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Deutsche Börse Group

From Trading Floor to Virtual Marketplace



Published by

Deutsche Börse Group 60485 Frankfurt/Main Germany July 2002

Order number: 1010-1404

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Xetra screen

The Xetra screen displays all the information required to conduct electronic trading in stocks and shares. At the click of a mouse, traders can select a security and enter their buy or sell order in the window provided along with additional details such as volume, price limit and validity constraints. In continuous trading, Xetra initiates an automatic plausibility check on every buy and sell order. If a matching order exists, the transaction is executed immediately and the participant receives simultaneous confirmation. In so-called auctions, Xetra calculates the price for all outstanding orders which would yield the highest turnover. In addition, Designated Sponsors (banks that "nurture" individual shares) enter buy and sell offers into the system. This also gives small investors a better chance of placing a successful order at any one time.





Deutsche Börse Group

- is one of the leading international exchange organizations
- offers the three core functions trading, settlement and information products
- operates Xetra®, the world's most powerful electronic trading system for the stock market
- organizes the world's largest derivatives market via its subsidiary Eurex
- owns Clearstream, Europe's leading securities settlement organization
- makes market activity transparent with information products such as the DAX® and numerous indices and prices
- develops and operates complex technology solutions as owner of IT service provider Deutsche Börse Systems and entory
- initiates the electronic trading of standardized goods such as commodities, industrial and consumer goods via its subsidiary xlaunch





What is a stock exchange anyway?

A stock exchange is a marketplace where buyers and sellers come together to trade. But it is not the usual type of marketplace. Take a look around: you won't find a trace of the goods that are being so busily traded. And if electronic trading continues to grow at the current rate, soon there won't be any traders left on the floor, either.

More than a German exchange

Deutsche Börse organizes securities markets, and has done so for the past 400 years. Exchanges are one of the most ancient forms of trade – but also one of the most modern. The days when Deutsche Börse could be described as a mere market-place or even a stock exchange for Germany are long gone. These days, Deutsche Börse is a transaction service provider, smoothing the way for investors and companies to the global capital markets with high-performance technology.

Deutsche Börse covers the entire spectrum of products and services that are part and parcel of exchange trading: from securities and derivatives trading through the settlement of transactions and provision of market information right up to the development and operation of electronic trading systems.

In Xetra*, Deutsche Börse has an electronic trading platform offering outstanding efficiency and performance. Eurex, a Deutsche Börse subsidiary, has risen to become the world's leading futures and options exchange in the shortest periode of time. Deutsche Börse also owns Clearstream International, the largest European organization for the settlement of securities transactions. Subsidiaries Deutsche Börse Systems and entory build and operate the trading systems, as well as Deutsche Börse's worldwide participant network.

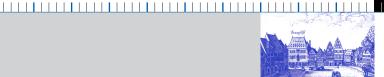
Deutsche Börse has young, international staff with above-average education and skills. Reliability, speed, innovation and global thinking are the company's hallmarks.















How does stock trading work?

For centuries, nothing changed in the way the stock exchange conducted business: All participants came together in an impressive building to trade by open outcry. In the past 15 years, however, electronic trading systems which do not depend on a specific location have revolutionized trading on the stock exchange; trading on the floor, and the floor itself, are losing significance worldwide.

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"Daimler 4 Geld, 5 Brief!" - "An dich!"*

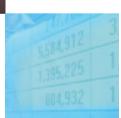
Deutsche Börse provides the infrastructure for the trading floor, but it's the traders and brokers that actually do the deals. Traders are employed by banks and other financial institutions to buy and sell securities on behalf of their clients, whereas unofficial brokers trade on their own account.

Both of these denizens of the financial bestiary typically pace the trading floor talking rapidly into mobile phones. By contrast, the official brokers sit behind the red "barriers", collecting the orders and calculating the official prices. The price is deemed to be "official" because the official broker's office is a public one, and he or she is appointed by the state of Hesse.

The terminology still used dates back to former times when most deals were done by calling out orders, "Geld" (bid) means "I want to buy", and "Brief" (ask) means "I want to sell". The preceding figure indicates the price offered. Today, even trading on the floor would be unthinkable without the computer. Via Xontro, the electronic order routing system, orders are sent directly from the bank to the stock exchange and into the official brokers' order book. However, the majority of orders no longer reach the floor, but are traded electronically on Xetra.

*This is what you might hear brokers on the trading floor in Frankfurt call out to each other; the literal translation: "Daimler 4 bid, 5 ask!" - "It's vours!"







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How does Xetra's electronic trading work?

With the introduction of the electronic trading system Deutsche Börse embarked on a new era in exchange history: stocks and shares moved from the trading floor to the computer screen, the physical presence on the floor is no longer a prerequisite for participation in trading.

60 orders per second

Speed, transparency and cost-effectiveness are the decisive benefits offered by Xetra. Deutsche Börse's electronic trading system processes up to 60 orders per second at extremely low cost, regardless of the trader's location. Furthermore, the Xetra order book showing the buy and sell offers for each tradable security can be viewed, thus making the market transparent and fair for all participants.

Xetra is currently the most efficient and flexible system infrastructure worldwide. On its first day of operation, in 1997, 221 market participants in seven countries began trading in the system and closed a total of 4,934 trades. Today, more than 400 market participants in 17 countries are connected to the system. In peak times, Xetra processes up to 200,000 trades per day.



Xetra has increasingly replaced broker-supported stock trading on the floor. Today, some 95 percent of DAX® stocks and over 86 percent of all German shares entered into the order book are traded on the system. Deutsche Börse has been calculating all indices on the basis of Xetra prices since June 1999. Private investors also profit from this new technology: intraday trading and real-time prices would be impossible without Xetra. The system was developed by Deutsche Börse Systems AG.

Information technology is the key to success in the competition among the international financial marketplaces. Today, successful exchanges are much more than simply marketplaces: they are technology service providers. Through the acquisition of entory AG, a systems solutions supplier specializing in the financial sector, Deutsche Börse increased its core competencies in information technology and has advanced to become a leading international full-service provider for the development and operation of electronic trading systems. Deutsche Börse Systems currently operates 18 exchanges worldwide.





1700-1750





How do securities change hands?

Whether you deal through your bank by phone or place your order online, a complex chain of services is triggered every time you buy or sell shares. The transaction itself - whether via Xetra or on the floor - is just the beginning.

Clearing and settlement of securities

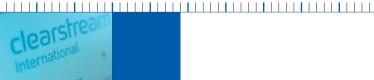
The trading floor certainly presents a captivating show to the spectator. But like any good performance, the exchange's success is largely due to the people behind the scenes. Only one fifth of value added can be attributed to actual trading; the remainder is generated by a far more complicated process: the settlement of transactions. Once trading on the floor is completed, the individual deals have to be entered into the books and processed. Further steps involve crediting the amount to the client's account and the central safe-keeping of securities. The terms used by the exchange to describe these procedures are clearing, settlement and custody.



High-performance stock exchanges require high-performance settlement organizations. To this purpose Deutsche Börse took over Clearstream International completely in July 2002. It had formerly owned a 50 percent stake in the Luxembourg-based clearinghouse. Some €7.5 trillion worth of shares, bonds and funds are in Clearstream's custody. However, most securities are no longer physically stored and transported; instead, only the information is booked and secured in electronic storage media.

Apart from the core businesses of securities settlement and custody, Clearstream also offers services covering all aspects of securities lending. To this end, Clearstream Banking acts as a neutral intermediary between lender and borrower and also takes over the administration of the collateral deposited. Securities lending permits market participants to raise the yields of their portfolios and to minimize risks.







What's the deal?

The stocks and shares of more than 5,700 companies are listed on the FWB® Frankfurter Wertpapierbörse (the Frankfurt Stock Exchange). Since the year 2000, some 170 companies went public. In addition to stocks and shares, trade in fixed-income securities (bonds, mortgage bonds and debentures) and warrants is also significant. Around 6,800 fixed-income securities and some 23,000 warrants are currently traded on the Frankfurt Stock Exchange.

Made to measure capital markets

By providing access to the various market segments, Deutsche Börse offers companies tailor-made conditions for raising capital. The segments also make it easier for investors to find their way around the capital market, allowing them to target their investments to their individual risk/return profile. Securities undergo a rigorous selection procedure before they can be listed in one of the six segments.

Official Trading

Around 530 shares are listed in the Official Trading segment. These include the 30 standard stocks (so-called "blue-chips") that make up the DAX® index. Official Trading is the segment with the highest turnover on the Frankfurt Stock Exchange. The admission criteria are strict: for example, the issuing companies must have been in business for at least three years and have published regular financial statements during this period.

Regulated Market

Over 130 shares are admitted to the Regulated Market. The admission criteria are less strict than for Official Trading. Medium-sized companies typically use the Regulated Market as their initial segment when going public.

Regulated Unofficial Market

There are few conditions for admission to the Regulated Unofficial Market. Approximately 4,800 stocks (mainly foreign companies) and warrants are traded on this market. Companies meeting particularly strict requirements (e.g. publication of quarterly reports, using the IAS or US GAAP accounting standards, and disclosing directors' stockholdings) can be admitted to the Neuer Markt® or SMAX®.

Neuer Markt

Established in 1997, the Neuer Markt has paved the way for fledgling companies to the capital markets. This market segment is attractive for investors who are interested in companies providing innovative products and services and who are willing to accept a higher calculated risk in return for higher return.

SMAX

Medium-sized companies whose shares are traded on the Official Trading or the Regulated Market segments can take advantage of a forum that distinguishes them from the mass of second-line stocks. SMAX was launched in 1999.

XTF Exchange Traded Funds®

In XTF, unlike in classical fund business, fund shares can be traded continuously like shares without an offering premium. You can choose between index funds, with which you can participate in the development of e.g. the DAX or the Euro STOXXSM 50, or actively managed funds; whose performance strives to exceed that of an index. The XTF segment began trading in April 2000.









What's the DAX doing?

The DAX® is the benchmark for the German stock market and an important mood barometer for the German economy as a whole. The 30 standard stocks which go to make up the DAX constitute 80 percent of the turnover on the Frankfurt Stock Exchange and around 75 percent of total stock turnover on the German market. Since the DAX became popular with television broadcasters and a regular closing feature of the main evening news, it has entered the collective consciousness. These days, it's as normal to discuss the DAX as it is to talk about the weather or the football results.

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Information generates trading

Successful investors in the capital markets require up-to-theminute information from a reliable source. Using market prices, they can get a picture of a company's economic health, or equally the health of a business sector or an entire country. Deutsche Börse ensures accuracy by collecting financial data where they are generated – on the electronic platforms of its own trading systems. Using prices, indices and statistics, Deutsche Börse renders transparent what happens on the markets.

The indices provide important information about Deutsche Börse's various trading segments. Trends on the German market are illustrated by the DAX*, MDAX* and NEMAX 50*. On a European level Deutsche Börse is the partner of STOXX Ltd.; their indices are among the leading European indices.

Deutsche Börse calculates and distributes a total of about 1,200 indices, the majority of which are not for stocks, however, but for German and other European government bonds.

DAX

The German stock index (Deutscher Aktienindex). Comprises the 30 largest German stocks in Official Trading at the Frankfurt Stock Exchange in terms of market capitalization and turnover.

MDAX

Mid-cap DAX. Comprises the 70 German stocks ranking directly below the top 30 DAX companies in terms of market capitalization and turnover.

SDAX

Small-cap DAX. Comprises the 100 largest stocks with the highest market capitalization and turnover within the SMAX®— a quality segment for companies with lower market capitalization.

NEMAX 50

Neuer Markt Index. Comprises the 50 largest stocks with the highest market capitalization and turnover in the Neuer Markt® segment. The NEMAX All Share index includes all Neuer Markt stocks.

Dow Jones Euro STOXX 50

European blue-chip index, comprising 50 blue-chip shares from the EU member countries. Criteria for inclusion in this index are sector and market capitalization.

Admission to an index

Market capitalization, exchange turnover and free float (the share of freely tradable stocks) are the decisive criteria for evaluating a company regarding its admission to an index or when the composition of an index is reviewed. The decision is taken according to the statutes of a set of transparent and comprehensible regulations.

February 23, 1945 Closure of the stock exchange



1900-1950

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4,520

2,300 2,100 4W 519000 700 1,800 7,000 34.22 34.38 8,000 34.21 34.39 15,000 34.20 34.40 900 34.11 34.50 KWN. 519003 1,400 3K 803200 2,700 3K 514000 5,000 X 710000 2,100 łA 542500 200 RB 535000 2,100 Έ 555750 1,600 A 761440 7,800 C 512800 500 700 1E 578580 1,000 IE3 578583 200 604840 500 N 57.60 500 500 300 2,000 604843 1,300 N3 400 802200 М 200 623100 3,300 627500 R 13,000 823212 800 648300 28,97 28.89 1,000 593700 N 1,000 4,000 593703 200 N3 8,000 725750 24.50 0 1,400 1,200 725753 500 355.25 03 500 843002 **V**2 38.87 1,000 695200

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1,500

Know futures?

Who has never dreamt of seeing into the future? Due to its distinctive relationship to the future, the stock exchange has developed instruments designed to make tomorrow more manageable. Futures and options give the right or oblige to buy or sell underlying securities on a fixed date at a predetermined price. This allows investors to protect their investments against price fluctuations. Speculation in futures and options tempts with prospects of high returns for low investments, but caution is recommended. You can just as easily lose all your

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Eurex: The world's leading market for futures contracts

Eurex, the futures and options exchange, is a subsidiary of Deutsche Börse and SWX Swiss Exchange. It was formed in 1998 through the merger of DTB (the German derivatives exchange) and the Swiss Soffex. In 2001, some 674 million contracts were traded on Eurex. This was an increase of almost 50 percent on the previous year's figure.

In individual products – such as the Bund future or the Bobl future – Eurex now enjoys a market share of over 90 percent, making it by far the world's largest market for the trading and settlement of futures and options on shares and share indices, as well as on the capital market.

What makes Eurex so successful? Eurex banked on electronic trading combined with an international network right from the start. Today, some 425 participants in 17 countries are connected to the Eurex® trading system. Eurex is currently in the process of connecting members in the Far East, so that it is only a matter of time before Eurex can boast a presence in markets spanning three time zones: Europe, America and the Pacific Rim. The Eurex trading system was developed by Deutsche Börse Systems AG.

Derivatives market

Market for futures and options. In contrast to trading in shares and bonds, transactions in derivatives trading, such as delivery, acceptance and payment, are not completed until an agreed point in the future has been reached

Option

Financial instrument which gives the buyer the right to buy or sell an underlying (for example a share) at a certain time and at a price determined in advance.

Future

Financial instrument by which the buyer is obliged to buy or sell an underlying (for example a share) at a certain time and at a price determined in advance.

Call

Buy option with which the buyer can profit disproportionately from rising prices.

Put

Sell option with which the buyer can hedge against the risk of falling prices.

Underlying

Instruments on which futures and options contracts are based such as equities, bonds, indices, currencies or commodities.

1958

The first foreign stocks are listed

1950-2000



September 28,1998 Founding of Eurex

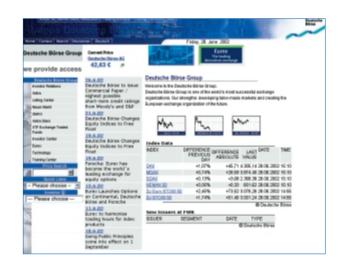
November 28, 1997 Xetra® goes online

July 1, 1988 Launch of the DAX® March 10, 1997 Launch of Neuer Markt® 30 I 31

The Deutsche Börse Group

The Deutsche Börse Group comprises Deutsche Börse AG and its subsidiaries Clearstream International. Deutsche Börse Systems AG, entory AG and xlaunch AG. Deutsche Börse AG operates the FWB® Frankfurt Stock Exchange and has an 80 percent stake in the derivatives exchange Eurex.

Deutsche Börse AG itself has been listed since February 5, 2001. With a market capitalization of around €5 billion (June 1, 2002), the company is one of the largest MDAX stocks and by far the most highly valued exchange organization in the world. Around 50 percent of its shares are owned by institutional investors. The largest individual stakeholders are Deutsche Bank, Allianz and the other regional German exchanges.



www.deutsche-boerse.com

You will find information on the capital markets on Deutsche Börse's homepage www.deutsche-boerse.com. Here you can access the latest exchange news, prices, indices as well as information on recent admissions to the stock exchange. There are links to all Deutsche Börse Group business segments, as well as to several companies whose stocks are listed on the exchange. Individual stock quotes can also be called up in separate fields – so that you always know how your stocks are doing. Two navigation bars provide access to several thousand further pages, e.g. you will find the basics of the stock market in the menu item: Services/Know-how

With an average of 650,000 hits per day, Deutsche Börse's website is one of the most successful Internet services in the German financial sector

February 5, 2001 IPO of Deutsche Börse AG July 12, 2002 Acquisition of Clearstream International



2000-2002



Want to find out more about the Börse?

In addition to visits to the trading floor and the information on the web, Deutsche Börse also offers brochures and booklets on a range of topics.

The Visitors Gallery We look forward to seeing you

- The basics of exchange trading are revealed three times a day, at 10:00 a.m., 11:00 a.m. and 12 noon (please book beforehand)
- Looking onto the trading floor of the Frankfurt Stock Exchange, the Visitors Gallery is open to visitors from 10:30 a.m. to 6 p.m. by appointment only (don't forget to bring your passport)
- Information phones explain what is happening on the floor
- During your visit we'll call up the latest share prices and charts upon request

For bookings call:

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