CHF)	1.4552	1.4829
US dollars (USD)	1.0471	0.8813
Pounds sterling (GBP)	0.6525	0.6085

With the exception of Clearstream, the revenues and expenses of Deutsche Börse Group are mainly settled in euros. Around 20 percent of Clearstream's revenue is settled in US dollars. After deduction of all US dollar expenses, this revenue is hedged against exchange rate movements against the euro where it is estimated that such transactions will benefit Deutsche Börse Group.



### **Consolidation of the Eurex derivatives exchange**

The Eurex derivatives exchange is operated jointly by Eurex Frankfurt AG, Eurex Zürich AG and Eurex Clearing AG; Eurex Clearing AG is responsible for clearing.

All Eurex transaction fees are collected by Eurex Clearing AG, which remits 80 percent of them to Deutsche Börse AG and 20 percent to SWX Swiss Exchange in accordance with the contractual arrangements. In 2002, Deutsche Börse AG received transaction fees generated from derivatives market trades amounting to €313.1 million (2001: €258.5 million). These fees are carried under sales revenue. The transaction fees of €78.3 million (2001: €64.6 million) attributable to SWX are not included in the consolidated financial statements.

20 percent of the net expenses incurred by the Eurex companies to operate the Eurex derivatives exchange – totaling €134.4 million in 2002 (2001: €134.4 million) – are borne by SWX (2002: €26.9 million; 2001: €26.9 million), and are contained in other operating income.

Eurex Zürich AG is fully consolidated as a subsidiary in Deutsche Börse AG's IFRS/IAS consolidated financial statements. SWX also holds an equity interest in Eurex Zürich AG, which is recognized as a minority interest item. This item is adjusted to reflect proportionate changes in capital and annual results. As at 31 December 2002, SWX's interest was valued at €4.0 million (2001: €3.9 million).

### **5. Significant differences in the financial reporting of Deutsche Börse Group between the IFRSs/IASs and the German Commercial Code (HGB)**

Because Deutsche Börse Group does not prepare consolidated financial statements in accordance with the HGB, it is not possible to estimate the amount of any differences between net profit and total assets in the IFRS/IAS financial statements and comparable HGB financial statements.

#### **Intangible assets**

In contrast to the HGB, IAS 38 requires internally generated intangible assets to be capitalized if certain criteria are satisfied. The software development expenses of Deutsche Börse Group are capitalized at cost.

#### **Financial instruments**

The HGB prohibits financial investments from being remeasured at an amount higher than the original acquisition cost. IAS 39.69 generally requires financial assets to be measured at their fair values, even if this means carrying financial investments at an amount higher than their original acquisition cost.

Under the HGB, anticipated losses on financial instruments must be recognized as an expense. In accordance with IAS 39, changes in value of financial instruments used as hedging instruments must be recognized directly in equity.

**Pension provisions**

HGB measurement of pension provisions normally uses the 6 percent discount rate prescribed by the German Income Tax Act. The IFRSs/IASs require the application of the current capital market rate as the discount rate, and also require pension provisions to reflect future salary and pension increases.

**Deferred taxes**

Under the HGB, deferred taxes are computed using the income statement method. Companies have an option to carry deferred taxes as assets in their single-entity financial statements. The IFRSs/IASs require deferred taxes to be computed using the balance sheet approach, and also require the recognition of deferred tax assets.

**Revenue recognition**

Under the HGB, revenue from construction contracts is recognized when the contract is completed ("completed contract method"). Under the IFRSs/IASs, these revenues are recognized using the percentage of completion method.

**Acquisition costs**

Under the HGB, only the costs incurred to complete the acquisition are capitalized. Under the IFRSs/IASs, the costs incurred for preparation of the acquisition are also capitalized.

**Costs of capital increases**

The HGB requires the cost of raising capital to be expensed. In accordance with the IFRSs/IASs (Interpretation SIC 17), external costs directly attributable to an equity transaction should be accounted for as a deduction from equity, net of any related income tax benefit.

**Amortization of purchased goodwill**

Under the HGB, there is an option to capitalize goodwill from first-time consolidation, or to deduct it from reserves on the face of the balance sheet. If goodwill is capitalized, it is amortized either over four years or over the expected useful life. Under the IFRSs/IASs, purchased goodwill must be amortized over its useful life. The amortization period should reflect the best estimate of the period during which future economic benefits are expected to flow to the enterprise. There is a rebuttable presumption that the useful life of goodwill will not exceed 20 years from the date of initial recognition.

## Consolidated income statement disclosures

### 6. Sales revenue

A breakdown of external sales revenue by segment is presented below:

	2002 €m	2001 €m
<b>Xetra</b>		
Floor trading fees	59.4	88.7
Xetra trading fees	127.5	126.8
Listing fees	11.8	13.9
Income from cooperation agreements	6.3	8.1
Other sales revenue	5.8	5.6
	<b>210.8</b>	<b>243.1</b>
<b>Eurex</b>		
Trading and clearing fees	313.1	258.5
Other sales revenue	18.5	10.3
	<b>331.6</b>	<b>268.8</b>
<b>Information Products</b>		
Sales of price information	99.4	91.1
Other sales revenue	22.1	18.8
	<b>121.5</b>	<b>109.9</b>
<b>Clearstream<sup>1)</sup></b>		
Custody fees	174.1	–
Transaction fees	51.9	–
Global Securities Financing	27.9	–
Other sales revenue	23.1	–
	<b>277.0</b>	–
<b>Information Technology<sup>2)</sup></b>		
Systems development	77.2	24.4
Systems operation	88.4	106.6
Other sales revenue	0	7.5
	<b>165.6</b>	<b>138.5</b>
<b>Total sales revenue</b>	<b>1,106.5</b>	<b>760.3</b>

<sup>1)</sup> Second half of 2002 only

<sup>2)</sup> Contains the sales revenue allocated to the Systems and Xlaunch segments in 2001

Xetra and Eurex sales revenue is composed principally of trading and clearing fees earned per transaction or per contract. The other sales revenue in the Xetra and Eurex segments includes revenue from training and events. The fall in sales revenue in the Xetra segment is due primarily to a decline in floor trading activity. The rise in Eurex revenue is principally a result of the sharp increase in turnover on the derivatives exchange.

Information Products generates most of its sales revenue from the sale of price information that is sold per terminal. Other revenue is generated by index license income and the transmission of securities information.

The sales revenue reported for Clearstream relates to the second half of 2002. Full-year sales revenue of the Clearstream subgroup fell by 10.5 percent to €590.1 million (2001: €659.2 million).

As part of the Clearstream segment, Clearstream Banking AG provides settlement services for Deutsche Börse Group's Xetra segment. As Clearstream International S.A. was fully consolidated as at 1 July 2002, this revenue is treated as intercompany revenue and is therefore not contained in Clearstream's external revenue. These intercompany settlement fees amounted to €13.7 million in the second half of 2002.

The Information Technology segment develops and operates systems for internal Group and external customers. External revenue from systems operation fell by 17 percent to €88.4 million, primarily due to the consolidation of Clearstream revenue in the second half of 2002 (–€12.1 million). In addition, the revenue from the contract with BrainTrade GmbH to operate the Xontro cash market trading system, which is used for Frankfurt floor trading and by the regional stock exchanges, fell heavily along with the number of floor-traded contracts (–€5.1 million). External revenue from systems development rose from €24.4 million to €77.2 million due to the acquisition of entory AG as at 17 December 2001. The entory subgroup generated external sales revenue of €57.9 million in 2002.

Without the effects of the acquisition of Clearstream International S.A., entory AG and Infobolsa S.A., sales revenue would have risen by around 3 percent.

## 7. Net interest income from banking business

Net interest income from banking business is composed of the following items:

	2002 €m	2001 <sup>1)</sup> €m
Interest income	117.1	–
Interest expenses	–52.7	–
<b>Net interest income from banking business</b>	<b>64.4</b>	<b>–</b>

<sup>1)</sup> No prior-year comparatives are disclosed because Clearstream International S.A. was not fully consolidated until the second half of 2002.

The net interest income from banking business reported here was generated exclusively in the Clearstream segment and relates to the second half of 2002. The full-year net interest income from banking business in the Clearstream subgroup fell by 26.2 percent to €134.1 million (2001: €181.7 million), primarily because of the lower level of interest rates.

## 8. Development costs and own expenses capitalized

Own expenses capitalized relate solely to development costs of internally developed software, involving the following systems and projects in the individual segments:

	Development costs		of which own expenses capitalized	
	2002 €m	2001 €m	2002 €m	2001 €m
<b>Xetra</b>				
Central Counterparty <sup>1)</sup>	40.4	4.3	24.4	0
Xetra software	17.4	16.7	12.1	11.6
Common Internet Access	0	2.3	0	0
	<b>57.8</b>	<b>23.3</b>	<b>36.5</b>	<b>11.6</b>
<b>Eurex</b>				
Eurex software	28.2	36.7	22.5	27.2
Integrated Clearer <sup>2)</sup>	10.3	21.6	3.3	11.6
	<b>38.5</b>	<b>58.3</b>	<b>25.8</b>	<b>38.8</b>
<b>Information Products</b>				
Consolidated Exchange Feed (CEF)	6.2	9.6	5.8	5.6
StatistiX	3.0	3.5	0	0
Xebos/Fixed Income Benchmark	1.6	2.2	1.5	2.2
Index Engine releases	1.1	1.8	0.9	1.6
Consolidation Engine	0.4	2.3	0	0
Internet and Xetra Live	0	1.8	0	1.1
	<b>12.3</b>	<b>21.2</b>	<b>8.2</b>	<b>10.5</b>
<b>Information Technology</b>				
Xentric	3.9	2.1	1.1	0.7
Components business	0.3	0	0.3	0
Integriertes Aktienbuch (Integrated Share Register)	0	2.0	0	1.0
	<b>4.2</b>	<b>4.1</b>	<b>1.4</b>	<b>1.7</b>
<b>Clearstream<sup>2)</sup></b>				
Connectivity	13.1	–	13.1	–
Customer Focus	8.1	–	8.1	–
Creation 24	7.3	–	7.3	–
Custody	4.7	–	4.7	–
NCB Link	2.2	–	2.2	–
Daytime Bridge	0.5	–	0.5	–
Other	2.3	–	2.3	–
	<b>38.2</b>	<b>–</b>	<b>38.2</b>	<b>–</b>
<b>Total development costs and own expenses capitalized</b>	<b>151.0</b>	<b>106.9</b>	<b>110.1</b>	<b>62.6</b>

<sup>1)</sup> The Central Counterparty and Integrated Clearer systems are managed as part of a joint project; the development costs were allocated to the Xetra and Eurex segments on the basis of the resources used.

<sup>2)</sup> No prior-year comparatives are disclosed because Clearstream International S.A. was not fully consolidated until the second half of 2002.

The development costs and own expenses capitalized that are reported for the Clearstream segment are the amounts for the second half of 2002. Clearstream's full-year development costs and own expenses capitalized for 2002 fell by 27.5 percent to €63.4 million (2001: €87.4 million).

Research costs not capitalized in the Information Technology segment in 2002 totaled €6.2 million (2001: €17.7 million).

## 9. Other operating income

Other operating income is composed of the following items:

	2002 €m	2001 €m
Income from agency agreements	40.0	48.1
Income from the release of other provisions and liabilities	11.3	10.3
Rental income	4.7	5.0
Capital consolidation of Deutsche Börse Computershare GmbH	3.1	0
Recoveries on receivables previously written off	1.1	0
Reimbursement of external suppliers	1.6	2.0
Reimbursement of costs charged to partner exchanges	0	3.6
Miscellaneous	8.8	8.3
<b>Total other operating income</b>	<b>70.6</b>	<b>77.3</b>

The income from agency agreements results from the operational management of the Eurex Zürich derivatives market for SWX Swiss Exchange, and from centralized functions performed for certain companies, including Clearstream Banking AG (until 30 June 2002). The income from agency agreements for the assumption of centralized functions for Clearstream Banking AG for the first half of 2002 amounted to €7.1 million (full year 2001: €7.9 million).

Miscellaneous other operating income relates primarily to income from cooperation agreements and from training.

## 10. Staff costs

Staff costs are composed of the following items:

	2002 €m	2001 €m
Wages and salaries	209.0	94.4
Social security contributions, retirement and other benefit costs	36.3	17.6
<b>Total staff costs</b>	<b>245.3</b>	<b>112.0</b>
thereof:		
Clearstream subgroup	91.5	–
entry subgroup	27.8	–
Infobolsa subgroup	0.6	–
Other Deutsche Börse Group	125.4	112.0

Without the effects of acquisitions, staff costs would have risen by 12.0 percent, reflecting the 5.2 percent rise in the average number of employees.

The staff costs reported for 2002 contain the staff costs of the Clearstream subgroup for the second half of 2002 amounting to €91.5 million. Clearstream's full-year staff costs for 2002 fell by 1.0 percent to €171.7 million (2001: €173.4 million).

### 11. Depreciation and amortization expense

The depreciation and amortization expense is broken down as follows:

	2002 €m	2001 €m
Intangible assets		
Software	113.6	55.7
Goodwill	68.7	0.2
Property, plant and equipment	41.3	27.4
<b>Total depreciation and amortization expense</b>	<b>223.6</b>	<b>83.3</b>
thereof:		
Clearstream subgroup	43.3	–
entory subgroup	2.1	–
Infobolsa subgroup	0.1	–
Other Deutsche Börse Group	178.1	83.3

The amortization expense for intangible assets includes exceptional write-downs of €17.6 million (2001: €2.7 million). These result primarily from impairment losses of €11.6 million charged on the "Integrated Clearer" software, which is expected to be replaced by another program that will be introduced when the central counterparty is launched for equities trading. In addition, impairment losses of €5.1 million were charged on software in the Information Products segment (Xebos €3.5 million, Global Index Engine €0.9 million and Internet €0.7 million), and impairment losses of €0.9 million were charged in the Information Technology segment.

The depreciation and amortization expense reported for 2002 contains the expense of the Clearstream subgroup amounting to €43.3 million for the second half of 2002. Clearstream's full-year depreciation and amortization expense for 2002 rose by 7.2 percent to €85.1 million (2001: €79.4 million).

## 12. Other operating expenses

Other operating expenses are composed of the following items:

	2002 €m	2001 €m
Legal and consulting costs	183.5	150.3
IT costs	51.2	40.3
Premises expenses	49.7	43.1
Communication costs (incl. network costs)	27.3	36.6
Non-recoverable input tax	26.9	28.6
Purchase of price information	22.5	19.7
Xontro system operation	18.7	26.3
Advertising and marketing costs	18.1	20.6
Insurance premiums, contributions and fees	13.7	5.9
Fees payable to Helsinki Exchanges (HEX)	13.2	15.4
Xetra settlement fees <sup>1)</sup>	10.7	20.6
Travel, entertainment and corporate hospitality expenses	9.8	6.0
Cost of agency agreements	8.2	6.4
Non-wage labor costs and voluntary social benefits	6.9	6.9
External labour	5.8	6.2
Specific and general bad debt allowances	3.0	6.0
Postage and transport costs	3.0	3.9
Office supplies	2.3	1.5
Rent and leases (excl. IT)	1.8	1.6
Maintenance (excl. IT)	1.0	2.1
Additions to provision for litigation and interest rate risks	0.5	9.7
Miscellaneous	22.2	13.9
<b>Total other operating expenses</b>	<b>500.0</b>	<b>471.6</b>
thereof:		
Clearstream subgroup	94.3	–
entry subgroup	47.6	–
Infobolsa subgroup	1.0	–
Other Deutsche Börse Group	404.5	471.6
Consolidation of intercompany services	–47.4	–

<sup>1)</sup> Amounts for the first half of 2002 only; thereafter reported as intercompany services

Legal and consulting costs relate mainly to expenses in conjunction with software development. An analysis of development costs is presented in note 8. Legal and consulting costs also contain costs of user support and software operation, as well as strategic and legal consulting services.

The legal and consulting costs in 2002 contain €22.2 million from the Clearstream subgroup. Excluding the fully consolidated costs of the Clearstream subgroup for the second half of the year, the legal and consulting costs would have risen by 7.3 percent (€11.0 million), primarily as a result of purchased contract labor services in the Information Technology segment.



IT costs contain the costs for rental, leasing and maintenance of hardware and software.

IT costs for 2002 contain €9.9 million from the Clearstream subgroup. Excluding the fully consolidated costs of the Clearstream subgroup for the second half of the year, IT costs would have risen by 2.5 percent (€1.0 million).

Premises expenses relate primarily to the costs of the Neue Börse and other buildings in Frankfurt leased by Deutsche Börse Group. €10.4 million was attributable to premises expenses of the Clearstream subgroup, and a further €1.8 million to costs for buildings of the entry subgroup. Provisions for anticipated losses from rental expenses have been set up for rented buildings no longer used by Deutsche Börse Group. €3.1 million was utilized in 2002 (2001: €2.8 million), and a further net €0.2 million (2001: €0.7 million) was released.

Excluding the fully consolidated costs of the Clearstream subgroup for the second half of the year, the premises expenses would have fallen by 8.8 percent (€3.8 million), primarily as a result of one-time costs incurred in 2001.

Communication costs, which also include the costs of the participant network, fell by 25.4 percent in 2002 to around €27.3 million due to the technical consolidation of the network infrastructure and corresponding price negotiations with external network providers. They contain €3.9 million from the Clearstream segment in 2002. Excluding the fully consolidated costs of the Clearstream segment for the second half of the year, the communication costs would have fallen by 36.1 percent (€13.2 million).

Non-recoverable input tax results from the VAT-free income from Eurex trading and clearing fees, and from interest income and payment services income.

Costs for the purchase of price information are incurred by the Information Products segment for data and information from other stock exchanges. These costs rose 14.2 percent to €22.5 million. Overall, these variable costs are correlated with this segment's revenue.

Xetra settlement fees are commissions paid to Clearstream Banking AG to settle transactions on the Xetra electronic trading platform. Xetra charges its customers an "all-in" price, which includes these settlement fees. Since the full consolidation of the Clearstream subgroup as at 1 July 2002, these expenses are reported under the consolidation of intercompany expenses.

The cost of agency agreements includes the costs of SWX Swiss Exchange, which renders services for the Eurex subgroup.

Miscellaneous other operating expenses are composed of smaller items, including leasing costs, license fees, and donations.

### 13. Income from equity investments

The income from equity investments is attributable to the following items:

	2002 €m	2001 €m
<b>Associates and joint ventures</b>		
Clearstream International S.A. (carried at equity)	15.6	41.5
Clearstream International S.A. (dividend)	23.2	14.5
STOXX Ltd. (carried at equity)	0.8	0.5
STOXX Ltd. (dividend)	0.6	0.3
Deutsche Gesellschaft für Ad hoc-Publizität mbH (dividend)	0.3	0.5
<b>Other equity investments</b>		
Cedel International S.A. (dividend)	0.2	0.2
BrainTrade GmbH (dividend)	0	0.4
<b>Subsidiaries</b>		
Deutsche Gesellschaft für Wertpapierabwicklung mbH (dividend)	0.3	0.1
<b>Total income from equity investments</b>	<b>41.0</b>	<b>58.0</b>

As Cedel International S.A. and Clearstream International S.A. were fully consolidated as at 1 July 2002, the carrying amount adjustments and dividend income for these formerly equity-accounted investments relate to the first half of 2002.

### 14. Write-downs of noncurrent financial assets

Write-downs of noncurrent financial assets are broken down as follows:

	2002 €m	2001 €m
Proportionate net losses of equity-accounted investees	2.7	12.6
Write-downs of interests in Monte Titoli S.p.A.	2.0	–
Write-downs of the investment in European Energy Exchange AG <sup>1)</sup>	1.2	–
Miscellaneous	0.3	0.6
<b>Total write-downs of noncurrent financial assets</b>	<b>6.2</b>	<b>13.2</b>

<sup>1)</sup> Resulting from the merger of European Energy Exchange AG and Leipzig Power Exchange GmbH

## 15. Net financial income

Net financial income is composed of the following items:

	2002 €m	2001 €m
Income from noncurrent financial instruments and long-term loans	10.0	4.0
Other interest and similar income	29.3	44.4
Interest and similar expenses	-16.1	-7.3
<b>Total net financial income</b>	<b>23.2</b>	<b>41.1</b>

Other interest and similar income is composed of the following items:

	2002 €m	2001 €m
Interest on foreign bank balances	21.1	42.3
Income from interest rate swaps	5.7	0
Interest income from taxes under section 233 of the AO (German Tax Code)	1.7	0.2
Interest on nostro accounts	0.3	0.3
Interest on term deposits	0.1	1.2
Other interest income	0.4	0.4
<b>Total interest and similar income</b>	<b>29.3</b>	<b>44.4</b>

Interest and similar expenses is composed of the following items:

	2002 €m	2001 €m
Interest on current liabilities	6.7	0
Expenses from interest rate swaps	5.6	0
Interest on long-term loans	2.9	5.5
Interest on nostro accounts	0	0.4
Interest on tax arrears	0	1.4
Other interest expenses	0.9	0
<b>Total interest and similar expenses</b>	<b>16.1</b>	<b>7.3</b>

The cash acquisition of Cedel International S.A. resulted in a reduction in interest income. This acquisition also required the issue of commercial paper under the commercial paper program launched in December 2001, which increased interest expenses.

## 16. Income tax expense

The following table presents a breakdown of the income tax expense:

	2002 €m	2001 €m
Current income taxes		
of the year under review	132.4	81.3
from previous years	-4.4	0
Deferred tax expense	13.2	34.9
<b>Total income tax expense</b>	<b>141.2</b>	<b>116.2</b>

The income tax expense relates solely to the profit before tax from ordinary activities. As in 2001, a tax rate of 41 percent was used to calculate deferred taxes for the German companies. This reflects trade income tax at an assessment rate of 490 percent on the tax base value of 5 percent, corporation tax of 25 percent and 5.5 percent solidarity surcharge on the corporation tax. An increased corporation tax rate of 26.5 percent is applied to temporary differences relating to 2003 in accordance with the Flood Victims Solidarity Act. A tax rate of 30 percent was used for the Luxembourg companies, reflecting trade income tax at the rate of 7.5 percent and corporation tax of 23 percent.

The deferred tax expense relates to the following items:

	2002 €m	2001 €m
Intangible assets	14.2	17.7
Current financial instruments	-1.2	1.2
Taxes on cost of capital increases	2.9	15.1
Equity investments	-1.1	0.1
Provisions for anticipated losses from rental expenses	0.6	0.8
Pension provisions, provisions for pension obligations to IHK <sup>1)</sup> and provisions for early retirement benefits	-1.0	-0.2
Property, plant and equipment	-2.2	0
Other provisions	1.0	0.2
<b>Deferred tax expense</b>	<b>13.2</b>	<b>34.9</b>

<sup>1)</sup> Industrie- und Handelskammer (Chamber of commerce)

The following table presents the deferred tax assets and liabilities recognized in the balance sheet, as well as the deferred taxes for the year. Changes taken directly to equity relate to deferred taxes on changes in the measurement of noncurrent financial assets carried at fair value, and to deferred taxes on the costs of the capital increase in June 2002 and on the costs of the IPO in February 2001.

	2002 €m	2001 €m
<b>Balance as at 1 January</b>		
Deferred tax assets	11.2	10.0
Deferred tax liabilities	-47.6	-28.7
	<b>-36.4</b>	<b>-18.7</b>
Changes in deferred taxes taken directly to equity	0.5	17.5
Deferred tax expense for the year	-13.2	-34.9
First-time consolidation	-37.0	-0.3
<b>Balance as at 31 December</b>		
Deferred tax assets	13.2	11.2
Deferred tax liabilities	-99.3	-47.6
	<b>-86.1</b>	<b>-36.4</b>

The following table presents a reconciliation between the expected and the actual tax expense. To determine the expected tax expense, the profit before tax has been multiplied by the composite tax rate of 41 percent assumed for 2002 (2001: 41 percent).

	2002 €m	2001 €m
Expected income taxes derived from net profit before taxes	153.5	130.9
Tax reduction due to dividends and income from foreign equity investments carried at equity	-16.3	-22.9
Effect of tax rate changes <sup>1)</sup>	-22.9	0
Tax increases due to non-tax deductible goodwill amortization	16.8	0
Tax increases due to other non-tax deductible expenses	3.1	0.4
Risk provision	4.5	3.0
Non-tax deductible losses carried forward	3.6	5.4
Miscellaneous	-1.1	-0.6
<b>Actual tax expense</b>	<b>141.2</b>	<b>116.2</b>

<sup>1)</sup> The Luxembourg tax rates were applied to the proportionate net profit of the Luxembourg companies.

## Consolidated balance sheet disclosures

### 17. Statement of changes in noncurrent assets

	Historical cost						Balance as at 31 Dec. 2002 €m
	Balance as at 1 Jan. 2002 €m	Additions €m	Revalu- ations €m	Reclassifi- cations €m	Disposals €m	Changes from first-time consolidation €m	
<b>Intangible assets</b>							
Software	438.6	82.0	0	57.6	1.5	104.5	681.2
Goodwill	75.0	1,266.0	0	0	0	0	1,341.0
Payments on account	0.8	35.2	0	-56.7	0	131.1	110.4
	<b>514.4</b>	<b>1,383.2</b>	<b>0</b>	<b>0.9</b>	<b>1.5</b>	<b>235.6</b>	<b>2,132.6</b>
<b>Property, plant and equipment</b>							
Land and buildings	0	0	0	0	0	27.7	27.7
Leasehold improvements	18.9	1.1	0	0	0.1	7.9	27.8
Computer hardware, operating and office equipment	149.5	21.3	0	0.4	11.3	54.9	214.8
Payments on account and construction in progress	0.4	60.2	0	-1.3	0	133.3	192.6
	<b>168.8</b>	<b>82.6</b>	<b>0</b>	<b>-0.9</b>	<b>11.4</b>	<b>223.8</b>	<b>462.9</b>
<b>Noncurrent financial assets</b>							
Investments in subsidiaries	8.4	0	0	0	0.2	-8.2	0
Investments in associates:							
Clearstream International S.A.	370.2	0	13.2	0	0	-383.4	0
Others	32.2	0.7	0.9	0	0	0	33.8
Other equity investments	2.5	0	0	0	6.4	18.8	14.9
Receivables and securities from banking business	0	0	10.2	0	2.5	328.1	335.8
Other noncurrent financial instruments	35.3	8.0	0	0	32.2	0	11.1
Other long-term loans	1.5	0.3	0	0	0.6	261.4	262.6
Investment property	0	0	0	0	0	10.7	10.7
	<b>450.1</b>	<b>9.0</b>	<b>24.3</b>	<b>0</b>	<b>41.9</b>	<b>227.4</b>	<b>668.9</b>
<b>Total</b>	<b>1,133.3</b>	<b>1,474.8</b>	<b>24.3</b>	<b>0</b>	<b>54.8</b>	<b>686.8</b>	<b>3,264.4</b>

Cumulative depreciation and amortization				Carrying amount			
Balance as at 1 Jan. 2002	Additions	Disposals	Changes from first-time consolidation	Balance as at 31 Dec. 2002	as at 31 Dec. 2002	as at 31 Dec. 2001	
€m	€m	€m	€m	€m	€m	€m	
230.9	113.6	0.7	0	343.8	337.4	207.7	
23.7	68.7	0	0	92.4	1,248.6	51.3	
0	0	0	0	0	110.4	0.8	
<b>254.6</b>	<b>182.3</b>	<b>0.7</b>	<b>0</b>	<b>436.2</b>	<b>1,696.4</b>	<b>259.8</b>	
0	0	0	0	0	27.7	0	
3.7	3.7	0	0	7.4	20.4	15.2	
107.8	37.6	10.8	0	134.6	80.2	41.7	
0	0	0	0	0	192.6	0.4	
<b>111.5</b>	<b>41.3</b>	<b>10.8</b>	<b>0</b>	<b>142.0</b>	<b>320.9</b>	<b>57.3</b>	
7.2	0	0.2	-7.0	0	0	1.2	
0	0	0	0	0	0	370.2	
19.6	4.0	0	-0.1	23.5	10.3	12.6	
0	2.2	0	-0.1	2.1	12.8	2.5	
0	0	0	0	0	335.8	0	
3.2	1.8	2.0	0	3.0	8.1	32.1	
0	1.2	0	0	1.2	261.4	1.5	
0	0	0	0	0	10.7	0	
<b>30.0</b>	<b>9.2</b>	<b>2.2</b>	<b>-7.2</b>	<b>29.8</b>	<b>639.1</b>	<b>420.1</b>	
<b>396.1</b>	<b>232.8</b>	<b>13.7</b>	<b>-7.2</b>	<b>608.0</b>	<b>2,656.4</b>	<b>737.2</b>	

### Intangible assets

Additions and reclassifications of software relate principally to the expansion of the Eurex and Xetra electronic trading systems and to the development of software products for the Information Products and Clearstream segments. Payments on account relate primarily to advance payments on software.

Capitalized development costs include the costs of in-progress development at 31 December 2002 amounting to €34.0 million (2001: €47.5 million).

Impairment losses are charged where necessary and are subsequently reversed if the original reasons for the impairment no longer apply. The amortization expense for intangible assets includes exceptional impairment losses of €17.6 million (2001: €2.7 million).

### Goodwill

During the course of 2002, additional goodwill of €33.2 million arose in conjunction with the acquisition of entory AG, corresponding to the proportionate differences between the assets and liabilities to be recognized at the corresponding acquisition dates. On account of the difficult market environment for software development, in particular in the financial services sector, entory AG's revenue and profitability fell well behind expectations in 2002. Of the total amount recognized as goodwill from the acquisition of entory AG, €36.4 million was written down in 2002, including €33.0 million recognized as an exceptional impairment loss.

The acquisition of Cedel International S.A. and its 50 percent interest in Clearstream International S.A., completed on 11 July 2002, generated goodwill of €1,215.8 million. This amount corresponds to the excess of the purchase price of €1,760.9 million, over the carrying amounts of identifiable assets and liabilities amounting to €549.1 million and €4.0 million respectively. €30.4 million of the goodwill was reduced by systematic amortization in 2002.

Changes in goodwill	Balance as at 1 Jan. 2002 €m	Generated by acquisitions in 2002 €m	Amortization and write-downs in 2002 €m	Balance as at 31 Dec. 2002 €m
entory AG	51.3	33.2	36.4	48.1
Cedel International S.A.	0	1,215.8	30.4	1,185.4
Infobolsa S.A.	0	15.2	0.1	15.1
STOXX Ltd.	0	1.8	1.8	0
<b>Total goodwill</b>	<b>51.3</b>	<b>1,266.0</b>	<b>68.7</b>	<b>1,248.6</b>



### Property, plant and equipment

Additions of hardware, operating and office equipment in 2002 rose by 25 percent year-on-year, mainly as a result of the first-time consolidation of the Clearstream.

Payments on account for construction in progress relate largely to the new Clearstream building in Luxembourg.

### Noncurrent financial assets

The investments in associates and joint ventures have a carrying amount of €10.3 million as at 31 December 2002 (2001: €382.8 million). The reduction is due primarily to the full consolidation of the Clearstream subgroup.

As available-for-sale financial assets, noncurrent financial instruments are carried at their fair values. Gains or losses on noncurrent financial instruments are reported in the revaluation surplus in the statement of changes in shareholders' equity. Gains of €6.5 million (2001: losses of €2.1 million) were credited directly to the revaluation surplus in 2002.

Receivables and securities from banking business include debt securities held for resale.

Other long-term loans relate to reverse repurchase agreements. These are described in greater detail in note 4.

Investment property not currently used was recognized in the balance sheet at its cost of €10.7 million. The estimated fair value as at 31 December 2002 was €16.6 million.

## 18. Deferred tax assets

Deferred tax assets resulting from differences between the carrying amounts in the IFRS/IAS consolidated financial statements and in the tax accounts are composed of the following items:

	31 Dec. 2002 Mio. €	31 Dec. 2001 Mio. €
Pension provisions, provisions for pension obligations to IHK <sup>1)</sup> and provisions for early retirement benefits	6.8	3.5
Provisions for anticipated losses from rental expenses	5.0	5.6
Property, plant and equipment	0.5	0
Noncurrent financial instruments	0.2	0
Interest rate swaps	0	1.6
Other	0.7	0.5
<b>Total deferred tax assets</b>	<b>13.2</b>	<b>11.2</b>

<sup>1)</sup> Chamber of commerce

## 19. Receivables and securities from banking business

In addition to noncurrent receivables from banking business (see note 17, noncurrent financial assets), the following receivables and securities from the banking business were classified as current assets as at 31 December 2002:

	Fair value as at 31 Dec. 2002 €m	Fair value as at 1 July 2002 <sup>1)</sup> €m	Average fair value in H2/2002 <sup>2)</sup> €m
Loans to banks and customers			
Money market lendings	1,011.3	3,183.1	2,255.7
Securities repurchase agreements	1,087.0	1,616.0	1,322.3
Overdrafts from settlement business	473.5	1,345.4	978.5
Balances on own accounts at other banks	334.8	450.8	428.8
	<b>2,906.6</b>	<b>6,595.3</b>	<b>4,985.3</b>
Interest receivable	121.5	77.6	98.4
Available-for-sale fixed-income securities	31.2	12.0	29.0
Available-for-sale equities and other non-fixed-income securities	11.1	37.9	13.1
Derivatives	14.6	12.4	12.1
<b>Total</b>	<b>3,085.0</b>	<b>6,735.2</b>	<b>5,137.9</b>

<sup>1)</sup> Receivables and securities from banking business are attributable solely to the companies of the Clearstream subgroup acquired as at 1 July 2002.

<sup>2)</sup> The average amounts are calculated from the arithmetic mean of the end-month amounts.

The fixed-income and non-fixed-income securities held as at 31 December 2002 are all listed. None of the fixed-income securities held at this date were issued by sovereign or semi-sovereign issuers, and all of them had maturities of between one and five years. All loans to other banks and customers at the reporting date had a maximum maturity of three months. There were generally no early call rights on the loans extended.

### Derivatives

The Clearstream subgroup generally hedges interest rate risks.

Interest rate swaps under which the Group companies pay a fixed interest rate and receive a variable rate are used to hedge fixed rate available-for-sale financial instruments (fair value hedges).

The following table gives an overview of the average notional amount of the positions covered by fair value hedges, and the corresponding weighted average interest rates:

as at 31 Dec. 2002	
Notional amount of pay-fixed interest rate swaps (€m) (expiry July 2004/April 2006)	81.8
Average pay rate (%)	3.78
Average receive rate (%)	3.34

Interest rate swaps under which the Group companies pay a variable interest rate and receive a fixed rate are used to hedge available-for-sale variable rate financial instruments (cash flow hedges).

Deutsche Börse AG entered into a forward interest rate swap agreement in 2002 to hedge interest income from expected cash flows of €0.7 billion and US\$ 0.6 billion. These cash flows account for around 50 percent of the total expected cash flows from the reinvestment of customer deposits. This swap has a term from January 2003 to January 2004. In addition, there were cash flow hedges at 31 December 2002 as follows:

as at 31 Dec. 2002	
Notional amount of pay-variable interest rate swaps (€m) (expiry January 2003)	1,777.5
Average pay rate (%)	2.85
Average receive rate (%)	4.20

Cross-currency swaps at 31 December 2002 were as follows:

as at 31 Dec. 2002	
Notional amount of pay-fixed interest rate swaps (€m) (expiry January 2003)	260.1
Average pay rate (%)	3.92
Average receive rate (%)	3.07

## 20. Trade receivables

Specific valuation allowances of €3.0 million (2001: €5.5 million) were charged on receivables in 2002.

As at 31 December 2002, there were no trade receivables with more than one year to maturity.

## 21. Other current assets

Other current assets are composed of the following items:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Recoverable taxes	48.9	17.8
Prepaid expenses	12.3	7.1
Interest receivable from interest rate swaps	7.2	0
Collection business of Deutsche Börse Systems AG	2.1	2.2
Creditors with debits	1.1	0.6
Miscellaneous	11.5	7.4
<b>Total other current assets</b>	<b>83.1</b>	<b>39.1</b>

## 22. Restricted bank balances

Amounts reported separately as at 31 December 2002 under liabilities as cash deposits by Eurex participants amounting to €217.2 million (2001: €164.7 million) are restricted and mainly invested in interest-bearing accounts at banks. Cash funds amounting to €86.5 million and attributable to the Clearstream segment are also for the most part restricted due to minimum reserve requirements at central banks.

## 23. Other cash and bank balances

Cash funds of €248.1 million were available as at 31 December 2002; €172.9 million of these funds were credited to bank accounts of the companies of the Cedel subgroup.

## 24. Shareholders' equity

Changes in shareholders' equity are presented in the statement of changes in shareholders' equity.

The subscribed capital was increased on 19 June 2002 by €9,042,880 to 111,802,880 shares by issuing new no-par value registered shares against cash contributions. The newly issued shares were mainly placed with institutional investors in the UK, Germany and the US at a price of €44.00 per share under the terms of a private placement; shareholders' subscription rights were suspended.

At the General Meeting on 3 May 2001, the shareholders approved a resolution to increase Authorized Capital I and Authorized Capital II. The Executive Board was correspondingly authorized, with the consent of the Supervisory Board, to increase the subscribed capital by up to €41.104.000 (Authorized Capital I), and by a further €10.276.000 (Authorized Capital II) by issuing new no-par value registered shares against cash and/or non-cash contributions. The Executive Board was also authorized, with the consent of the Supervisory Board, to suspend shareholders' subscription rights where Authorized Capital I is increased against non-cash contributions for the purpose of acquiring

companies, parts of companies or interests in companies. The Executive Board was authorized to suspend shareholders' subscription rights to the increased Authorized Capital II in order to issue new shares against cash contributions at an issue price that is not materially lower than the market price. Following the aforementioned capital increase on 19 June 2002, the share capital can still be increased by the remaining €1,233,120 from Authorized Capital II.

There were no further subscription rights for shares at either 31 December 2002 or 31 December 2001.

Following the discontinuation of the underlying, the costs of the interest rate swaps that had been charged to retained earnings to hedge the interest expense were reversed and recognized in the income statement.

The revaluation surplus results from the net remeasurement of noncurrent financial instruments at their fair values totaling €9.0 million net. Instruments held by Deutsche Börse AG were marked down by €1.6 million while instruments held by the Clearstream subgroup were revalued upwards in the amount of €10.6 million.

## 25. Shareholders' equity of Deutsche Börse AG, appropriation of net profit

The annual financial statements of the parent company Deutsche Börse AG, prepared as at 31 December 2002 in accordance with the provisions of the HGB, and for which an unqualified audit opinion has been granted, report net profit for the year of €138.2 million (2001: €116.6 million) and shareholders' equity of €1,770.8 million (2001: €1,271.8 million).

	31 Dec. 2002 €m	31 Dec. 2001 €m
Share capital	111.8	102.8
Share premium	1,367.5	978.7
Other retained earnings	221.5	130.3
Unappropriated surplus	70.0	60.0
<b>Shareholders' equity</b>	<b>1,770.8</b>	<b>1,271.8</b>

The Executive Board proposes that the unappropriated surplus amounting to €70.0 million reported in the annual financial statements of Deutsche Börse AG be appropriated as follows:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Net profit	138.2	116.6
Appropriation to retained earnings in the annual financial statements	-68.2	-56.6
<b>Unappropriated surplus</b>	<b>70.0</b>	<b>60.0</b>
Proposal by the Executive Board:		
Distribution of a dividend to the shareholders on 15 May 2003 of €0.44 per no-par value share for 111,802,880 no-par value shares (in 2002 from net profit for 2001: €0.36)	49.2	37.0
Appropriation to retained earnings	20.8	23.0

The proposed dividend for 2002 corresponds to a dividend rate of 20.9 percent of the consolidated net profit (2001: 18.2 percent). €138.2 million or 58.8 percent of the consolidated net profit was generated in the HGB annual financial statements of the parent company Deutsche Börse AG (2001: €116.6 million or 57.2 percent).

## 26. Minority interests

Minority interests include the equity interest and proportionate interest in consolidated net profit of the following subgroups and companies:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Clearstream Banking S.A.	10.0	–
Infobolsa S.A.	4.8	–
Eurex Zürich AG	4.0	3.9
Deutsche Börse Computershare GmbH	2.9	–
Eurex Bonds GmbH	1.4	2.0
entory AG	0	4.7
<b>Total minority interests</b>	<b>23.1</b>	<b>10.6</b>

## 27. Provisions

The composition and development of provisions are presented in the following statement of changes in provisions:

	1 Jan. 2002 €m	Adjustment €m	Utilized €m	Released €m	Additions €m	First-time consolidation €m	31 Dec. 2002 €m
<b>Noncurrent provisions</b>							
Provisions for pensions and other employee benefits	31.2	0	–14.9	–2.1	9.5	40.8	64.5
Deferred tax liabilities	47.6	0	–0.8	–6.2	15.6	43.1	99.3
Other noncurrent provisions	26.3	1.5 <sup>1)</sup>	–3.2	–1.0	7.1	7.2	37.9
	<b>105.1</b>	<b>1.5</b>	<b>–18.9</b>	<b>–9.3</b>	<b>32.2</b>	<b>91.1</b>	<b>201.7</b>
<b>Current provisions</b>							
Tax provisions	26.9	0	–46.8	–7.3	56.2	95.1	124.1
Other current provisions	25.4	0	–15.6	–5.5	18.8	5.5	28.6
	<b>52.3</b>	<b>0</b>	<b>–62.4</b>	<b>–12.8</b>	<b>75.0</b>	<b>100.6</b>	<b>152.7</b>
<b>Total provisions</b>	<b>157.4</b>	<b>1.5</b>	<b>–81.3</b>	<b>–22.1</b>	<b>107.2</b>	<b>191.7</b>	<b>354.4</b>

<sup>1)</sup> Reclassification of the provision for phantom stock options. This amount was carried under noncurrent liabilities in the previous year.

The maturity structure of the noncurrent provisions is shown below:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Maturities between one and five years	89.8	60.2
Maturities in excess of five years	111.9	44.9
<b>Total noncurrent provisions</b>	<b>201.7</b>	<b>105.1</b>

## 28. Provisions for pensions and other employee benefits

The provisions for pensions and other employee benefits contain provisions for early retirement payments granted and obligations from pension payment reimbursements to the IHK (chamber of commerce). Changes in these provisions were as follows:

	2002 €m	2001 €m
Balance as at 1 January	31.2	24.5
Past service cost	1.3	3.1
First-time consolidation	40.8	2.6
Interest cost	3.4	1.5
Current service cost	4.6	1.1
Transferred assets	-1.4	0
Current benefit payments	-15.4	-1.6
<b>Total provisions for pensions and other employee benefits as at 31 December</b>	<b>64.5</b>	<b>31.2</b>

The actuarial present value of the pension obligations corresponds to the provisions reported.

Expenses in conjunction with redundancies in the entity subgroup were carried as other exceptional expenses. There was no other exceptional expense or income in the year under review resulting from the termination of pension plans or from the curtailment and transfer of pension payments.

## 29. Deferred tax liabilities

Deferred tax liabilities are composed of the following items:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Intangible assets	56.6	42.1
Risk provisions	25.7	0
Current financial instruments	10.9	1.2
Noncurrent financial instruments	4.9	2.4
Other noncurrent assets	1.6	0
Investments in associates	0	1.1
Miscellaneous	-0.4	0.8
<b>Total deferred tax liabilities</b>	<b>99.3</b>	<b>47.6</b>

The deferred tax liabilities recognized from the measurement of noncurrent financial instruments were taken directly to equity.

## 30. Other noncurrent provisions

Other noncurrent provisions with more than one year to maturity comprise the following items:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Provisions for anticipated losses from rental expenses	12.1	13.8
Other provisions:		
Provision for early retirement benefits	10.0	2.6
Provision for pension obligations to IHK (Chamber of commerce)	9.8	9.6
Provision for stock options	5.9	0 <sup>1)</sup>
Other noncurrent provisions	0.1	0.3
<b>Total other noncurrent provisions</b>	<b>37.9</b>	<b>26.3</b>

<sup>1)</sup> Provisions for phantom stock options were reported under other noncurrent liabilities in the annual financial statements 2001 in the amount of €1.5 million.

The provisions for anticipated losses from rental expenses that are not expected to be settled until 2004 and thereafter are discounted at the rate of 5.5 percent. They were estimated on the basis of existing rental agreements and take account of expected rental income if the properties can be sublet.

Provisions for early retirement benefits are estimated on the basis of the active and former employees involved. Provisions for pension obligations to the IHK are recognized on the basis of the number of eligible employees.



### 31. Tax provisions

The tax provisions contain the following items:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Income tax expense: previous years	63.4	8.2
Income tax expense: current year	58.5	17.1
Wealth tax	2.2	0
Foreign income taxes	0	0.8
VAT: previous years	0	0.8
<b>Total tax provisions</b>	<b>124.1</b>	<b>26.9</b>

### 32. Other current provisions

The other current provisions are composed of the following items:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Litigation and interest rate risks	8.0	12.0
Rent and incidental rental costs	7.1	6.6
Restructuring costs	4.3	0
Jubilee benefits	2.7	1.1
Miscellaneous	6.5	5.7
<b>Total other current provisions</b>	<b>28.6</b>	<b>25.4</b>

The provision for restructuring costs amounting to €4.3 million was established for the integration of the Clearstream subgroup. The miscellaneous other current provisions include provisions for payroll tax and redundancy scheme obligations.

### 33. Liabilities

The composition and development of liabilities are presented in the following statement of liabilities:

	31 Dec. 2001	First-time consolidation	Change	31 Dec. 2002
	€m	€m	€m	€m
<b>Noncurrent liabilities</b>				
Interest-bearing liabilities	0	12.2	-3.0	9.2
Other noncurrent liabilities	11.1	25.0	-27.8	8.3
	<b>11.1</b>	<b>37.2</b>	<b>-30.8</b>	<b>17.5</b>
<b>Current liabilities</b>				
Liabilities from banking business	0	6,970.1	-3,712.2	3,257.9
Cash deposits by Eurex participants	164.7	0	52.5	217.2
Other bank loans and overdrafts	90.0	0	-90.0	0
Other commercial paper	0	0	288.1	288.1
Trade payables	70.2	66.5	-13.8	122.9
Payables to other investors	12.6	0	-6.4	6.2
Other current liabilities	58.2	68.1	-21.6	104.7
	<b>395.7</b>	<b>7,104.7</b>	<b>-3,503.4</b>	<b>3,997.0</b>
<b>Total liabilities</b>	<b>406.8</b>	<b>7,141.9</b>	<b>-3,534.2</b>	<b>4,014.5</b>

	31 Dec. 2002	31 Dec. 2001
	€m	€m
<b>Noncurrent liabilities</b>		
with one to five years to maturity	17.5	0
with more than five years to maturity	0	11.1
<b>Total</b>	<b>17.5</b>	<b>11.1</b>

The noncurrent interest-bearing liabilities contain a subsidized loan by the state-owned Luxembourg investment agency "Société Nationale de Crédit et d'Investissement" to Clearstream Services S.A. amounting to €5.3 million; this loan is due on 30 June 2004.

The noncurrent liabilities also contain finance lease obligations amounting to €1.6 million.

Closing out interest rate and cross-currency swaps resulted in liabilities of €8.3 million as at 31 December 2002. These swaps have a term of up to eight years.

All other liabilities have less than one year to maturity.

There were no liabilities as at 31 December 2002 that were secured by liens or similar rights.

### 34. Liabilities from banking business

The liabilities from banking business are composed of the following items:

	As at 31 Dec. 2002 €m	As at 1 July 2002 <sup>1)</sup> €m	Average in H2/2002 <sup>2)</sup> €m
Customer deposits from settlement business	2,476.8	5,975.7	4,602.8
Overdrafts on own accounts at other banks	476.4	432.8	401.8
Issued commercial paper	238.7	391.4	330.4
Interest liabilities	36.7	32.4	34.0
Money market borrowings	29.3	137.8	73.8
<b>Total liabilities from banking business</b>	<b>3,257.9</b>	<b>6,970.1</b>	<b>5,442.8</b>

<sup>1)</sup> The liabilities from banking business are attributable solely to companies of the Clearstream subgroup acquired as at 1 July 2002.

<sup>2)</sup> The average amounts are calculated from the arithmetic mean of the end-month amounts.

As at 31 December 2002, all liabilities from banking business had a maximum maturity of three months.

### 35. Cash deposits by Eurex participants

The cash deposits are liabilities of Eurex Clearing AG from margin payments by clearing members of the Eurex derivatives exchange.

### 36. Other current liabilities

The other current liabilities are composed of the following items:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Liabilities relating to the Employee Share Option Plan of the Clearstream subgroup	25.6	0
Special payments and bonuses	23.5	6.8
Vacation entitlements, flexitime and overtime credits	9.0	7.8
Tax liabilities	8.7	8.1
Reimbursements	7.5	4.3
Loan interest payable	7.2	5.7
Debtors with credits	3.4	5.6
Deferred income	1.3	2.3
Liabilities from purchase of shares of entory AG	0	2.0
Miscellaneous	18.5	15.6
<b>Total other current liabilities</b>	<b>104.7</b>	<b>58.2</b>

The miscellaneous other current liabilities are composed principally of accruals for products or services that had already been delivered or rendered, but for which no invoice has yet been received.

### 37. Interest rate gap analysis

The following table indicates the effective interest rates for the banking business as at 31 December 2002 and the period in which financial assets and liabilities repriced:

	Effective interest rate %	Sight €m
<b>Assets</b>		
Cash and bank balances	–	91.7
Money market lendings and loans to banks and customers	2.88	2,176.9
Bonds and other fixed-income securities	5.60	–
Other assets	–	–
<b>Total cash and cash equivalents</b>		<b>2,268.6</b>
<b>Liabilities</b>		
Deposits from other banks and from customers	0.36	–2,992.6
Commercial paper	1.38	–
Other liabilities	–	–
<b>Total liabilities</b>		<b>–2,992.6</b>
<b>Asset/liability gap</b>		<b>–724.0</b>
<b>Derivatives affecting interest rate sensitivity</b>		
Pay-fixed interest rate swaps:		–
Average pay rate	3.78	
Average receive rate	3.34	
Receive-fixed interest rate swaps:		–
Average pay rate	2.85	
Average receive rate	4.20	
Other derivatives		–
Average pay rate	3.92	
Average receive rate	3.07	
<b>Total derivatives</b>		<b>–</b>
<b>Net interest sensitivity gap</b>		<b>–724.0</b>

Not more than 3 months	Fixed-rate instruments			Over 5 years	Non-interest bearing	Total
	More than 3 months but not more than 12 months	More than 1 year but not more than 5 years				
€m	€m	€m	€m	€m	€m	€m
-	-	-	-	-	-	91.7
1,111.4	-	-	-	-	-	3,288.3
-	5.1	219.8	142.1	-	-	367.0
-	-	-	-	-	145.3	145.3
<b>1,111.4</b>	<b>5.1</b>	<b>219.8</b>	<b>142.1</b>	<b>142.1</b>	<b>145.3</b>	<b>3,892.3</b>
-18.9	-4.6	-3.1	-	-	-	-3,019.2
-238.7	-	-	-	-	-	-238.7
-	-	-	-	-	-320.1	-320.1
<b>-257.6</b>	<b>-4.6</b>	<b>-3.1</b>	<b>-</b>	<b>-</b>	<b>-320.1</b>	<b>-3,578.0</b>
<b>853.8</b>	<b>0.5</b>	<b>216.7</b>	<b>142.1</b>	<b>142.1</b>	<b>-174.8</b>	<b>314.3</b>
-	-	81.8	-	-	-	81.8
1,777.5	-	-	-	-	-	1,777.5
260.1	-	-	-	-	-	260.1
<b>2,037.6</b>	<b>-</b>	<b>81.8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,119.4</b>
<b>2,891.4</b>	<b>0.5</b>	<b>298.5</b>	<b>142.1</b>	<b>142.1</b>	<b>-174.8</b>	<b>2,433.7</b>

## Cash flow disclosures

### 38. Cash flow statement

The cash flow statement presents the balance of and changes in Deutsche Börse Group's cash and cash equivalents. In compliance with IAS 7 (Cash Flow Statements), cash flows are classified by operating, investing and financing activities. Cash and cash equivalents are composed of cash, bank balances, current financial instruments and the receivables from banking business classified as current assets, net of current liabilities from banking business and the cash deposits by Eurex participants. Reflecting their consolidation, the cash flows of Cedel International S.A. and the Clearstream subgroup have been included since 1 July 2002, and the cash flows of the Infobolsa subgroup have been included since 1 November 2002.

### 39. Restrictions on cash funds

There were restricted bank balances of €86.5 million (2001: €0) as at 31 December 2002 in the form of balances of the Clearstream subgroup in central bank accounts, most of which are based on minimum reserve requirements. The remaining restricted bank balances are not included in cash and cash equivalents because they were offset by current liabilities from cash deposits of Eurex clearing participants amounting to €217.2 million (2001: €164.7 million).

### 40. Cash flows from operating activities

After adjustments to net profit for the period for non-cash items and the inclusion of net financial income, cash flows from operating activities amounted to €466.2 million (2001: €248.8 million). The entire cash provided by net financial income (net interest and investment income) is allocated to operating activities. DVFA/SG cash flow was €467.7 million (2001: €282.6 million).

Depreciation and amortization expense contains the following items:

	2002 €m	2001 €m
Amortization of intangible assets and depreciation of plant and equipment	223.6	83.3
Write-downs of noncurrent financial assets	6.2	13.2
<b>Total depreciation and amortization expense</b>	<b>229.8</b>	<b>96.5</b>

The decrease in noncurrent provisions can be explained as follows:

	Balance as at 31 Dec. 2001	Increase/(decrease) in cash flow	First-time consolidation and other adjustments	Balance as at 31 Dec. 2002
	€m	€m	€m	€m
Provisions for pensions and other employee benefits	31.2	-7.5	40.8	64.5
Other noncurrent provisions	26.3	4.4	7.2	37.9
<b>Decrease in noncurrent provisions</b>		<b>-3.1</b>		

Other non-cash income and expense results from the following items:

	2002 €m	2001 €m
Measurement at equity:		
Clearstream International S.A.	15.6	41.5
STOXX Ltd.	0.8	0.5
Specific and general valuation allowances on receivables	-3.0	-6.0
Net expenses for interest rate swaps	-2.5	0
Miscellaneous	-2.3	0
<b>Total other non-cash income and expense</b>	<b>8.6</b>	<b>36.0</b>

The decrease in receivables and other current assets is composed of the following items:

	Balance as at 31 Dec. 2001	(Increase)/decrease in cash flow	First-time consolidation and other adjustments	Balance as at 31 Dec. 2002
	€m	€m	€m	€m
Trade receivables	112.7	-21.5	48.1	139.3
Intragroup receivables	0.8	-0.8	0	0
Associate receivables	2.2	0.1	0	2.3
Receivables from other investors	2.9	-2.6	4.0	4.3
Other current assets	41.4	-57.9	108.4	91.9
Receivables from banking business: derivatives	0	2.2	12.4	14.6
<b>Decrease in receivables and other current assets</b>		<b>-80.5</b>		

The decrease in current provisions is composed of the following items:

	Balance as at 31 Dec. 2001	Decrease in cash flow	First-time consolidation and other adjustments	Balance as at 31 Dec. 2002
	€m	€m	€m	€m
Other current provisions	25.4	-2.3	5.5	28.6
<b>Increase in current provisions</b>		<b>-2.3</b>		

The decrease in noncurrent liabilities is composed of the following items:

	Balance as at 31 Dec. 2001	Decrease in cash flow	First-time consolidation and other adjustments	Balance as at 31 Dec. 2002
	€m	€m	€m	€m
Other noncurrent liabilities	11.1	-16.5	13.7	8.3
<b>Decrease in noncurrent liabilities</b>		<b>-16.5</b>		

The decrease in current liabilities is composed of the following items:

	Balance as at 31 Dec. 2001	Decrease in cash flow	First-time consolidation and other adjustments	Balance as at 31 Dec. 2002
	€m	€m	€m	€m
Trade payables	70.2	-14.5	67.2	122.9
Payables to other investors	12.6	-9.2	2.8	6.2
Other current liabilities	58.2	-23.4	69.9	104.7
<b>Decrease in current liabilities</b>		<b>-47.1</b>		

#### 41. Cash flows from investing activities

The payments to acquire noncurrent assets are composed of the following items:

	2002 €m	2001 €m
Payments to acquire intangible assets	105.6	88.8
Payments to acquire property, plant and equipment	82.6	19.2
Payments to acquire noncurrent financial assets	1.0	5.0
<b>Total payments to acquire noncurrent assets</b>	<b>189.2</b>	<b>113.0</b>

Further payments to acquire noncurrent assets amounting to €11.6 million (2001: €5.4 million) relate to non-cash items.



The payments to acquire subsidiaries comprise the following items:

	2002 €m	2001 €m
Cedel International S.A.	1,758.6	0
entory AG	43.6	48.9
Infobolsa S.A.	20.0	0
Filinks S.A.	1.0	0
less: cash and cash equivalents acquired	-254.2	-7.9
<b>Total payments to acquire subsidiaries</b>	<b>1,569.0</b>	<b>41.0</b>

The payments to acquire noncurrent financial instruments amounted to €8.0 million (2001: €0). The net cash proceeds from the sale of available-for-sale noncurrent financial instruments and from the disposal of other items of noncurrent assets amounted to €7.6 million and €24.5 million respectively (2001: €0 and €1.2 million respectively). These transactions relate in the most part to the liquidation of a special fund jointly held by Clearstream Banking AG and Deutsche Börse AG and the reinvestment of the resulting funds.

#### 42. Cash flows from financing activities

The proceeds from Deutsche Börse AG's capital increase, less costs incurred, amounted to €390.8 million. Deutsche Börse Group also received €8.1 million from cash contributions by external shareholders. A dividend of €37.0 million was distributed in 2002 for 2001 (in 2001 for 2000: €30.8 million). In addition to own funds, debt was used to finance the investments mentioned above, in particular the acquisition of Cedel International S.A., by issuing commercial paper under a €2.5 billion program launched in December 2001. The issue of commercial paper generated cash of €286.7 million net in 2002. Long-term loans amounting to €100.0 million were raised in January 2000 to finance the merger of the business operations of Cedel International S.A. and Deutsche Börse Clearing AG to form Clearstream International S.A. €10.0 million of these loans was contractually repaid in January 2001, and the remaining €90.0 million was repaid in January 2002. A further €3.0 million was used to repay other noncurrent liabilities and for lease payments.

### 43. Reconciliation to cash and cash equivalents

The reconciliation to cash and cash equivalents is shown in the following table:

Liquidity	31 Dec. 2002 €m	31 Dec. 2001 €m
Cash and bank balances	551.8	916.9
Other current financial instruments	0	302.9
	<b>551.8</b>	<b>1,219.8</b>
<b>Reconciliation to cash and cash equivalents</b>		
Current receivables from banking business	3,085.0	6.9
less: available-for-sale fixed-income securities	-31.2	0
less: available-for-sale equities and other non-fixed-income securities	-11.1	0
less: derivatives	-14.6	0
Current liabilities from banking business	-3,257.9	0
Current liabilities from cash deposits by Eurex participants	-217.2	-164.7
	<b>-447.0</b>	<b>-157.8</b>
<b>Cash and cash equivalents</b>	<b>104.8</b>	<b>1,062.0</b>

To prevent receivables and liabilities from banking business from distorting the cash flow statement, these amounts are offset in cash and cash equivalents, even though some of the amounts involved have an original maturity of more than three months. Exceptions to this are available-for-sale securities and derivatives, which are treated as operating or investing activities.

Bank balances as at 31 December 2002 include €87.4 million (2001: €13.4 million) held at central banks.

## Other disclosures

### 44. DVFA/SG earnings

Earnings according to the methodology published by the Deutsche Vereinigung für Finanzanalyse und Anlageberatung e.V. and the Schmalenbach-Gesellschaft (DVFA/SG) were calculated as follows:

	2002 €m	2001 €m
Profit before tax from ordinary activities (EBT)	374.4	391.2
Income tax expense	-141.2	-116.2
Minority interests in net profit	1.9	0.7
<b>Net profit for the period and DVFA/SG earnings</b>	<b>235.1</b>	<b>203.7</b>

Under IAS 33, earnings per share are calculated by dividing the net profit for the year by the weighted average number of shares outstanding. DVFA/SG earnings per share are calculated by dividing consolidated net profit for the period by the weighted average number of shares outstanding. Due to a capital increase on 19 June 2002, the number of shares rose by 9,042,880 from 102,760,000 to 111,802,880.

There were no further rights to subscribe for shares that could have potentially diluted earnings per share at either 31 December 2002 or 31 December 2001. The reported DVFA/SG earnings per share correspond to the IFRS/IAS earnings per share.

DVFA/SG earnings per share were calculated as follows:

	2002	2001
Number of shares of Deutsche Börse AG as at 31 December	111,802,880	102,760,000
Average number of shares	107,615,903	99,763,014
DVFA/SG earnings per share (€)	2.18	2.04
Dividend distributed to shareholders (€m)	49.2 <sup>1)</sup>	37.0
Dividend per share (€)	0.44 <sup>1)</sup>	0.36

<sup>1)</sup> Proposal for 2002

#### 45. Segment reporting

Segment reporting is governed by the Group's internal organizational and reporting structure, which is broken down by markets and services into the Xetra, Eurex, Information Products, Clearstream, Information Technology and Corporate Services segments.

Segment	Activity
Xetra	Cash market: electronic order book and floor trading
Eurex	Derivatives exchange
Information Products	Sales of price information and information distribution
Clearstream	Settlement of transactions and custody of securities
Information Technology	Development, implementation and operation of technical infrastructure and provision of IT solutions
Corporate Services	Group strategy, provision of centralized functions for the other segments, and integration of the entry and Clearstream subgroups

Until 30 June 2002, the Clearstream segment included the 50 percent interest in the net profit of Clearstream International S.A. for the first half of 2002. This was reported under "Income from equity investments" (H1/2002: €39.0 million, full-year 2001: €56.2 million). Since 1 July 2002, the results of the Clearstream subgroup have been fully consolidated and are allocated as follows to the Clearstream, Information Technology and Corporate Services segments:

	Sales revenue €m	EBIT €m
<b>Segments:</b>		
Clearstream	290.7	116.8
Information Technology	0	3.0
Corporate Services	0	-19.8
<b>Clearstream subgroup</b>	<b>290.7</b>	<b>100.0</b>

In accordance with IAS 14, the Systems and Xlaunch segments were merged to form the new Information Technology segment. The Clearstream TEC and entory activities are also combined in this segment. The Integriertes Aktienbuch (IAB) activities were removed from Information Technology and contributed to Deutsche Börse Computershare GmbH (DBCS). On the basis of the new extended business model, DBCS is allocated to the Xetra segment. The corresponding activities in the acquired entory and Clearstream subgroups were allocated to Corporate Services.

Sales revenue is presented separately by external sales revenue and internal (inter-segment) revenue. Inter-segment services are charged on the basis of measured quantities. Services to be measured at a market price are measured on an arm's length basis; these include services of the Information Technology segment, such as application development hours or data centre services. Other services are billed to users on the basis of fully absorbed costs using an allocation key, for example the billing of building usage at fully absorbed cost, using square metres as the basis. Services are also billed on the basis of fixed prices between the segments, e. g. the provision of data by Eurex to Information Products. The system used did not change between 2001 and 2002. The adjustment of the underlying quantities corresponds to the relevant usage; price changes are driven by changes in costs. There were no material changes in the aggregate required to be reported under IAS 14.75.

Deutsche Börse Group uses earnings before interest and taxes (EBIT) as a key internal earnings indicator that also serves as a measure of a segment's long-term earnings power.

## Segment reporting for the year ended 31 December

	Xetra		Eurex		Information Products		Clearstream	
	2002 €m	2001 €m	2002 €m	2001 €m	2002 €m	2001 €m	2002 €m	2001 €m
External sales revenue	210.8	243.1	331.6	268.8	121.5	109.9	277.0	
Internal sales revenue	0.1	0.5	0	0	5.2	4.9	13.7	
<b>Total sales revenue</b>	<b>210.9</b>	<b>243.6</b>	<b>331.6</b>	<b>268.8</b>	<b>126.7</b>	<b>114.8</b>	<b>290.7</b>	
Net interest income from banking business	0	0	0	0	0	0	64.4	
Own expenses capitalized	36.5	11.6	25.8	38.8	8.2	10.5	38.2	
Other operating income	19.5	16.9	50.3	54.1	0.3	1.9	1.6	
Fee and commission expenses from banking business	0	0	0	0	0	0	-66.3	
Staff costs	-17.5	-19.0	-16.8	-13.6	-9.5	-7.7	-38.6	
Depreciation and amortization expense (excl. goodwill amortization)	-35.6	-31.2	-27.3	-9.9	-14.7	-7.6	-28.9	
Goodwill amortization	0	0	0	0	-1.9	0	-30.4	
Other operating expenses	-195.6	-183.1	-202.9	-229.1	-75.8	-94.3	-144.3	
<b>Total expenses</b>	<b>-248.7</b>	<b>-233.3</b>	<b>-247.0</b>	<b>-252.6</b>	<b>-101.9</b>	<b>-109.6</b>	<b>-308.5</b>	
Income from equity investments	0.3	0.5	0	0	1.4	1.3	39.0	56.2
Write-downs of equity investments	-1.1	-0.9	-2.4	-9.8	-0.4	-1.9	0	
<b>Earnings before interest and taxes (EBIT)</b>	<b>17.4</b>	<b>38.4</b>	<b>158.3</b>	<b>99.3</b>	<b>34.3</b>	<b>17.0</b>	<b>125.4</b>	<b>56.2</b>
Net financial income	0.3	-0.1	5.0	7.7	0.1	0	2.5	-5.6
<b>Profit before tax from ordinary activities</b>	<b>17.7</b>	<b>38.3</b>	<b>163.3</b>	<b>107.0</b>	<b>34.4</b>	<b>17.0</b>	<b>127.9</b>	<b>50.6</b>
<b>Assets</b>								
Intangible assets	90.4	85.1	66.3	67.4	48.6	39.7	1,432.2	
Property, plant and equipment	0.3	0.5	0.9	1.0	1.0	0.1	7.0	
Other noncurrent assets	29.5	52.7	291.0	226.9	31.3	23.3	3,791.5	370.2
<b>Total Assets</b>	<b>120.2</b>	<b>138.3</b>	<b>358.2</b>	<b>295.3</b>	<b>80.9</b>	<b>63.1</b>	<b>5,230.7</b>	<b>370.2</b>
Provisions and liabilities	22.0	31.4	251.1	208.6	12.8	20.5	3,436.1	95.5
Net assets	98.2	106.9	107.1	86.7	68.1	42.6	1,794.6	274.7
Investments in intangible assets, property, plant and equipment	38.5	28.5	26.0	39.5	8.4	14.7	39.6	
Employees	179	194	142	116	161	84	939	
<b>EBIT margin (%)</b>	<b>8.3</b>	<b>15.8</b>	<b>47.7</b>	<b>36.9</b>	<b>28.2</b>	<b>15.5</b>	<b>31.2<sup>2)</sup></b>	<b>n. a.</b>

The Reconciliation column shows:

- Elimination of intercompany sales revenue and expenses
- Assets not attributable to the segments (noncurrent financial assets less equity-accounted investments, deferred tax assets) and certain liabilities (minority interests, tax provisions, deferred tax liabilities)

<sup>1)</sup> Formerly Systems

<sup>2)</sup> EBIT margin excluding measurement at equity

<sup>3)</sup> EBIT margin based on external and internal sales revenue

	Information Technology <sup>1)</sup>		Corporate Services		Total for all segments		Reconciliation		Group	
	2002 €m	2001 €m	2002 €m	2001 €m	2002 €m	2001 €m	2002 €m	2001 €m	2002 €m	2001 €m
	165.6	138.5	0	0	1,106.5	760.3	0	0	1,106.5	760.3
	222.7	229.7	0	0	241.7	235.1	-241.7	-235.1	0	0
	<b>388.3</b>	<b>368.2</b>	<b>0</b>	<b>0</b>	<b>1,348.2</b>	<b>995.4</b>	<b>-241.7</b>	<b>-235.1</b>	<b>1,106.5</b>	<b>760.3</b>
	0	0	0	0	64.4	0	0	0	64.4	0
	1.4	1.7	0	0	110.1	62.6	0	0	110.1	62.6
	102.0	14.4	186.5	113.2	360.2	200.5	-289.6	-123.2	70.6	77.3
	0	0	0	0	-66.3	0	0	0	-66.3	0
	-110.7	-49.5	-52.2	-22.2	-245.3	-112.0	0	0	-245.3	-112.0
	-38.4	-28.2	-10.0	-6.2	-154.9	-83.1	0	0	-154.9	-83.1
	-36.4	-0.2	0	0	-68.7	-0.2	0	0	-68.7	-0.2
	-253.2	-218.9	-159.5	-104.5	-1,031.3	-829.9	531.3	358.3	-500.0	-471.6
	<b>-438.7</b>	<b>-296.8</b>	<b>-221.7</b>	<b>-132.9</b>	<b>-1,566.5</b>	<b>-1,025.2</b>	<b>531.3</b>	<b>358.3</b>	<b>-1,035.2</b>	<b>-666.9</b>
	0	0	0.3	0	41.0	58.0	0	0	41.0	58.0
	0	0	-2.3	-0.6	-6.2	-13.2	0	0	-6.2	-13.2
	<b>53.0</b>	<b>87.5</b>	<b>-37.2</b>	<b>-20.3</b>	<b>351.2</b>	<b>278.1</b>	<b>0</b>	<b>0</b>	<b>351.2</b>	<b>278.1</b>
	0.8	-1.0	14.5	40.1	23.2	41.1	0	0	23.2	41.1
	<b>53.8</b>	<b>86.5</b>	<b>-22.7</b>	<b>19.8</b>	<b>374.4</b>	<b>319.2</b>	<b>0</b>	<b>0</b>	<b>374.4</b>	<b>319.2</b>
	56.0	65.1	2.9	2.5	1,696.4	259.8	0	0	1,696.4	259.8
	60.8	29.7	250.9	26.0	320.9	57.3	0	0	320.9	57.3
	41.4	55.7	36.0	1,023.8	4,220.7	1,752.6	306.2	65.5	4,526.9	1,818.1
	<b>158.2</b>	<b>150.5</b>	<b>289.8</b>	<b>1,052.3</b>	<b>6,238.0</b>	<b>2,069.7</b>	<b>306.2</b>	<b>65.5</b>	<b>6,544.2</b>	<b>2,135.1</b>
	74.0	84.2	349.4	45.5	4,145.4	485.7	246.6	89.2	4,392.0	574.9
	84.2	66.3	-59.6	1,006.8	2,092.6	1,584.0	59.6	-23.7	2,152.2	1,560.3
	21.3	19.8	66.0	5.5	199.8	108.0	0	0	199.8	108.0
	1,448	544	449	185	3,318	1,123	0	0	3,318	1,123
	<b>13.6<sup>3)</sup></b>	<b>23.8</b>	<b>n. a.</b>	<b>n. a.</b>	<b>n. a.</b>	<b>n. a.</b>	<b>n. a.</b>	<b>n. a.</b>	<b>31.7</b>	<b>36.6</b>

Exceptional impairment losses arose in the following segments:

	2002 €m	2001 €m
Eurex	11.6	0
Information Products	5.1	2.7
Information Technology	0.9	0
<b>Total exceptional impairment losses</b>	<b>17.6</b>	<b>2.7</b>

Non-cash specific valuation allowances result from the following segments:

	2002 €m	2001 €m
Xetra	1.3	0.3
Information Products	0.5	3.4
Eurex	0.5	0
Information Technology	0.4	1.8
Corporate Services	0.3	0
<b>Total specific valuation allowances</b>	<b>3.0</b>	<b>5.5</b>

Assets and liabilities are allocated to the individual segments on the basis of objective criteria. Assets that cannot be allocated to the segments, as well as minority interests, are disclosed in the reconciliation column. The assets of Cedel International S.A. and its 50 percent interest in the Clearstream subgroup, acquired in July, were allocated to the Information Technology, Clearstream and Corporate Services segments.

The primary segments were not classified further into secondary segments (geographical segments), because Deutsche Börse Group's business model, and in particular that of its Xetra, Eurex, Information Products and Clearstream segments, is focused on an internationally operating participant base. From a price, margin and risk perspective, this means that it is unimportant whether revenue is generated from German or non-German participants.



#### **46. Completion of the acquisition of entory AG**

The shareholders of entory AG resolved in December 2001 to accept a purchase offer by Deutsche Börse AG. After acquiring 52 percent of the shares of entory for €50.9 million at the end of 2001, Deutsche Börse AG acquired the remaining 48 percent of entory shares for €43.6 million in 2002. This produced a total purchase price of €94.5 million, plus transaction costs of €1.9 million in 2001.

Due to the difficult market environment for software development, in particular in the financial services sector, entory AG's revenue and profitability fell well behind expectations in 2002. Although entory's business model and position in Deutsche Börse Group's portfolio are still stable, the company now operates from a lower base.

In view of these developments, an earn-out component of maximum €15.9 million agreed with the original shareholders in addition to the aforementioned purchase price and originally due to be paid out in September 2003 will not be paid out because the defined conditions have not been satisfied. A provision of €5.8 million established for this earn-out component as at 31 December 2001 was released directly against goodwill with no expense impact.

The acquisition resulted in goodwill of €84.7 million (€51.5 million in 2001 and €33.2 million in 2002), which will be amortized over 20 years. An exceptional impairment loss of €33.0 million was charged against this goodwill in the third quarter of 2002. This exceptional impairment loss and the systematic goodwill amortization charge of €3.4 million are contained in the IT segment in the preceding segment reporting.

#### **47. Acquisition of Cedel International S.A.**

Deutsche Börse AG successfully completed the acquisition of Cedel International S.A. and its 50 percent interest in Clearstream International S.A. on 11 July 2002. Deutsche Börse AG now holds 100 percent of the shares of Cedel International S.A., which it acquired for €1,758.6 million. Cedel International S.A., Clearstream International S.A. and its subsidiaries were fully consolidated as at 1 July 2002. The transaction was financed from existing cash reserves and the issue of commercial paper.

#### **48. Acquisition of Infobolsa S.A.**

Deutsche Börse AG acquired 50 percent of the shares of Infobolsa S.A. at a total purchase price of €20.0 million (including a capital increase of €5.0 million) in cash on 6 November 2002, generating goodwill of €15.2 million. The acquisition was financed by the positive operating cash flow in the fourth quarter.

## 49. Credit lines

The Group companies had the following credit lines as at 31 December 2002, none of which had been drawn down:

Company	Purpose of credit line		Amount in €m
Deutsche Börse AG	Working capital	– interday	400
	Working capital	– interday	35
Eurex Clearing AG	Working capital	– interday	20
	Eurex settlement <sup>1)</sup>	– intraday	700
	Eurex settlement <sup>1)</sup>	– interday	350
Clearstream Banking S.A.	Working capital	– interday	1,000
Immobilière Espace Kirchberg A S.A.	Property finance	– interday	66
Immobilière Espace Kirchberg D S.A.	Property finance	– interday	54
entory AG	Working capital	– interday	5

<sup>1)</sup> Credit lines for risks from the settlement of transactions for the Eurex companies

A multi-currency commercial paper program was established in December 2001. This program, which offers Deutsche Börse Group an opportunity for flexible and short-term financing at favorable terms, involves a total facility of €2.5 billion in various currencies. Funds from the issue of program tranches were received for the first time in July 2002. As at 31 December 2002, there were current liabilities of €288.1 million from euro commercial paper with a remaining maturity of less than one year.

Moody's Investors Service and Standard & Poor's have awarded Deutsche Börse AG long-term credit ratings of Aa1 and AA+ respectively (31 December 2001: Aa1/no rating). Deutsche Börse AG's commercial paper program was awarded the best possible short-term rating by both Moody's Investors Service (P-1) and Standard & Poor's (A-1+) (31 December 2001: no rating in either case).

Fitch and Standard & Poor's confirmed their long-term credit ratings of AA+ for Clearstream Banking S.A. (31 December 2001: AA+/AA+). Fitch awarded an F1+ rating to Clearstream Banking S.A.'s commercial paper program, and Standard & Poor's awarded an A-1+ rating (31 December 2001: F1+/A-1+).

## 50. Off-balance-sheet contingencies and commitments

### Eurex Clearing AG

According to the "Clearing Conditions for Trading at Eurex Deutschland and Eurex Zürich", transactions on the Eurex exchanges must be executed between Eurex Clearing AG and a clearing member. Deutsche Börse AG has issued a comfort letter with an unlimited term in favor of Eurex Clearing AG, by which Deutsche Börse AG undertakes to provide Eurex Clearing AG with 80 percent of the funds it needs to meet its obligation as the central counterparty to settle derivatives contracts traded on Eurex.

To safeguard against possible losses from any default by its contracting parties, the clearing conditions, as most recently amended on 27 January 2003, provide for certain conditions of membership. Among other things, each clearing member must provide cash or securities collateral to secure its entire contractual obligations each exchange day in the amount stipulated by Eurex Clearing AG. The institutions must also provide clearing guarantees as the basis for the clearing business.

The risk inherent in the executed trades in the event of default by a contracting party was valued at €10,540 million (2001: €9,246 million) at the balance sheet date.

The risk is offset by collateral in the amount of €15,851 million (2001: €14,108 million), composed as follows:

	31 Dec. 2002 Carrying amount €m	31 Dec. 2001 Carrying amount €m	31 Dec. 2002 Fair value €m	31 Dec. 2001 Fair value €m
Cash collateral (cash deposits)	217.2	164.7	217.2	164.7
Securities and book-entry securities collateral	15,634.1	13,942.8	19,630.8	18,170.2
<b>Total collateral</b>	<b>15,851.3</b>	<b>14,107.5</b>	<b>19,848.0</b>	<b>18,334.9</b>

There were also third-party bank guarantees for clearing members of Eurex Clearing AG amounting to €298 million at the year-end (2001: €264 million).

### Clearstream Banking AG

Deutsche Börse AG has issued an unlimited letter of comfort for Clearstream Banking AG in accordance with section 5 (10) of the statutes of the Einlagensicherungsfonds (deposit insurance fund), by which Deutsche Börse has undertaken to indemnify Bundesverband Deutscher Banken e.V. against all losses.

### 51. Financial risk management

Deutsche Börse Group's cash reserves are mostly invested in unsecuritized and securitized money market instruments with very high credit quality. The instruments used principally comprise term money deposits with banks, some of which are protected by deposit insurance funds, and securities repurchase agreements. The systematic use of market information systems also enables the Group to take countermeasures at an early stage if risks arise.

Compulsory compliance with the Luxembourg capital adequacy rules ensures that the default risk is managed in the Clearstream subgroup.

The liable own funds calculated to determine capital adequacy for the Clearstream subgroup amounted to €688.3 million (2001: €633.4 million). The minimum capital requirements under Luxembourg GAAP are €97.1 million (2001: €145.3 million), giving Clearstream a capital adequacy of 709 percent (2001: 436 percent).

The following table discloses the risk weighting of the loans extended by the Clearstream subgroup as at 31 December 2002:

Risk weighting	Balance sheet item	Loan principal €m	Risk-weighted capital requirement €m
0%	Sovereign debtors and central banks	1,352.9	–
20%	Banks in OECD countries	2,228.1	445.7
	Banks in non-OECD countries and maturities ≤1 year		
	Regional and local authorities		
	Financial institutions		
50%	Transit accounts	195.0	97.5
100%	Non-banks	596.5	596.5
<b>Total items recognized on balance sheet</b>		<b>4,372.5</b>	<b>1,139.7</b>
Total off-balance-sheet items			10.0
<b>Total risk-weighted capital requirement</b>			<b>1,149.7</b>

## 52. Other financial obligations

Group expenses in connection with long-term contracts in the coming years relating to rental agreements, leases and maintenance contracts, and to other contracts, amount to €470.9 million (2001: €279.3 million). Future obligations in subsequent years are shown in the table below:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Up to 1 year	110.9	49.3
1 to 5 years	181.7	131.1
More than 5 years	178.3	98.9
<b>Total future financial obligations</b>	<b>470.9</b>	<b>279.3</b>

Insurance policies result in obligations in 2003 amounting to €4.8 million (2002: €4.1 million).

In addition, a performance-related purchase price component of up to €15.9 million is contingently payable in 2003 to original shareholders of entory AG, which was acquired in full in 2002. However, Deutsche Börse Group expects that this contingent purchase price component will not be payable at all.

### 53. Finance leases

Finance leases relate to IT hardware components with a carrying amount of €3.9 million as at 31 December 2002. The hardware components are used operationally in Deutsche Börse Group and are not sublet. The minimum lease payments are shown in the following table:

	31 Dec. 2002 €m	31 Dec. 2001 €m
Up to 1 year	2.2	0
1 to 5 years	1.7	0
More than 5 years	0	0
<b>Total minimum lease payments</b>	<b>3.9</b>	<b>0</b>
Discount	-0.3	0
<b>Present value of minimum lease payments</b>	<b>3.6</b>	<b>0</b>

No contingent rent is provided for under the terms of the leases. The corresponding agreements do not contain any escalation clauses. Deutsche Börse Group is entitled to purchase the hardware components at the end of the lease term for €0.5 million. These lease agreements do not restrict the activities of Deutsche Börse Group above and beyond the obligations set out above.

### 54. Executive bodies

The members of the Company's executive bodies are listed in the "Managing Directors" and "Supervisory Board" sections of this annual report.

The composition of Deutsche Börse AG's Executive Board changed on 1 January 2003: Matthias Ganz was appointed to the Executive Board as Chief Operating Officer. Frank Gerstenschläger, Christoph Lammersdorf and Volker Potthoff left the Executive Board as at the same date, but continue to be available to the company in senior management positions.

## 55. Shareholdings of members of the Executive and Supervisory Boards

The Company was notified of the following holdings of Deutsche Börse AG shares as at 31 December 2002:

	Shareholding as at 31 Dec. 2002	Shareholding as at 31 Dec. 2001
<b>Executive Board</b>		
Werner G. Seifert	0	0
André Roelants	0	0
Rudolf Ferscha	18,290	18,290
Frank Gerstenschläger	745	745
Mathias Hlubek	5,000	5,000
Michael Kuhn	0	0
Christoph Lammersdorf	2,380	2,380
Volker Potthoff	660	660
<b>Supervisory Board</b>		
Dr. Rolf-E. Breuer	0	0
Manfred Zaß	0	0
Ralf Arnemann	0	0
Herbert Bayer	0	0
Dr. Peter Coym	0	0
Leonhard H. Fischer	0	0
Uwe E. Flach	0	0
Hans-Peter Gabe	410	410
Dr. Peter Gloystein <sup>1)</sup>	0	0
Harold Hörauf	0	0
Sandra S. Jaffee	0	n. a.
Dr. Stefan Jentzsch	0	n. a.
Dr. Norbert Juchem <sup>1)</sup>	0	0
Dr. Claus Löwe <sup>1)</sup>	0	0
Hessel Lindenbergh	0	n. a.
Friedrich von Metzler	0	0
Fritz Nols	0	0
Klaus M. Patig	0	0
Roland Prantl	0	0
Sadegh Rismanchi	0	430
Gerhard B. Roggemann	0	0
Rainer Roubal	0	0
Johannes Witt	100	100
Silke Zilles	0	0

<sup>1)</sup> Left the Supervisory Board during the course of 2002. The shareholdings of former Supervisory Board members in 2002 relate to the date on which they left the Supervisory Board (see also note 57 "Related party disclosures").

## 56. Corporate Governance

On 10 December 2002, the Executive and Supervisory Boards issued the first declaration of conformity in accordance with section 161 of the AktG (German Stock Corporation Act) and made it available to shareholders on the company's web site. The declaration of conformity is also reproduced in the "Corporate Governance" chapter of this annual report.

## 57. Related party disclosures

Related parties as defined by IAS 24 are the members of the executive bodies of Deutsche Börse AG and those companies classified as its associates. Transactions with individuals classified as related parties are presented in the table below:

### Remuneration of the Executive Board in 2002

Members of the Executive Board are paid annual compensation with a fixed and a variable component, including stock options.

	Fixed compensation <sup>1)</sup> € thousands	Performance related compensation € thousands	Long-term incentive components € thousands	Total € thousands
Werner G. Seifert	642.9	818.3	170.4	1,631.6
André Roelants <sup>2)</sup>	222.3	0	0	222.3
Rudolf Ferscha	361.9	179.0	0	540.9
Frank Gerstenschläger	331.8	347.8	34.1	713.7
Mathias Hlubek	321.4	332.5	35.3	689.2
Michael Kuhn	325.7	396.4	76.7	798.8
Christoph Lammersdorf	283.1	191.6	35.8	510.5
Volker Potthoff	333.3	268.5	51.1	652.9
<b>Total Executive Board remuneration</b>	<b>2,822.4</b>	<b>2,534.1</b>	<b>403.4</b>	<b>5,759.9</b>

<sup>1)</sup> The fixed compensation includes the fixed salary and other taxable salary components, such as health and long-term care insurance premiums and company car arrangements.

<sup>2)</sup> Appointed to the Executive Board on 9 September 2002; the remuneration given corresponds to the amounts received between this date and the end of the fiscal year.

The members of the Executive Board received total compensation of €5,742 thousand in 2001.

Since the IPO on 5 February 2001, Deutsche Börse AG has established a phantom stock option program for Executive Board members and senior executives of Deutsche Börse AG and its subsidiaries. These phantom stock options have a maximum term of five years and a lock-up period of three years. The options can be exercised in each quarter of the subsequent two years in 14-day exercise windows. The amount of the cash payout depends on the relative performance of Deutsche Börse AG shares versus the Dow Jones STOXX 600 Technology Index (EUR) (Return) as the benchmark index (€1 per 1 percent outperformance).

The following overview shows changes in the allocated stock options:

Number of stock options allocated	Balance as at 31 Dec. 2001	Additions	Disposals	Balance as at 31 Dec. 2002
To the Executive Board	8,292	38,919	0	47,211
To other senior executives	13,360	61,126	4,253	70,233
<b>Total stock options allocated</b>	<b>21,652</b>	<b>100,045</b>	<b>4,253</b>	<b>117,444</b>

A noncurrent provision of €5.9 million (2001: €1.5 million) (of which €2,346 thousand relates to the Executive Board (2001: €568 thousand)) was recognized within staff costs being the intrinsic value of the allocated phantom stock options at the closing date 31 December 2002.

Employees of Clearstream International S.A. and its subsidiaries who hold options and shares from the ESOP program will return these to Clearstream International S.A.

#### Remuneration of the Supervisory Board in 2002

For the duration of their membership in 2002, the Supervisory Board members received a ratable fixed remuneration without any variable performance-related components.

		Annual remuneration € thousands
Full-year Chairman of the Supervisory Board	Dr. Rolf-E. Breuer	40.0
Full-year Deputy Chairman of the Supervisory Board	Manfred Zaß	30.0
Full-year members of the Supervisory Board	16 members each at €20.0 thousand	320.0
Ratable remuneration of members who left the Supervisory Board during the year	Dr. Norbert Juchem, left on 15 May 2002	7.4
	Dr. Peter Gloystein, left on 9 Sep. 2002	13.8
	Dr. Claus Löwe, left on 19 Sep. 2002	14.3
Ratable remuneration of members who joined the Supervisory Board during the year	Dr. Stefan Jentzsch, joined on 15 May 2002	12.5
	Sandra S. Jaffee, joined on 22 Nov. 2002	2.2
	Hessel Lindenbergh, joined on 22 Nov. 2002	2.2

The members of the Supervisory Board received total remuneration of €442 thousand for their activities in 2002 (2001: €484 thousand).



Other transactions with individuals classified as related parties are shown in the following table:

	2002 € thousands	2001 € thousands
Remuneration of the Advisory Board	90	92
Pension obligations to members of the Executive Board	5,558	4,627
Pension obligations to former members of the Executive Board or their surviving dependents	5,886	4,395
Pensions paid to former members of the Executive Board or their surviving dependents	266	248

Material transactions with companies classified as related parties are presented below. All transactions were effected on an arm's length basis.

	2002 €m	2001 €m
Operation of the floor trading system by Braintrade GmbH for Deutsche Börse AG	19.6	28.5
Xetra settlement fees paid by Clearstream Banking AG to Deutsche Börse AG	10.7 <sup>1)</sup>	20.6
Systems operating services provided by Deutsche Börse Systems AG to Clearstream Banking AG	8.4 <sup>1)</sup>	21.1
Operation of the Xetra trading system by Deutsche Börse AG for European Energy Exchange AG	2.6	3.5
Services provided by Deutsche Börse Systems AG:		
Operation and development of Xontro software for Braintrade GmbH	31.5	30.1
Development of Eurex software for Swiss Exchange (SWX)	8.8	13.1
Operation of Xetra software for European Energy Exchange AG	0.6	0
Specific agency agreements for the provision of office and administrative services:		
by Eurex Zürich AG to Swiss Exchange (SWX)	26.9	24.8
by Deutsche Börse AG to Clearstream Banking AG	7.1 <sup>1)</sup>	7.9
by Eurex Frankfurt AG to European Energy Exchange AG	5.1	5.1
by Swiss Exchange (SWX) to Eurex Zürich AG	3.6	1.6
by Eurex Frankfurt AG to Eurex Bonds GmbH	1.2	7.1
by Deutsche Börse AG to European Energy Exchange AG	0	1.6
by entory AG to Deutsche Börse Systems AG	–	8.4

<sup>1)</sup> Amounts are shown for the first half of 2002 only.

**58. Employees**

	2002	2001
Average number of employees during the year	2,428	1,085
Employed at the balance sheet date		
Deutsche Börse Group excluding Clearstream subgroup and Infobolsa S.A.	1,506	1,511
Clearstream subgroup	1,738	–
Infobolsa S.A.	74	–
<b>Total Deutsche Börse Group</b>	<b>3,318</b>	<b>1,511</b>

There was an average of 2,302 full-time equivalent (FTE) employees during the year (2001: 1,030).

Please refer also to the “Employees” section in the group management report.

Frankfurt/Main, 25 February 2003  
Deutsche Börse AG



Werner G. Seifert



André Roelants



Mathias Hlubek



Rudolf Ferscha



Matthias Ganz



Michael Kuhn

# Auditors' Report

We have audited the consolidated financial statements, comprising the balance sheet, the income statement and the statements of changes in shareholders' equity and cash flows as well as the notes to the financial statements prepared by Deutsche Börse AG, Frankfurt/Main, for the business year from 1 January to 31 December 2002. The preparation and the content of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit of the consolidated financial statements in accordance with German auditing regulations and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW) and in supplementary compliance with International Standards on Auditing (ISA). Those standards require that we plan and perform the audit such that it can be assessed with reasonable assurance whether the consolidated financial statements are free of material misstatements. Knowledge of the business activities and the economic and legal environment of the Group and evaluations of possible misstatements are taken into account in the determination of audit procedures. The evidence supporting the amounts and disclosures in the consolidated financial statements are examined on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the net assets, financial position, results of operations and cash flows of the Group for the business year in accordance with International Financial Reporting Standards.

Our audit, which also extends to the group management report prepared by the Company's management for the business year from 1 January to 31 December 2002, has not led to any reservations. In our opinion, on the whole, the group management report provides a suitable understanding of the Group's position and suitably presents the risks of future development. In addition, we confirm that the consolidated financial statements and the group management report for the business year from 1 January to 31 December 2002 satisfy the conditions required for the Company's exemption from its duty to prepare consolidated financial statements and the group management report in accordance with German law.

Frankfurt/Main, 25 February 2003

KPMG Deutsche Treuhand-Gesellschaft  
Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft



Wohlmannstetter  
German Public Auditor



Mock  
German Public Auditor

# Single-Entity Financial Statements in Accordance with the HGB

A summary of Deutsche Börse AG's single-entity financial statements prepared in accordance with the provisions of the HGB (German Commercial Code) is presented below. Note that the information is not presented in the legally required form of publication in accordance with section 328 (2) of the HGB. A copy of the complete financial statements can be obtained from Deutsche Börse AG, Investor Relations, 60485 Frankfurt/Main, Germany.

Income statement for the period 1 January to 31 December	2002 €m	2001 €m
Sales revenue	658.9	625.2
Other operating income	110.5	92.1
Total expenses	-621.2	-643.5
Income from equity investments	24.7	16.0
Income from profit pooling agreements	96.6	93.4
Cost of loss absorption	-4.2	-16.7
Write-downs of noncurrent financial assets and current financial instruments	-48.9	-0.6
Net financial income	9.0	27.7
<b>Profit before tax from ordinary activities</b>	<b>225.4</b>	<b>193.6</b>
Taxes	-87.2	-77.0
<b>Net profit for the period</b>	<b>138.2</b>	<b>116.6</b>

Balance sheet as at 31 December	2002 €m	2001 €m
<b>Assets</b>		
Noncurrent assets		
Intangible assets	62.7	94.0
Property, plant and equipment	24.8	26.7
Noncurrent financial assets	2,006.8	267.1
	<b>2,094.3</b>	<b>387.8</b>
Current assets		
Receivables and other current assets	85.8	133.6
Current financial instruments	0	300.0
Cash and bank balances	21.5	715.0
Prepaid expenses	1.0	0.8
	<b>108.3</b>	<b>1,149.4</b>
<b>Total assets</b>	<b>2,202.6</b>	<b>1,537.2</b>
<b>Shareholders' equity and liabilities</b>		
Shareholders' equity		
Subscribed capital	111.8	102.8
Share premium	1,367.5	978.7
Other retained earnings	221.5	130.3
Unappropriated surplus	70.0	60.0
	<b>1,770.8</b>	<b>1,271.8</b>
Provisions	95.6	85.6
Liabilities	336.2	179.8
Deferred income	0	0
	<b>431.8</b>	<b>265.4</b>
<b>Total shareholders' equity and liabilities</b>	<b>2,202.6</b>	<b>1,537.2</b>

# Proposal on the Appropriation of the Unappropriated Surplus

The Executive Board proposes that the unappropriated surplus amounting to €70.0 million reported in the annual financial statements of Deutsche Börse AG be appropriated as follows:

	2002 €m	2001 €m
Distribution of a dividend to the shareholders on 15 May 2003 of €0.44 per no-par value share for 111,802,880 no-par value shares (in 2002 from net profit for 2001: €0.36 for 102,760,000 no-par value shares)	49.2	37.0
Appropriation to retained earnings	20.8	23.0
<b>Unappropriated surplus</b>	<b>70.0</b>	<b>60.0</b>

# Executive Board Members and their Appointments to Supervisory Committees

as at 31 December 2002

## Werner G. Seifert

Chief Executive Officer Deutsche Börse AG  
Responsible for the Group Coordination,  
Group Strategy and Risk Management Division

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
a/c/e Alliance CBOT/Eurex LLC.  
(Member of the Supervisory Board)  
Deutsche Börse Systems AG (Chairman)  
entry AG (Chairman)  
Eurex Frankfurt AG (Deputy Chairman)  
Eurex Clearing AG (Deputy Chairman)  
Xlaunch AG (Chairman)

### Appointments to Administrative Boards

Eurex Zürich AG (Vice Chairman)  
Other Appointments  
Clearstream International S.A.  
(Vice Chairman of the Board of Directors)

## André Roelants

Deputy Chief Executive Officer  
Deutsche Börse AG  
President and Chief Executive Officer  
Clearstream International S.A.  
Chief Executive Officer Clearstream Banking S.A.

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
Clearstream Banking AG (Chairman)  
Other Appointments  
Clearstream International S.A.  
(Member of the Board of Directors)  
Clearstream Banking S.A.  
(Member of the Board of Directors)

### EXTERNAL APPOINTMENTS

Other Appointments  
Blue Orchard Finance (Member of the Board of Directors)

## Rudolf Ferscha

Member of the Executive Board Deutsche Börse AG  
Chairman of the Executive Board Eurex Frankfurt AG  
Chairman of the Executive Board Eurex Zürich AG  
Chairman of the Executive Board Eurex Clearing AG  
Responsible for the Eurex Division

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
Deutsche Börse Systems AG  
Xlaunch AG

## Frank Gerstenschläger

Member of the Executive Board Deutsche Börse AG  
(until 31 December 2002)  
Chairman of the Executive Board entry AG  
Responsible for the IT Division

## Mathias Hlubek

Member of the Executive Board Deutsche Börse AG  
Member of the Executive Board Deutsche Börse  
Systems AG  
Responsible for the Finance, Corporate Center Division

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
entry AG  
Other Appointments  
Clearstream International S.A.  
(Member of the Board of Directors)  
Clearstream Services S.A.  
(Member of the Board of Directors)

## Michael Kuhn

Member of the Executive Board Deutsche Börse AG  
Chairman of the Executive Board Deutsche Börse  
Systems AG  
Responsible for the IT Division

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
Clearstream Services S.A.  
entry AG  
Eurex Frankfurt AG  
Eurex Clearing AG  
Appointments to Administrative Boards  
Eurex Zürich AG

## Christoph Lammersdorf

Member of the Executive Board Deutsche Börse AG  
(until 31 December 2002)  
Responsible for the Information Products Division

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
Deutsche Börse Systems AG  
Other Appointments  
iBoxx Limited (Member of the Board of Directors)  
Infobolsa S.A. (Member of the Board of Directors)

## Volker Potthoff

Member of the Executive Board Deutsche Börse AG  
(until 31 December 2002)  
Responsible for the Xetra Division

### APPOINTMENTS WITHIN THE GROUP

Appointments to Supervisory Boards  
Deutsche Börse Systems AG  
Xlaunch AG  
Other Appointments  
Clearstream International S.A.  
(Member of the Board of Directors)

# Supervisory Board Members and their Appointments to Supervisory Committees

as at 31 December 2002

## Dr. Rolf-E. Breuer

Chairman of the Supervisory Board  
Chairman of the Supervisory Board  
Deutsche Bank AG, Frankfurt/Main

### Appointments to Supervisory Boards

Bertelsmann AG  
Deutsche Lufthansa AG  
E.ON AG  
Münchener Rückversicherungs-Gesellschaft AG  
(until 6 December 2002)  
Siemens AG (Deputy Chairman)  
**Appointments to Administrative Boards**  
Compagnie de Saint-Gobain S.A.  
Kreditanstalt für Wiederaufbau  
Landwirtschaftliche Rentenbank

## Manfred Zaß

Deputy Chairman of the Supervisory Board  
Chairman of the Executive Board  
(until 31 January 2002)  
DGZ DekaBank Deutsche Kommunalbank,  
Frankfurt/Main  
**Appointments to Supervisory Boards**  
Deutsche EuroShop AG (Chairman)

## Ralf Arnemann

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You can order or download the relevant documents at the Internet address shown below. Most documents, including the annual report, are available in German and English.

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## Financial calendar of Deutsche Börse Group in 2003

27 March	Annual Press Briefing for fiscal 2002
8 May	Q1/2003 results
14 May	Annual General Meeting
15 May	Distribution of dividend for fiscal 2002
8 August	Q2/2003 results
10 November	Q3/2003 results

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## Glossary

**At equity** Measurement of an equity interest using the equity method, under which the shares acquired are initially recognized at cost. In subsequent periods, the carrying amount of the shares increases or decreases in line with the investor's share in the investee's net profit or loss for the period. Distributions received from the investee reduce the carrying amount of the shares.

**CCP** → Central Counterparty

**CDAX®** An index comprising all German securities in the → Prime and General Standards across all sectors and segments.

**Central Counterparty** For cash market trading: a central counterparty for exchange and off-exchange transactions that acts as a legal intermediary between trading parties, thus ensuring anonymity and minimizing the default risk. For derivatives transactions → clearing: a similar function that allows Eurex market participants to settle the entire process chain of a trade over a single system.

**Clearing** The netting and settlement of receivables and liabilities arising from securities and derivatives transactions; determination of the bilateral net debt of buyers and sellers.

**Commercial paper** A short-term (between 2 and 364 days) promissory note of a company that is generally issued on a discount basis and repaid at the principal amount.

**Cost of capital** The Weighted Average Cost of Capital (WACC) of a company (cost of equity and debt) that reflects the ratio of available equity to debt in an accounting period. The cost of debt is governed by the actual funding terms, whereby interest on borrowings is tax deductible (tax shield). The cost of equity is the after-tax return on a share that an investor can expect using the Capital Asset Pricing Model (CAPM).

**Custody** The safekeeping and administration of securities for others. A custody account (similar to an account for money transactions) is established for each client. This account contains details of the types, nominal amounts or quantities, numbers, etc. of the securities held, as well as the name and address of the account holder.

**DAX®** An index calculated by Deutsche Börse every 15 seconds. It depicts the performance of the 30 German companies with the greatest → exchange volume and → market capitalization (blue chips).

**Derivative** A highly liquid standardized financial instrument whose value is linked to changes in the price of an → underlying asset. The most common examples of derivatives are → futures and → options.

**eb.rexx®** The Deutsche Börse index family for fixed-income securities. The indices are based on prices on the Eurex Bonds trading platform.

**ETF – Exchange Traded Funds** Mutual funds whose shares can be bought or sold in continuous trading on the stock exchange, and that track the performance of the index on which they are based. → XTF

**Exchange volume** The total amount of trades executed for a security or on an entire market within a defined period of time; expressed as a currency amount (euros, US dollars, etc.).

**Future** A derivatives contract in which sellers agree to deliver, and buyers agree to purchase, a certain quantity of an underlying at a predetermined price on a specified date.

**General Standard** An admission standard on the Frankfurt Stock Exchange. Unlike the → Prime Standard, issuers need only meet the minimum statutory requirements (such as an annual report and ad-hoc disclosures) to be admitted to and remain in the General Standard.

**iBoxx®** Real-time indices and prices for bonds. Calculated by Deutsche Börse on the basis of real-time prices from leading investment banks.

**Market capitalization** An indicator of a company's market value that corresponds to the market price multiplied by the number of shares listed on the exchange. Market capitalization can be calculated for individual sectors or for the entire equities market.

**MDAX®** A selection index in the → Prime Standard for midcaps in traditional sectors. Like the → TecDAX®, this index ranks directly below the equities listed in the → DAX®.

**Option** A derivatives contract that entitles buyers and sellers to buy (call) or sell (put) a defined quantity of an → underlying at an agreed price (exercise price) within a certain period of time or on a specified date.

**Prime Standard** An admission standard on the Frankfurt Stock Exchange that requires issuers to meet high transparency criteria. These requirements, such as quarterly reports and the application of internationally accepted accounting standards, exceed those of the → General Standard. A listing in the Prime Standard is a precondition for admission to a Deutsche Börse selection index, such as DAX®, MDAX®, TecDAX®, or SDAX®.

**Quote book** The electronic order book for Eurex Bonds, where market makers enter binding bid and ask prices (quotes).

**Rating** A system for classifying corporate creditworthiness. Independent agencies award a rating for a company's short- or long-term debt securities, based on the probability of future interest and principal payments. The purpose of ratings is to make the risk associated with an investment more transparent for investors. Depending on the agency, an AAA or Aaa rating is awarded for the highest quality; Aa and AA also both indicate a high quality in every respect; the suffixes 1, 2 or 3, or + and –, allow further differentiation of the quality.

**Round lot** The minimum number of units in equities trading for which an order can be placed not only in auctions, but also in continuous trading at any time. The round lot for all equities traded on the Frankfurt Stock Exchange and in the Xetra® trading system is one share.

**SDAX®** A selection index in the → Prime Standard for smallcaps in traditional sectors. These equities rank directly below those in the → MDAX®.

**Settlement** The completion and fulfilment of an exchange transaction, i. e. the delivery of the security or commodity in exchange for the cash equivalent.

**TecDAX®** A selection index in the → Prime Standard for the 30 largest technology equities ranking below the DAX® selection index.

**Underlying** A security or commodity on which an options or futures contract is based. The underlying for options on equities is the share itself, and the underlying for a DAX® future is the DAX index.

**Xetra Stars®** Deutsche Börse segments where the most attractive international equities are traded on the fully electronic Xetra platform. Dow Jones Euro STOXX 50<sup>SM</sup> shares are represented in the Xetra European Stars, while Xetra US Stars includes US equities from the most common stock indices.

**XTF Exchange Traded Funds®** A segment on the Frankfurt Stock Exchange for continuous trading in investment fund shares. Index funds (→ ETF) and actively managed funds can be traded here.

## Deutsche Börse Group: Five-Year Review

		1998 <sup>1)</sup>	1999 <sup>1)</sup>	2000	2001	2002 <sup>1)</sup>
<b>Consolidated income statement</b>						
Sales revenue <sup>2)</sup>	€m	455.1	599.0	648.9	760.3	1,106.5
Net interest income from banking business	€m	0	0	0	0	64.4
Other operating income	€m	27.8	45.9	95.7	77.3	70.6
Fee and commission expense from banking business	€m	0	0	0	0	-66.3
Total expenses less own expenses capitalized <sup>2)</sup>	€m	-373.0	-533.0	-591.6	-604.3	-858.8
Income from equity investments (net)	€m	-3.7	-5.7	63.5	44.8	34.8
Earnings before interest and taxes (EBIT)	€m	106.3	106.2	216.5	278.1	351.2
Net financial income	€m	17.0	25.3	2.4	41.1	23.2
Profit before tax from ordinary activities	€m	123.3	131.5	218.9	319.2	374.4
DVFA/SG earnings <sup>3)</sup>	€m	53.4	70.0	142.9	203.7	235.1
Dividend (proposal for 2002)	€m	31.1	58.7	30.8	37.0	49.2
<b>Consolidated cash flow statement</b>						
Cash flows from operating activities	€m	155.0	168.4	101.5	248.8	466.2
Cash flows from investing activities	€m	-82.5	-137.9	-252.3	-152.8	-1,734.1
<b>Consolidated balance sheet</b>						
Noncurrent assets (excluding miscellaneous and deferred tax assets)	€m	193.3	260.0	620.3	737.2	2,656.4
Receivables over 1 year including deferred tax assets	€m	10.7	20.7	12.5	17.5	22.0
Receivables from banking business	€m	978.6	2,907.1	0	6.9	3,085.0
Restricted bank balances	€m	93.8	450.1	71.1	164.7	303.7
Other cash and bank balances	€m	55.9	102.1	69.5	1,055.1	248.1
Other current assets	€m	122.0	165.9	149.3	153.7	229.0
Shareholders' equity <sup>3)</sup>	€m	218.5	257.9	419.8	1,560.3	2,152.2
Minority interests	€m	3.2	3.8	4.3	10.6	23.1
Noncurrent interest bearing liabilities	€m	0	0	90.0	0	9.2
Other noncurrent provisions and liabilities	€m	116.4	137.4	84.3	116.2	210.0
Technical closing date liabilities <sup>4)</sup>	€m	964.7	3,284.6	71.1	164.7	3,475.1
Other current provisions and liabilities	€m	151.4	222.2	253.2	283.3	674.6
Total assets <sup>3)</sup>	€m	1,454.2	3,905.9	922.7	2,135.1	6,544.2
<b>Balance sheet performance indicators</b>						
Trade creditors 1	days	28	37	33	28	33
Trade creditors 2	days	32	42	39	33	38
Trade creditors ratio	%	20	24	27	29	47
Equity ratio 1	%	30	23	41	203	42
Equity ratio 2	%	68	64	56	220	61
Debt/equity ratio	%	31	36	30	14	22
Liabilities structure	%	57	62	59	71	75
Cash ratio	%	37	46	27	372	37
Current ratio	%	117	121	86	430	72
Debt coverage	%	66	55	70	101	67
Equity/net tangible assets		6.4	6.6	8.5	37.1	7.9



## Deutsche Börse Group: Five-Year Review

		1998 <sup>1)</sup>	1999 <sup>1)</sup>	2000	2001	2002 <sup>3)</sup>
<b>Performance indicators</b>						
EBIT (excluding share of results of associated companies) / sales revenue	%	24	19	24	31	29
Cash flow 1 return on investment (CF1 ROI)	%	36	32	35	20	20
Cash flow 2 return on investment (CF2 ROI)	%	37	32	35	21	19
DVFA/SG earnings per share <sup>5)</sup>	€	0.73	0.95	1.95	2.04	2.18
Dividend per share <sup>5)</sup>	€	0.42	0.80	0.30	0.36	0.44
Operating cash flow per share <sup>5)</sup>	€	2.11	2.29	1.38	2.49	4.33
Return on equity	%	27	29	40	16	13
Staff costs / total revenue	%	20	17	14	12	18
Employees (FTEs, annual average)		1,042	1,143	894	1,030	2,302
Sales revenue per employee <sup>2)</sup>	€ thousands	437	524	726	738	481
<b>Market indicators</b>						
<b>Xetra</b>						
Number of transactions	thousands	7,150	15,785	39,009	49,719	60,001
Order book volume	€m	403,302	514,959	980,552	958,407	876,179
Participants (at 31 December)		280	404	431	413	359
<b>Floor</b>						
Number of transactions	thousands	47,159	73,364	163,914	124,342	86,653
Order book volume	€m	207,998	400,479	438,712	235,780	157,760
<b>Eurex</b>						
Number of traded contracts	millions	248.2	379.1	454.1	674.2	801.2
Participants (at 31 December)		313	414	429	427	424

<sup>1)</sup> Deutsche Börse Clearing AG was fully consolidated until 1999. The 50 percent interest in Clearstream International S.A. was carried at equity following the merger of Deutsche Börse Clearing AG with the operations of Cedel International S.A. to form Clearstream International S.A. Following the acquisition of Cedel International S.A., Clearstream International S.A. has been fully consolidated since 1 July 2002.

<sup>2)</sup> Excluding net license fees, which were recognized until 2000

<sup>3)</sup> Restated to reflect changes in accounting policies

<sup>4)</sup> Technical closing date liabilities include liabilities from banking business of Deutsche Börse Clearing and Clearstream International S.A., and the Eurex Clearing members' cash deposits.

<sup>5)</sup> Adjusted for the 10-for-1 stock split implemented on 1 June 2001

