DEUTSCHE BÖRSE
GROUP

www.deutsche-boerse.com

Financial report 2017

Excerpt: report on economic position

Report on economic position

Macroeconomic and sector-specific environment

Macroeconomic conditions had, and continue to have, a significant impact on the overall economic environment and on trading activity on the markets. For Deutsche Börse Group, the macroeconomic environment during the year under review was rather complex; whilst some factors have a stimulating effect on business, others have the potential of unsettling market participants, burdening their business activity:

- The robust global economic situation, with growth in the economies relevant to Deutsche Börse Group (Central Europe, USA) during the year under review
- The European Central Bank's (ECB) persistent low interest rate policy, with deposit rates at minus 0.4 per cent and the resulting ongoing high levels of liquidity provided, reinforced by the bond-buying programme that is part of the ECB's quantitative easing (QE) policy
- The turnaround in the US Federal Reserve's (Fed) interest rate policy initiated at the end of 2015 and confirmed in the year under review, through interest rate increases of 25 basis points each in March, June and December
- The persistent extremely low level of volatility on equity markets – as measured by the VDAX® index – as one of the key drivers of activity on the cash and derivatives markets
- The more stable economic situation in the euro area – associated, however, with uncertainty regarding the UK's exit from the EU and its future impact on markets
- Growing confidence in a united Europe after election results in Germany, France, Austria and the Netherlands
- Unstable political conditions in some parts of Eastern Europe and recurring flashpoints in the Arab world and their impact on the Western world

Share price development of Deutsche Börse AG and benchmark indices in 2017

1) Between 30 December 2016 and 3 April 2017, the data shown refer to tendered shares with ISIN DE000A2AA253.

- Regulatory projects and the resulting stricter requirements for capital market participants (see the "Regulatory environment" section)

Against this background, the economies of industrialised nations showed significantly stronger growth in 2017 compared to the previous year, as estimated by the International Monetary Fund (IMF). According to these estimates, real gross domestic product (GDP) rose by 2.3 per cent in 2017, compared to a growth rate of 1.7 per cent in 2016. Global economic growth was 3.7 per cent in 2017 (2016: real growth rate of 3.2 per cent).

Along with the upturn in global economic growth, German gross domestic product for 2017 significantly outperformed the previous year's levels as well, according to initial estimates. The IMF's January 2018 estimates put growth in German economic output at 2.5 per cent in 2017 (2016: increase in real terms of 1.9 per cent).

Economic performance throughout the euro area slightly improved in 2017: no country was in recession during 2017; moreover, economic growth accelerated in some states within the European Economic Area, particularly in France and Italy. Hence, the ECB continues to assess the economic situation in the EU as stable. Deposit rates for banks have been at –0.4 per cent since March 2016. Moreover, it extended its bond-buying programme by nine months until September 2018, albeit cutting monthly volumes from €60 billion to €30 billion per month from January 2018 on. In 2017, the monthly repurchase volume remained stable at €60 billion.

The IMF expects US economic output to post a real 2.3 per cent increase for 2017, compared to a 1.5 per cent increase the year before. Given further relief on the labour market and higher expected economic growth for 2018 (particularly due to tax reductions for companies), the US Federal Reserve raised its key interest rate again in December 2017, to a range between 1.25 and 1.50 per cent.

All told, improving economic growth, decline in political uncertainty in Europe, and the continued low interest rate policy pursued by the European Central Bank had a slightly positive effect on trading on the European capital markets. The Group has increased its trading volumes in equities and clearly benefited from trading activity in interest rate derivatives, whereas equity index derivatives showed a decline, as volatility hit historic lows, resulting in overall Eurex trading volumes slightly below the prior year's level.

Development of trading activity on selected European cash markets

	2017 €bn	Change vs 2016 %
Deutsche Börse Group	**1,467.6**	**7**
Euronext[1]	1,906.9	6
Borsa Italiana[2]	745.9	6
London Stock Exchange[2] (£)	1,338.9	5
Bolsas y Mercados Españoles[1]	651.4	0

1) Trading volume in electronic trading (single-counted)
2) Part of London Stock Exchange Group
Source: Exchanges listed

Development of contracts traded on selected derivatives markets

	2017 m contracts	Change vs 2016 %
National Stock Exchange of India	2,465.3	15
CME Group	4,088.9	4
Intercontinental Exchange	2,125.3	4
Deutsche Börse Group – Eurex®	**1,675.9**	**–3**
Shanghai Futures Exchange	1,364.2	–19
Moscow Exchange	1,544.1	–21

Source: Exchanges listed

Regulatory environment

The international financial crisis has demonstrated the necessity for increased transparency and stability in the global financial markets and has sparked a discussion about the role and details of the necessary financial market infrastructure. In the wake of the United Kingdom's resolution to exit the EU, the conditions of Brexit for the financial services industry also need to be negotiated. In this context, it is crucial to consider the needs of all stakeholders.

As a provider of a highly regulated financial market infrastructure, Deutsche Börse Group shares the objective of national legislators, the European Union as well as G20 to strengthen transparent, stable and regulated markets. In this connection, Deutsche Börse Group has proven itself as a constructive partner, actively contributing to political discussions on suitable national and European initiatives for the regulation of financial markets.

The considerable increase in regulatory requirements has a twofold impact on Deutsche Börse Group: as a market infrastructure provider, the Group must meet regulatory duties and at the same time strive to offer products and services tailored exactly to meet the needs of its customers. It therefore holds an important position as a link between regulators and customers. As such, Deutsche Börse Group supports its customers in ensuring compliance with regulatory requirements and thereby minimising their risks. The various regulatory dossiers have different impacts and/or offer opportunities for the business units contributing to Deutsche Börse Group's value chain.

Financial markets infrastructure regulation

Regulation of markets in financial instruments (MiFID II, MiFIR)

The revised directive (MiFID II) and the accompanying regulation (MiFIR) became applicable on 3 January 2018.

The European Parliament, the European Commission as well as the Council of Member States have agreed on the majority of implementing measures (level 2); at present, amendments designed to ensure a level playing field are being made to the regulations for systematic internalisers. The European Securities and Markets Authority (ESMA) is currently developing specific interpretation and implementation guidance (level 3), in close cooperation with national supervisory authorities.

MiFID II und MiFIR will fundamentally transform the European financial market by expanding transparency provisions, strengthening the stability and integrity of its infrastructure, revising the market's microstructure and improving the quality and availability of market data. The new rules have a profound impact on Deutsche Börse Group, too, in particular on its trading and clearing activities, as well as on its market data business. In this context, the company has developed various products and services designed to support clients in their compliance with regulatory requirements. Specifically, these relate to the requirements regarding transparency and disclosure, market-making and algorithmic trading, as well as to the organisational requirements concerning safety mechanisms for trading venues and market participants.

Regulation of packaged retail and insurance-based investment products (PRIIPs Regulation)

The PRIIPs Regulation was adopted in response to market developments whereby retail investors looking to make an investment decision are faced with a constantly growing variety of available investment opportunities. To enhance transparency regarding these products, the PRIIPs Regulation requires the provision of key information documents (KIDs), in order to establish a standard governing published information for retail investors within the EU. Standardised KIDs summarise key aspects of different PRIIPs – such as risks, premiums and costs – and thus help investors to better understand and compare these products. Specific legal requirements apply to exchange-traded derivatives.

According to the PRIIPs Regulation, Eurex is a PRIIP manufacturer for exchange-traded derivatives: hence, Eurex provides KIDs for all exchange-traded products from the Eurex product portfolio. The PRIIPs Regulation became applicable on 1 January 2018.

EMIR: implementation and review

The European Market Infrastructure Regulation (EMIR), which entered into force in 2012, is a significant regulation for central counterparties. The purpose of the proposals for a revision of the regulation published in the summer of 2017 (EMIR Review) was to enhance efficiency as well as to ensure the post-Brexit safety and stability of financial markets. For example, the proposals provide for adjustments to reporting and the supervisory structure, and aim to facilitate access to centralised clearing for smaller market participants. Deutsche Börse welcomes the review: it perceives opportunities for its business and offers market-oriented products and services to its clients in this respect.

By publishing the review proposals, the European Commission initiated the legislative process in the European Parliament and the European Council.

Recovery and resolution regulation for central counterparties

Following the European Market Infrastructure Regulation (EMIR), developing recovery and resolution plans for central counterparties is the next logical legislative step for making central counterparties even more secure and stable. A key aspect of regulation is to create sound incentive structures – on a European as well as a global level – in order to ensure that the interests of stakeholders involved are aligned.

As a next step following the coordination of international standards, the European Commission published draft legislation concerning recovery and resolution plans for central counterparties in November 2016, triggering the legislative process in the European Parliament and the European Council.

Central Securities Depository Regulation (CSDR)

With the CSDR, a uniform European regulatory framework for central securities depositories (CSDs) was established for the first time in September 2014. Official regulatory technical standards (RTSs) were published in March 2017.

The CSDR will harmonise the securities settlement systems and supervisory rules for CSDs throughout Europe. This will strengthen Clearstream's business model because the provision of integrated banking services will still be permitted. Licensing applications were filed with local regulatory authorities at the end of September 2017, with decisions on admission expected in the course of 2018.

At present, it is fair to assume that CSDs and their clients will be required to comply with the new CSDR rules from mid-May 2018. While the rules governing settlement discipline have not yet been finalised, they are expected to become binding during the course of 2020. Deutsche Börse Group will support its clients in fulfilling the new requirements through existing and enhanced service offers.

Regulation on benchmarks and indices

The regulation on indices used as benchmarks in financial instruments and financial contracts (Benchmark Regulation) entered into force on 30 June 2016. The final application of the regulation took place on 1 January 2018. Benchmark administrators from EU and non-EU countries will have to be admitted or recognised by 1 January 2020. The Benchmark Regulation largely follows the global principles for financial benchmarks of the International Organization of Securities Commissions (IOSCO). These principles were developed in 2013, as a response to the manipulation of certain indices or reference rates (such as LIBOR and Euribor).

Deutsche Börse Group, which successfully implemented the IOSCO principles in 2014 for its DAX® indices and for the indices of its subsidiary STOXX Ltd., welcomes the agreement reached between the European Parliament and the European Council. The regulation's specific impact on the Group's business activities depends on the implementing measures still to be laid out in the form of delegated acts and technical standards by the European Commission and ESMA.

Overview of regulatory initiatives and their impact on Deutsche Börse Group's business areas

	Cash Market	Eurex	EEX	360T	Eurex Clearing	Clear-stream	IT & MD+S	Status as at 31 December 2017
Financial market infrastructure								
MiFID II, MiFIR	X	X	X	X	X		X	Published in 2014; application since 3 January 2018
PRIIPs		X						Application since 1 January 2018
EMIR			X	X	X	X		Became effective in 2012; review in 2017
Recovery and resolution plans for CCPs			X		X	(X)[1]		Draft legislation in the legislative process
CSDR	X	X			X	X		Became effective in 2014; application expected for mid-May 2018
Regulation on benchmarks and indices		X	X		X		X	Became effective on 30 June 2016; application since 1 January 2018
Capital Markets Union	X	X	X		X	X	X	Mid-term review in 2017; implementation by 2019
Review of European supervisory structures (ESAs review)					X		X	Legislative process commenced with the publication of a legislative proposal in September 2017
Investment firms								
Basel III					X	X		Finalisation at the end of 2017, with subsequent implementation throughout the EU
CRD V, CRR II			X		X	X		Finalisation expected by the end of 2018/beginning of 2019; implementation expected at the beginning of 2021
SFTR						X		Became effective in 2016; implementing standards still outstanding

1) Not in scope of legislative proposal

Capital Markets Union

The European Commission has placed the focus of its planned Capital Markets Union on growth, and on industrial policy. Its main goals are the sustainable promotion of growth and job creation, and the development of a diversified financial system where bank financing is supplemented by highly developed capital markets. A successful Capital Markets Union is more important than ever – especially given that the EU has fallen behind in global competition, with respect to numerous metrics. Success in the creation of integrated, pan-European capital markets would release inactive capital throughout Europe, as savers would be given a greater choice of investments, while businesses would benefit from enhanced financing options. The European Commission published its mid-term review in June 2017, in which it pointed out that 20 of the 33 measures lined up in the action plan had already been successfully implemented. Moreover, the Group has announced that it will initiate further measures to promote the Capital Markets Union in 2018.

The Capital Markets Union affects Deutsche Börse Group's entire value chain. Thus, the Group has actively supported the project from the outset, seeking active involvement in the political debate, and contributing to the creation of safer, integrated EU-27 capital markets. Deutsche Börse supports the objectives of the Capital Markets Union, through initiatives such as the Deutsche Börse Venture Network®, a platform designed to connect high-growth start-up companies with investors, and the FinTech Hub, a business incubator for fintech enterprises.

Brexit

On 29 March 2017, the United Kingdom officially declared its exit from the EU, in accordance with Article 50 of the Treaty on European Union (EU Treaty). This triggered a two-year negotiation process on the terms of the exit: numerous relevant issues concerning the restructuring of the relationship between the United Kingdom and the remaining 27 EU member states (EU-27) will need to be clarified during this period.

The outcome of ongoing negotiations between the United Kingdom and the EU-27 remains to be seen. Should no new treaties (or transitional arrangements) have been negotiated between the European Commission and the British government by the time Brexit takes place on 29 March 2019, UK financial services providers might lose their existing rights under the EU passport – in which case they would no longer be allowed to offer services to clients within the EU.

The European Council and the European Commission are looking to commence the ratification process in October 2018. An extension of the two-year period would require the unanimous consent of the EU-27 – considering the various interests involved, this does not appear to be a realistic assumption at present. It is fair to assume that the United Kingdom will leave the EU in March 2019.

Financial markets in the EU and the United Kingdom are highly interconnected: at present, the UK financial markets serve as the main trading hub for other financial centres throughout the EU – close to 80 per cent of financial markets activities in the EU take place there.

As in the past, Deutsche Börse's paramount objective remains to create stable and resilient trading and post-trading conditions. Deutsche Börse Group maintains close and continuous contact with its clients, as well as with regulatory authorities and associations, to analyse the impact of Brexit and to recognise the needs of all its stakeholders.

It is the Group's goal to develop solutions supporting clients during and after Brexit, in order to mitigate related effects to the greatest possible extent. The Group is firmly convinced that even after Brexit it will be able to offer valuable add-on services to all parties, over and above its range of services covering the entire exchange trading value chain (comprising pre-trading, execution and post-trading). The Group covers all asset classes and is connected with all major financial markets.

Review of European supervisory structures (ESAs review)
Based on insights gained from the financial crisis of 2007/2008, the European Union was determined to establish a more efficient, more strongly integrated supervision. The introduction of the European System of Financial Supervision (ESFS) in 2010 – comprising the three European Supervisory Authorities (ESAs) and the European Systemic Risk Board (ESRB) – established a new supervisory structure at a European level for the first time. The European Commission reviews the tasks and organisation of this supervisory structure every three years.

As part of this regular review – embedded in the updated action plan for the Capital Markets Union – the European Commission launched a public consultation in spring 2017 and draft legislation in September 2017, on realigning the duties, authority, financing and governance of the ESAs. In particular, the role of ESMA is set to be upgraded through an extension of its regulatory powers. Especially in the wake of Brexit, the European Commission has assigned top priority to aligning European supervisory structures to the new political environment, strengthening regulatory integration for certain cross-border financial services within the remaining 27 EU member states.

The work of the ESAs – and especially of ESMA – has an impact on the entire value chain of Deutsche Börse Group: the Group welcomes the progress the EU has made in financial markets regulation and supervision over the past decade. EU regulations relevant to supervisory structures are still being implemented at present. Harmonisation of the European capital markets is set to be driven ahead by projects such as the Capital Markets Union, while Brexit will have profound implications on financial markets and their regulatory frameworks. In the context of these challenges, efficient regulation – with clearly defined responsibilities and decision-making processes – will remain a key topic. This is why Deutsche Börse Group will remain an active participant in political debate. The review of European supervisory structures should preserve an environment that promotes growth, while carefully adjusting the existing regulatory regime (if necessary), in order to safeguard financial stability – but also legal certainty and the operational viability of supervised enterprises.

More information on regulatory issues is available on Deutsche Börse Group's website at www.deutsche-boerse.com/regulation.

Rules for banks and investment firms

Basel III

As a consequence of the global financial crisis of 2007/2008, the Basel Committee on Banking Supervision (BCBS) thoroughly revised its existing Basel II framework for banks, on the basis of corresponding G20 agreements. Further amendments were resolved on top of the first cornerstones adopted in 2011; the revised Basel III framework was finally concluded on 7 December 2017.

The following changes have already been implemented:

- Stricter definition of the term "capital"
- Increased capital levels
- Revised market risk framework
- Introduction of a leverage ratio
- Introduction of international rules to contain risk concentration (large exposure rules)
- Introduction of liquidity requirements

With the measures adopted in December 2017, revised rules – largely governing capital backing of credit and operational risk – will come into effect between now and 1 January 2022. On top of the credit risk framework, both the standardised approach and the model-based approach have been substantially revised, and operational risk regulations have been restricted to a modified standardised approach. In addition, a floor was determined regarding capital requirements for credit risk, where these are calculated using internal models: the so-called output floor was set at 72.5 per cent of capital requirements under the standardised approach.

Moreover, the BCBS has submitted initial proposals as to how exposures to public-sector entities should be treated in the future. The BCBS will continue to develop these proposals, supplementing the Basel III framework, and may implement them at a later stage if applicable.

CRD V/CRR II

Accounting for ongoing changes to the Basel III framework and to other elements of bank regulation, the European Commission proposed amendments to the Capital Requirements Directive (CRD IV) and Capital Requirements Regulation (CRR) in November 2016. These proposals concern the minimum requirements for equity and eligible liabilities (MREL) as well as the total loss-absorbing capacity (TLAC); they also involve amendments to the EU Bank Recovery and Resolution Directive (BRRD) and the related regulation.

Besides the changes to MREL and TLAC, the European Commission's proposals concern the following items in particular:

- Introduction of a binding leverage ratio of 3 per cent
- Introduction of a net stable funding ratio (NSFR)
- Revision of the market risk framework

Deutsche Börse Group anticipates the draft legislation proposed by the European Commission not to be finalised prior to the end of 2018; the related requirements are not expected to come into force before the beginning of 2021. The draft legislation is still under discussion; hence, it is not yet possible to assess the related impact on financial markets infrastructure.

CRD IV/CRR entered into force on 1 January 2014, implementing the first elements of Basel III. Transitional provisions apply until 1 January 2019. The measures to finalise the Basel III framework, as resolved by the BCBS in December 2017, are expected to be incorporated following completion of the CRD V/CRR II package, for implementation into EU law – on time – by 2022.

Deutsche Börse Group actively and continuously seeks to contribute to discussions on modifications to banking regulations. In this context, it emphasises the impact on financial infrastructure providers with a (restricted) banking licence, as well as the necessity of identifying specific rules for regulated entities in order to avoid any negative impact on financial market stability, in terms of specific requirements for banks. Moreover, the Group focuses on the capitalisation of its regulated entities, intervening where required in order to ascertain adequate risk coverage.

Transparency of securities financing transactions

The Securities Financing Transactions Regulation (SFTR) was published in the EU Official Journal on 23 December 2015. It provides for reporting requirements concerning securities lending and repo transactions to so-called trade repositories. Furthermore, it sets out requirements regarding the re-pledging of collateral, and reporting obligations of investment fund providers which are active in securities lending. The introduction of comprehensive reporting duties for securities lending transactions has different effects upon the Clearstream subgroup, Eurex Clearing AG, and REGIS-TR S.A., with increased efforts – and hence, higher costs – expected for proprietary securities financing transactions. Yet the obligation to file reports to trade repositories also holds business potential for REGIS-TR. ESMA drew up corresponding implementation standards and submitted them to the European Commission in April 2017; however, these standards have not yet entered into force.

Uniform supervision of investment firms

On 20 December 2017, the European Commission published a draft legislative proposal for a uniform regulatory regime for investment firms, based on a proposal prepared by the European Banking Authority (EBA). The EBA had submitted its original draft within the framework of a public consultation, and modified it on the basis of feedback received. Having participated in the EBA consultation, Deutsche Börse Group will continue to constructively contribute to the legislative process. The Group is currently in the process of analysing the draft, and will continue to address its impact on Group entities and market participants.

Business developments

Given the overall framework conditions outlined at the beginning of the economic report, the situation on the capital markets for financial services providers in the reporting period was somewhat more favourable compared to 2016. Solid economic growth in the major economies, a strong German economy with stable corporate balance sheets as well as the stable political situation in the EU – despite the impending exit of the UK – provide fertile ground for the businesses of exchange operators. The benchmark DAX® and STOXX® indices reached record levels, and trading volumes on the cash market platforms of Deutsche Börse Group rose compared with the previous year. At the same time, the low level of vola-tility in the equity market and the ECB's QE policies negatively impacted other business segments of Deutsche Börse Group, such as index derivatives trading at Eurex. The Group's growth areas, such as Clearstream's Investment Funds Services, foreign-exchange (FX) trading on 360T, and the index business in the Market Data + Services (MD+S) segment, continued to develop favourably. In the post-trading business, the value of securities held with the Central Securities Depository (CSD) increased, while volumes at the International Central Securities Depository (ICSD) declined slightly. Due to rising interest rates in the US, net interest income from Clearstream's banking business rose significantly. Looking at developments during the course of the year, business was strongest in the fourth quarter, whereas the third quarter turned out to be the weakest one.

Comparability of figures

Discontinued operations

The disposal of International Securities Exchange Holdings, Inc. (ISE) as of 30 June 2016 is disclosed as a discontinued operation in accordance with IFRS 5. Following IFRS 5, this combined management report contains financial indicators of the previous year excluding figures from this discontinued operation.

Changes to the basis of consolidation and to segment reporting

Within the Group's organisation, the allocation of revenue and costs to individual segments was changed in 2017, effective as from Q1/2017. Due to these changes, the following adjustments were made to segment reporting; previous year's figures were adjusted accordingly.

- Revenue and costs generated or incurred in connection with managed services (particularly IT services for Clearstream customers) are disclosed within the ICSD business of the Clearstream segment (previously under Infrastructure Services in the Market Data + Services segment).
- Revenue and costs generated or incurred in connection with the development of a central platform for the pan-European intraday power market (XBID) are disclosed under the "Commodities" item within the Eurex segment (previously under Infrastructure Services in the Market Data + Services segment).
- The definitions of product groups were changed within the Xetra segment; among other things, due to the introduction of the new product group "partner markets". Accordingly, revenues and costs were allocated.

Furthermore, there were changes to the basis of consolidation in 2017: EEX US Holdings, Inc., the parent entity of Nodal Exchange Holdings, LLC, which Deutsche Börse acquired in the first quarter of 2017, has been fully consolidated since 3 May 2017, with revenues and costs reported in the Eurex segment.

To facilitate transparency in reporting costs and results and to improve comparability with competitors, Deutsche Börse Group will now separately disclose operating costs as well as depreciation, amortisation and impairment losses, introducing earnings before interest, tax, depreciation and amortisation (EBITDA) as an additional parameter. The previous year's figures were adjusted accordingly.

Results of operations

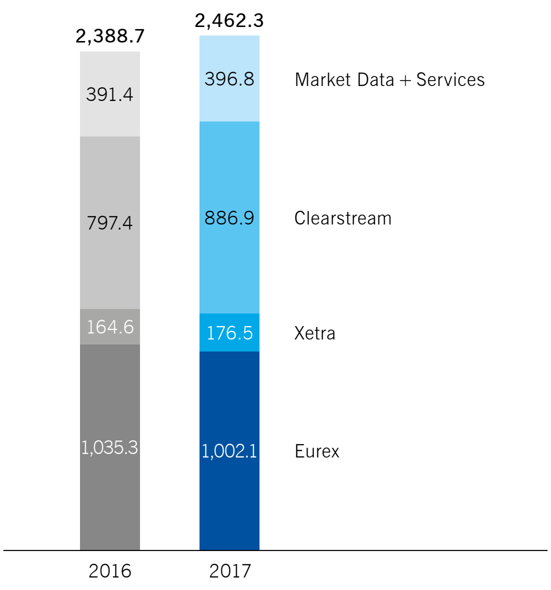
Deutsche Börse Group can look back on a satisfactory financial year. Structural drivers of the Group's business were largely intact, and substantially contributed to revenue and profit growth. The custody, funds and collateral management businesses at Clearstream benefited in particular. Structural growth was also evident in the index business at MD+S, and in new, innovative derivative products. Even though cyclical factors such as higher interest rates in the US provided support for the Group in Clearstream's banking business or in interest derivatives trading, these positive developments could not fully compensate for a decline in key revenue sources, which was driven by cyclical factors. For instance, equity derivatives trading was burdened by persistently low equity market volatility.

Deutsche Börse Group's net revenue increased by 3 per cent in the 2017 financial year, with the Clearstream and Xetra segments generating the strongest growth rate of 11 and 7 per cent. Net revenue of the Market Data + Services segment increased by 1 per cent. MD+S was thus able to more than compensate for the loss in net revenue, which was the result of the disposal of MNI and Infobolsa during the first half of 2016. The Eurex segment lagged 3 per cent behind the previous year. Net revenue is composed of sales revenue plus net interest income from banking business and of other operating income, less volume-related costs.

In the derivatives market, low volatility was reflected in lower traded index derivatives volumes, Eurex Exchange's biggest business segment. Conversely, traded volumes in interest rate contracts increased, largely due to interest rate hikes in the US and the expectation that ECB will also change its interest rate policy over the medium term. Overall, the volume of futures and options contracts traded at Eurex Exchange was down 3 per cent compared to 2016. Deutsche Börse's commodities business, operated by European Energy Exchange and its subsidiaries (EEX group), markedly increased in the areas of gas and emissions trading, expanding EEX group's market position vis-à-vis competitors, as well as over-the-counter (OTC) trading. Trading in gas products grew by 13 per cent, whilst emissions trading increased by 45 per cent. In contrast, the power market was influenced by a debate on price zones for the German and Austrian markets, which led to uncertainty amongst market participants and drove them to off-exchange trading platforms for an interim period. In this context, EEX temporarily lost market share but was able to win it back to a large extent during the course of the year. On a full-year basis, trading in EEX power products declined by 16 per cent. Regarding FX trading, operated by Deutsche Börse's subsidiary 360T, new customer business in particular provided the ground to achieve growth in a stagnating market. Aggregate net revenue in the Eurex segment was down by 3 per cent year-on-year.

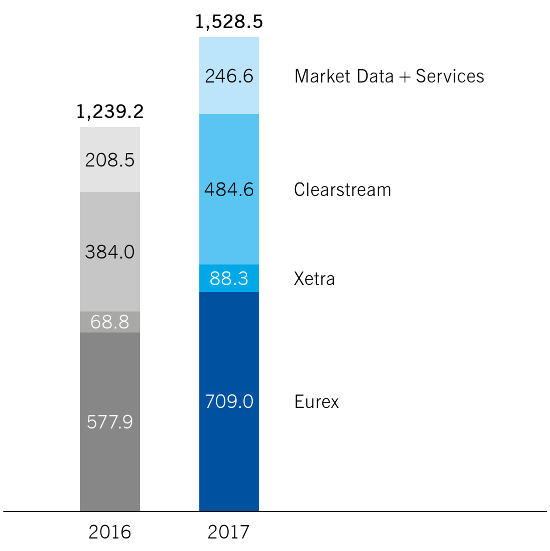
Net revenue by segment

€ million



EBITDA by segment

€ million



The cash market showed year-on-year increases across all trading platforms, in spite of very low volatility. This was attributable, on the one hand, to the extremely robust economic situation in Germany, which brought the benchmark index DAX to record levels. On the other hand, Deutsche Börse gained market share in trading DAX constituents from other trading platforms. Low interest rates make investments in equities and other variable-return securities more attractive compared to fixed income investments. Accordingly, net revenue increased by 7 per cent.

Net revenue generated by the Clearstream segment with its post-trading services increased by 11 per cent. In particular, Clearstream was able to further expand its Investment Fund Services business area, primarily through the acquisition of new clients as hedge fund business partners. Clearstream also benefited from higher interest rates in the US, and from increased trading activity – whilst the value of cash market securities held in custody rose at the same time.

The technology and market data business of Deutsche Börse Group (Market Data + Services segment) achieved growth in the index business in particular, whilst revenue in the data business was down year-on-year, mainly due to consolidation effects. Revenue in Infrastructure Services was up slightly against the previous year. Overall net revenue of the Market Data + Services segment was slightly above the previous year's figure – net revenue from the index business rose strongly, by 11 per cent.

Operating costs comprise staff costs and other operating costs. The Group reports depreciation, amortisation and impairment losses separately from operating costs. During the year under review, operating costs were down by 5 per cent from the previous year. They included non-recurring effects of €92.1 million in total (2016: €137.7 million), comprising, amongst other things, costs for the integration of acquired companies or the disintegration of sold entities (€20.7 million), efficiency programmes (€18.4 million), the planned merger with London Stock Exchange Group (€10.3 million) and criminal investigations against Clearstream Banking S.A. (and other entities) in the US (€8.3 million). Adjusted for these non-recurring effects, operating costs declined slightly, by 1 per cent compared to the previous year.

Staff costs are a key driver for operating costs. Adjusted staff costs increased by 7 per cent to €611.9 million (2016: €573.0 million) due to a series of reasons:

- Increased average number of employees during the year under review attributable to the hiring of staff at the beginning of the year, who had previously worked on a freelance basis
- Higher costs for share-based remuneration, due to the higher share price
- Salary increases for non-executive staff, between 2.5 per cent and 4 per cent (depending on location)

Other operating expenses relate primarily to the costs of enhancing and operating Deutsche Börse Group's technological infrastructure, including, for example, costs for IT services providers and electronic data processing. In addition, other operating expenses include the cost of the office infrastructure at all the Group's locations as well as travel expenses, most of which are incurred in connection with sales activities. Because of the Group's business model and the fact that the company does not normally distribute its products and services to end customers, advertising and marketing costs only account for a very small portion of the company's operating expenses. Adjusted for non-recurring effects, the other operating expenses declined by 10 per cent. This marked year-on-year decrease was due, in particular, to the hiring of staff who had previously worked on a freelance basis; the related costs have since been reported as staff costs.

Deutsche Börse Group's result from equity investments amounted to €197.8 million (2016: €36.9 million). This significant increase was due in particular to non-recurring income related to the full disposal of the stake in BATS Global Markets, Inc. during the first quarter of 2017, as well as to the disposal of shares in ICE US Holding Company L.P. during the fourth quarter of 2017. Adjusted for this non-recurring revenue, the result from equity investments stood at €8.3 million (2016: €5.7 million).

Deutsche Börse Group's earnings before interest, tax, depreciation and amortisation (EBITDA) increased by 23 per cent, largely reflecting the higher result from equity investments, combined with lower operating costs. On an adjusted basis, EBITDA rose by 6 per cent year-on-year.

Over the past years, Deutsche Börse Group has undertaken extensive infrastructure investments, in order to maintain its technological lead. Accordingly, depreciation, amortisation and impairment losses were up 22 per cent on the previous year's figure. Adjusted for non-recurring effects, depreciation and amortisation rose by 25 per cent, to €157.3 million.

Deutsche Börse Group's earnings before interest and tax (EBIT) increased by 24 per cent during the year under review, adjusted by 4 per cent.

The Group's financial result was €–79.7 million (2016: €–74.6 million). Adjusted for non-recurring effects, the financial result amounted to €–69.7 million (2016: €–74.6 million).

The effective Group tax rate 2017 was 30.5 per cent; adjusted it was 27.0 per cent, as expected.

Deutsche Börse Group's net profit for the period attributable to Deutsche Börse AG shareholders increased by 21 per cent compared with the previous year (adjusted: 6 per cent).

Non-controlling interests in net profit for the period attributable to Deutsche Börse AG shareholders for the period amounted to €21.7 million (2016: €25.5 million). The majority thereof was received by non-controlling shareholders of EEX group.

Basic earnings per share, based on the weighted average of 186.8 million shares, amounted to €4.68 (2016: €3.87 for an average of 186.8 million shares outstanding). Adjusted, basic earnings per share rose to €4.59 (2016: €4.34).

Deutsche Börse Group key performance figures

	Unadjusted			Adjusted		
	2017 €m	2016 €m	Change %	2017 €m	2016 €m	Change %
Net revenue	2,462.3	2,388.7	3	2,462.3	2,388.7	3
Operating costs	1,131.6	1,186.4	–5	1,039.5	1,048.7	–1
EBITDA	1,528.5	1,239.2	23	1,431.3	1,345.7	6
Depreciation, amortisation and impairment losses	159.9	131.0	22	157.3	125.5	25
EBIT	1,368.6	1,108.2	24	1,273.8	1,220.2	4
Net profit for the period attributable to Deutsche Börse AG shareholders	874.3	722.1	21	857.1	810.8	6
Earnings per share (basic) in €	4.68	3.87	21	4.59	4.34	6

Comparison of results of operations with the forecast for 2017
For 2017, Deutsche Börse Group originally expected an increase in net revenue between 5 and 10 per cent, anticipating further economic growth, improvements to the cyclical market environment (especially higher equity market volatility and further rising interest rates), and the variety of structural growth initiatives. Whilst the global economy performed as anticipated, equity market volatility fell short of the previous year's level on average during the year. Interest rates were only hiked in the US, whereas in Europe, they remained at the previous year's low levels. The conditions described earlier in the "Business developments" section only partly reflected the assumptions used in the forecast. Based on its highly diversified business model, Deutsche Börse Group increased its net revenue by 3 per cent, and thus did not reach completely the mean of its forecast for 2017. Breaking down net revenue increases and decreases by cyclical and structural factors, the Group was able to generate net revenue growth of around 5 per cent that was attributable to structural factors. Key drivers of this growth were Clearstream's custody, funds and collateral management businesses, the index business at MD+S, as well as new Eurex products. Whilst cyclical factors provided support to Deutsche Börse Group in Clearstream's banking business or for trading activities in interest rate derivatives, they also caused a marked year-on-year decline in traded contracts in Eurex's highest-volume business. Combined with consolidation effects, cyclical net revenue was down by 2 per cent.

Deutsche Börse Group manages operating costs (including depreciation and amortisation) – relative to the development of net revenue – based on principles designed to ensure the scalability of the Group's business model. For 2017, the Group forecast an adjusted operating costs growth range (including depreciation and amortisation) of between 0 and 5 per cent, depending on the net revenue increase. Given a 2 per cent increase in adjusted operating costs (including depreciation and amortisation), the Group achieved this objective in principle.

Deutsche Börse Group projected an increase in net revenue of between 5 and 10 per cent, and of operating costs in a corresponding range. Furthermore, the Group expected an increase in net profit for the period attributable to Deutsche Börse AG shareholders of between 10 and 15 per cent. Since the increase in net revenue slightly fell short of expectations, and the effect of lower operating costs was neutralised by markedly higher depreciation and amortisation, profit also remained slightly below the forecast. On an adjusted basis, Deutsche Börse Group achieved a 6 per cent increase in net profit for the period attributable to Deutsche Börse AG shareholders. Moreover, the Group achieved a ratio of interest-bearing gross debt to adjusted EBITDA of 1.4 at Group level, slightly below the target value of 1.5 at the

Key figures by quarter (adjusted)

	Q1		Q2		Q3		Q4	
	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m
Net revenue	623.4	610.5	623.6	600.7	576.3	558.5	639.0	619.0
Operating costs	245.1	249.3	245.4	245.1	247.4	244.8	301.6	309.5
EBITDA	380.2	362.8	379.5	356.3	333.1	316.9	338.3	309.7
Depreciation, amortisation and impairment losses	35.2	30.5	39.2	30.7	40.3	30.9	42.6	33.4
EBIT	345.0	332.3	340.3	325.6	292.8	286.0	295.7	276.3
Net profit for the period attributable to Deutsche Börse AG shareholders	232.2	221.3	232.8	218.5	198.1	190.7	194.0	180.3
Earnings per share (basic) in €	1.24	1.18	1.25	1.17	1.06	1.02	1.04	0.97

maximum. The adjusted tax rate was 27.0 per cent, as planned. In line with projections, the operating cash flow was clearly positive. Investments in property, plant and equipment, as well as intangible assets in the amount of €149.2 million were in line with the forecast. After increasing its target figures, the Group aimed to distribute dividends equivalent to the mean of the projected range of 40 to 60 per cent of (adjusted) net profit for the period attributable to Deutsche Börse AG shareholders. According to the proposal made to the Annual General Meeting, a figure of 53 per cent was reached.

Eurex segment

The performance of the Eurex derivatives segment largely depends on the trading activities of institutional investors and proprietary trading by professional market participants. The segment's revenue is therefore generated primarily from fees that are charged for trading and clearing derivatives contracts.

Revenue generated from Deutsche Börse Group's derivatives markets is primarily driven by the financial derivatives traded on Eurex Exchange: index derivatives accounted for 39 per cent of net revenue, interest rate derivatives 20 per cent and equity derivatives 4 per cent. Energy products traded on European Energy Exchange AG and its subsidiaries and/or shareholdings (EEX group), and derivatives based thereon (commodities), contributed 21 per cent; foreign-exchange trading on 360T® contributed approximately a further 7 per cent. The "other" item (9 per cent) includes, among other things, the repo business, the participation fees paid by trading and clearing participants, as well as interest income generated by the Group's clearing houses from investing their clients' cash collateral.

Regarding the derivatives market segment, trading volumes of the key business areas – financial derivatives (Eurex Exchange), commodities (EEX group) and foreign exchange (360T) – showed a mixed development during 2017. While Eurex Exchange was able to increase trading activity in interest rate derivatives, index derivatives trading was down compared to the same quarter of the previous year, due to the low volatility on equity markets. In the commodities business, traded volumes in gas products and emission rights boomed, while the power market declined in the wake of regulatory intervention. Daily FX trading volumes on the 360T trading platform continued to increase – in a stagnating overall market – in the year under review.

Net segment revenue decreased by 3 per cent, operating costs by 1 per cent, adjusted operating costs remained stable. EBITDA rose by 23 per cent, it comprises positive non-recurring effects of €189.2 million from the divestiture of the remaining shareholding in BATS Global Markets, Inc. in the first quarter of 2017 as well as from the sale of shares in ICE US Holding Company L.P. in the fourth quarter of 2017. Adjusted EBITDA was 6 per cent down year-on-year.

Segment key figures (adjusted)

	Eurex		Xetra		Clearstream		Market Data + Services	
	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m
Net revenue	1,002.1	1,035.3	176.5	164.6	886.9	797.4	396.8	391.4
Operating costs	442.7	443.6	88.4	90.1	370.7	365.1	137.7	149.9
EBITDA	562.4	595.6	93.4	76.1	516.2	432.5	259.1	241.5
Depreciation, amortisation and impairment losses	81.3	69.8	7.8	5.6	54.2	39.5	14.0	10.6
EBIT	481.1	525.8	85.6	70.5	462.0	393.0	245.1	230.9

Interest rate increases in the US, expectations that the European Central Bank (ECB) will adapt its monetary policy stance over the next two years, aborting negative interest rates and scaling back its QE measures fuelled demand for interest rate derivatives, where volumes grew by 11 per cent during the year under review. As in the previous year, Eurex equity index derivatives were the product group with the highest trading volume. Persistent low market volatility did not provide any impetus for trading, however: traded volumes of index contracts were down significantly year-on-year. This decline also affected the most actively traded products by far: contracts on the EURO STOXX 50® and DAX® indices. Eurex has managed to gradually reduce its dependence on such benchmark products by continuously diversifying its product portfolio. Products on MSCI indices as well as contracts on sector indices, dividend indices and volatility indices, for example, totalled around 18 per cent of overall trading volumes in index derivatives in the year under review. The volume of Eurex's equity derivatives contracts (single-stock options and futures) declined by 6 per cent. In total, 1,675.9 million futures and options contracts were traded on Eurex Exchange during 2017, down by 3 per cent year-on-year (2016: 1,727.5 million).

For participants in more than 30 countries around the world, EEX group represents the central marketplace for energy and commodity products. The group's product portfolio comprises contracts on energy, metals, environmental products, freight and agricultural products. EEX acquired all shares in Nodal Exchange Holdings, LLC in May 2017. This acquisition allowed EEX group to open up access

Eurex segment: key figures

	2017	2016	Change
Financial key figures	**€m**	**€m**	**%**
Net revenue	1,002.1	1,035.3	–3
Operational costs	485.6	492.5	–1
EBITDA	709.0	577.9	23
EBITDA (adjusted)	562.4	595.6	–6
Depreciation, amortisation and impairment losses	83.4	73.9	13
EBIT	625.6	504.0	24
EBIT (adjusted)	481.1	525.8	–9
Financial derivatives: trading volume on Eurex Exchange	**m contracts**	**m contracts**	**%**
Derivatives[1]	1,675.9	1,727.5	–3
Equity index derivatives[2]	818.6	909.4	–10
Interest rate derivatives	582.1	526.6	11
Equity derivatives[3]	275.0	291.4	–6
Commodities: trading volume on EEX[4]	**TWh / m t CO_2**	**TWh / m t CO_2**	**%**
Electricity	3,760.7[5]	4,455.6	–16
Gas	1,981.5	1,756.2	13
Emissions trading	1,380.5	949.9	45
Foreign-exchange business: trading volume on 360T®	**€bn**	**€bn**	**%**
Average daily volume on 360T	60.8	57.6	6

1) The total amount differs from the sum of the individual figures due to rounding differences.
2) Including index dividend and volatility derivatives; figures for 2016 adjusted accordingly
3) Including single stock dividend and ETF derivatives; figures for 2016 adjusted accordingly
4) Volumes traded on EEX – in terawatt hours (TWh) for power and gas contracts, and in million tonnes of CO_2 for emissions trading
5) Including Nodal Exchange (394.9 TWh since May 2017)

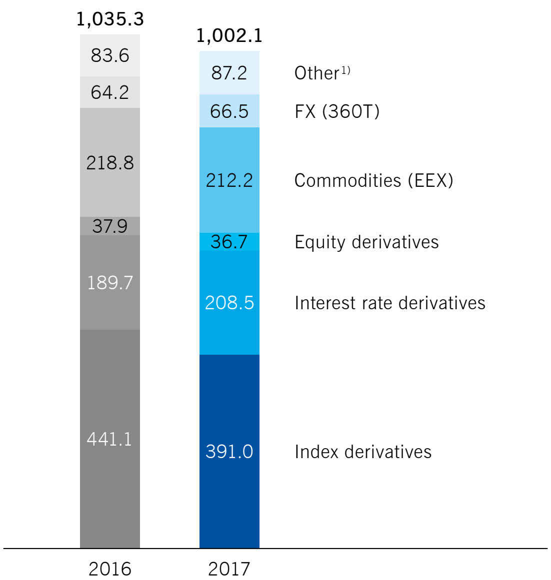
to the North American energy market, and to expand its global presence and member base. Nodal Exchange offers a wide range of electricity and natural gas contracts in order to hedge energy price risks in the US; it has been fully consolidated since 3 May 2017, with revenues and costs reported in the Commodities segment.

In the power market, the debate initiated by regulators on price zones and the impending split of the German/Austrian price zone has caused a significant decline in trading volumes on the power derivatives market. As a consequence, EEX developed new products for Germany and Austria, which allow its clients to set up hedges despite a potential price zone split. EEX was thus able to gradually regain market share during the second half of the year. The launched Phelix-DE future established itself as new benchmark for the European electricity segment along the entire curve. Furthermore, the unexpected shutdown of nuclear power plants in France in 2016 negatively impacted upon trading volumes in the first half of 2017. EEX increased its market share in the Italian power market to 74 per cent in the year under review. PEGAS, EEX Group's trading platform for natural gas products, was also able to gain market share and raise trading volumes thanks to its broad product range and high pricing quality. In the trading of emission rights, transaction volumes significantly posted double-digit growth rates on both the spot and the derivatives market.

Deutsche Börse Group has further increased daily FX trading volumes on 360T as well as its market share, whereas global FX trading has experienced static transaction volumes in the year under review. As a result of the low-interest environment in Europe and the relatively low fluctuations in the main currencies during the course of the year, the foreign exchange market lacked any major macroeconomic impulses in the first half of the year under review. Hence, volatility was low – apart from fluctuations triggered by specific occasions such as major political events. In contrast, the interest rate increases in the last quarter of 2017 had a positive impact on the trading volumes. In the US, this growth was

Net revenue in the Eurex segment

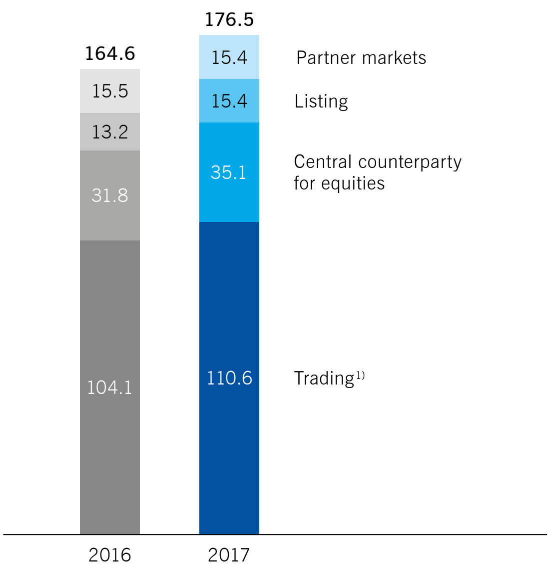
€ million



1) Incl. repo business and net interest income from banking business

Net revenue in the Xetra segment

€ million



1) The position "Trading" includes the Xetra® electronic trading system, Börse Frankfurt as well as structured products trading.

mainly driven by trading activity of new clients. 360T's efforts to consistently expand its network across all regions and market segments, especially in the growth markets of Asia/Pacific and US, is now paying off. In addition to corporates and banks, client acquisition focused on asset managers in particular – one of 360T's key strategic focus areas for the future. New trading mechanisms in the FX spot marked also contributed to 360T's success. All in all, 360T generated growth from its most important pillars: geography, customer segments and products. Customers appreciate the performance of 360T's trading platform, which became also evident in the awards recently won by 360T, including three Euromoney awards for best "Speed of Execution", "Variety of Dealers" and "Breadth of Currencies" as well as the FX Week Best Banks Award 2017 for "Best Professional E-Trading Venue".

MiFID II has brought about fundamental changes for the derivatives markets, too, creating new competitive dynamics. Eurex is well prepared and has been supporting markets in the transition. For instance, Eurex provides new trading models and off-book liquidity discovery services, thus addressing the new best execution and transparency requirements. Eurex's new market making models respond to the requirements in the fields of market making, algorithmic trading, licensing, as well as to location and equivalence requirements.

Xetra segment
The Xetra segment generates most of its net revenue from trading and clearing cash market securities. The primary sales driver, accounting for 63 per cent, was net revenue from trading. The central counterparty (CCP) for equities and exchange-traded products (ETPs) operated by Eurex Clearing AG contributed 20 per cent to the segment's net revenue; the net revenue of the CCP is determined to a significant extent by trading activities on the trading venue Xetra®. Listing revenue (which accounts for around 9 per cent) is primarily generated from existing listings and new admissions. The segment generates another 9 per cent of net revenues with partner markets, and through cooperations with other exchanges.

Net revenue in the Xetra segment increased by 7 per cent during the year under review. Operating costs went down by 4 per cent year-on-year, adjusted by 2 per cent. As a result of higher net revenues and lower costs, EBITDA increased by 28 per cent, adjusted by 23 per cent.

Trading activities on Deutsche Börse Group's cash markets – Xetra, the Frankfurt Stock Exchange and Tradegate – increased across the board during 2017. In the 2017 financial year, securities with a total volume of €1.47 trillion were traded (2016: €1.38 trillion), marking the second highest volume since 2012. The securities include shares and bonds from German and international issuers, exchange-traded funds (ETFs) and exchange-traded commodities (ETCs) as well as units in actively managed mutual funds and structured products. Institutional, international and private investors with a focus on highly liquid equities and ETFs primarily trade on the trading venue Xetra. As a result, Xetra generates by far the highest trading volumes within the segment. In addition to Xetra, Deutsche Börse operates trading at the Frankfurt Stock Exchange and holds a 75 per cent stake in Tradegate Exchange GmbH. Moreover, it holds a stake of just under 20 per cent in in Tradegate AG Wertpapierhandelsbank, which holds the remaining shares in Tradegate Exchange.

Reasons for the increase in traded volumes, in spite of persistently low equity market volatility, are manifold: the political and economic situation in the eurozone has stabilised; especially the German economy is showing outstanding records and full order books – at the same time, the benchmark indices DAX and STOXX are trading at record levels. Investor confidence in Europe as a stable economic area with good growth prospects has recovered again, whilst disenchantment was widespread in the US, following the first year of President Trump's term of office. Moreover, during the current low interest rate environment, equities are amongst the few asset classes providing investors with opportunities for higher returns – which are gaining relevance in public discussion as a building block for private retirement provisions over the long term.

The trading venue Xetra also gained ground compared to so-called multilateral trading facilities (MTFs); for instance, its share – as a reference market for trading in DAX shares – increased again to 65 per cent (2016: 57 per cent). The attractiveness of exchange trading was also enhanced thanks to T7®, the new trading technology to which Xetra trading migrated in July 2017, and which offers numerous advantages such as further reductions in latency – the time for processing an order in the system.

It was not least due to this technological renewal of its systems for the Xetra trading venue that Deutsche Börse managed to attract further renowned issuers – Fidelity, Vanguard and Franklin Templeton – for its ETF segment. Deutsche Börse offers investors the largest selection of ETFs of all European exchanges: as at 31 December 2017, 1,205 ETFs were listed (2016: 1,133 ETFs). Assets under management held by ETF issuers totalled €527.1 billion at the end of the year, a year-on-year increase of 28 per cent (31 December 2016: €411.6 billion). Trading volumes, however, declined by 17 per cent to €131.7 billion (2016: €158.0 billion). Deutsche Börse thus remains Europe's leading marketplace for ETFs. The most heavily traded ETFs are based on the European STOXX equity indices and on the DAX index.

Xetra-Gold®, a bearer bond issued by Deutsche Börse Commodities, benefited from the stable economic environment. The increase was due in particular to strong demand from institutional investors. At 174.2 tonnes (2016: 117.6 tonnes), gold holdings reached a record level at the year-end: assets under management in Xetra-Gold stood at a record level of approximately €6.1 billion as at 31 December 2017 (2016: €4.2 billion). Xetra-Gold has generated the most turnover among all ETCs traded on Xetra: aggregate order book turnover was around €2.9 billion in 2017.

The purpose of an exchange is to provide financing to, and foster growth for the real economy – this is at the very heart of an exchange's business. Against this background, 2017 was a satisfactory year for initial public offerings (IPOs), with the total number of IPOs at the Frankfurt Stock Exchange amounting to 13, compared to 19 in the previous year. The issue volume amounted to €2.7 billion (2016: €5.2 billion). The biggest IPO of 2017 was Delivery Hero AG, an online food ordering service, with a total issue size of €1.0 billion.

Xetra segment: key figures

	2017	2016	Change
Financial key figures	**€m**	**€m**	**%**
Net revenue	176.5	164.6	7
Operating costs	93.5	97.4	–4
EBITDA	88.3	68.8	28
EBITDA (adjusted)	93.4	76.1	23
Depreciation, amortisation and impairment losses	7.8	5.6	39
EBIT	80.5	63.2	27
EBIT (adjusted)	85.6	70.5	21
Cash market: trading volume (single-counted)	**€bn**	**€bn**	**%**
Xetra® trading venue	1,329.7	1,262.1	5
Börse Frankfurt	46.7	43.9	6
Tradegate	91.2	71.0	28

Yet companies continue to seek refinancing options outside a listing, not least due to prevailing low interest rates and the vast amount of cash in the markets. This is where the Deutsche Börse Venture Network comes into play. It matches start-ups in their growth phase looking for follow-up financing of €1 million or more, with international investors in a targeted manner, facilitating the raising of capital. The exclusive Venture Network online platform allows investors and entrepreneurs to establish initial contacts, exchanging information within a protected area. Deutsche Börse Venture Network is continuously growing and is becoming increasingly international: at the end of the reporting year, 175 growth companies and 300 investors were active on the platform. The enterprises have raised around €500 million in growth financing, and an additional €1.3 billion were raised via three IPOs directly from the Network.

It remains Deutsche Börse's goal to establish an ecosystem for growth, designed to facilitate a better flow of investments into the real economy, and to enhance financing options for enterprises of any size. Deutsche Börse has built "Scale", a new segment for established small and medium-sized companies primarily from Germany. The segment was launched on 1 March 2017: by the end of the year, 48 issuers of shares and 11 issuers of bonds were listed. Traded volumes of listed enterprises which moved to Scale have since more than doubled. In March, Deutsche Börse launched the Scale All-Share index, which was complemented by a selection index at the beginning of 2018.

The revised Markets in Financial Instruments Directive (MiFID II) came into force on 3 January 2018. New rules brought about by MiFID II include a shift of trading in financial instruments from off-exchange trading venues to regulated exchanges; also, it restricts the volume of trading in so-called "dark pools" to 8 per cent of the market volume in each share. Dark pools are off-exchange markets where investors can buy or sell large amounts of shares without disclosing their order size (or their limit) prior to trading. Deutsche Börse has adapted to these foreseeable changes in the order flow at an early stage; it developed trading and reporting systems which help clients to comply with their obligations under MiFID II.

Clearstream segment

The segment provides the post-trade infrastructure for the Eurobond market, and offers custody services for securities from more than 50 markets worldwide. In doing so, Clearstream ensures that once a trade has been executed, cash and securities change hands. Clearstream is responsible for securities issuance, settlement, management and custody. As an international central securities depository (ICSD), Clearstream provides these settlement and custody services for securities held in Luxembourg. As a central securities depository (CSD), Clearstream services the market for German securities. The ICSD and CSD business accounted for 63 per cent of net revenue in the year under review. Investment Funds services accounted for 16 per cent of net revenue. Using Clearstream's Vestima® fund processing platform, clients can manage settlements and custody for their entire fund portfolio. Net revenue from the Global Securities Financing (GSF) franchise – which encompasses triparty repo, GC Pooling®, securities lending and collateral management – contributed 9 per cent of the segment's net revenue. Net interest income from Clearstream's banking operations accounted for 12 per cent of net revenue.

During the year under review, Clearstream saw considerable growth in its investment fund business and its net interest income from banking business. The segment increased its net revenue by 11 per cent. Operating costs declined by 3 per cent, adjusted they rose by 2 per cent. EBITDA thus increased by 26 per cent, adjusted by 19 per cent.

Within the ICSD and CSD business, custody services provide the greater contribution. Net revenue in this business is mainly driven by the volume and value of securities under custody, which determines the deposit fees. The settlement business depends heavily on the number of settlement transactions processed by Clearstream, both via stock exchanges and over the counter (OTC). The domestic CSD business reflects the business development on the German cash markets, whereby custody volumes are largely determined by the market values of equities, funds and structured products traded. At the beginning of February 2017, Clearstream migrated the domestic settlement business of its CSDs to the TARGET2-Securities platform (T2S) provided by the ECB. This step represented the migration of the largest T2S participant, boosting the settlement volume on the ECB platform by some 40 per cent. Following migration to T2S, the segment no longer generates net revenue with domestic settlement transactions. Clearstream is the only CSD in Europe to not charge an extra margin on the ECB settlement fees, thus providing lowest-cost settlement services to its customers. Nevertheless, Clearstream was able to compensate for the resulting lack of settlement revenues by an increase in the value of

Clearstream segment: key figures

	2017	2016	Change
Financial key figures	€m	€m	%
Net revenue	886.9	797.4	11
Operating costs	402.3	413.6	–3
EBITDA	484.6	384.0	26
EBITDA (adjusted)	516.2	432.5	19
Depreciation, amortisation and impairment losses	54.5	40.6	34
EBIT	430.1	343.4	25
EBIT (adjusted)	462.0	393.0	18
Business key figures			
International business (ICSD)	€bn	€bn	%
Value of securities under custody (average value during the year)	6,699.4	6,753.6	–1
Domestic business (CSD)	€bn	€bn	%
Value of securities under custody (average value during the year)	4,546.5	4,419.3	3
Investment Funds Services	€bn	€bn	%
Value of securities under custody (average value during the year)	2,218.7	1,902.0	17
Global Securities Financing	€bn	€bn	%
Outstanding volume (average value during the year)	459.8	515.9	–11
Net interest income from banking business	€bn	€bn	%
Average daily cash balances[1]	13.6	13.1	4

1) Includes some €1.5 billion currently or formerly blocked by EU and US sanctions (2016:€1.5 billion)

assets under custody in the domestic CSD businesses, and by adapting the pricing model to the new T2S environment. In Clearstream's ICSD business the value of international assets held in custody (which predominantly comprise bonds traded on the OTC market) declined slightly year-on-year due to reduced issuance while the number of transactions increased by 25 per cent.

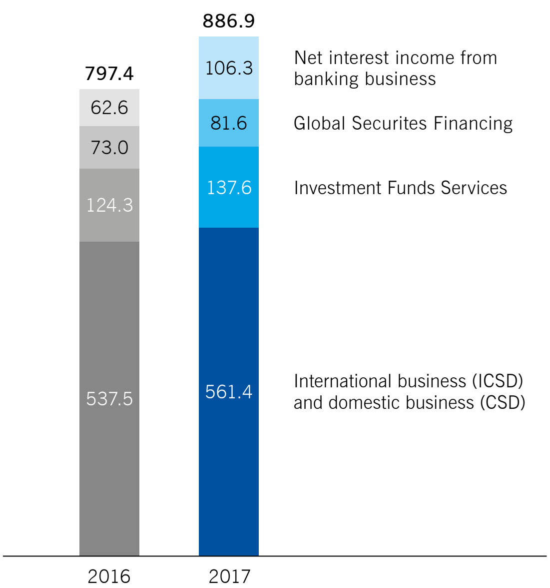
The Investment Funds Services business achieved significant growth by gaining new issuers for its services and increasing assets held in custody, partly due to capital inflows from the US and partly reflecting the positive overall performance on the international fund markets throughout the year. Since some of these business gains came with a fee holiday in the beginning, the segment saw the full impact of these gains in the course of the year under review. At the same time, Clearstream continues to attract new clients as partners in the hedge fund business. In June 2017, Vontobel selected Clearstream as strategic partner to streamline and consolidate its third-party hedge fund processing activities. Clearstream's investment funds processing infrastructure Vestima enables processing of all types of funds from mutual funds to hedge funds on a single platform. Centralised solutions, such as Clearstream's Vestima platform, support market participants in complying with the regulatory requirements and new rules on risk mitigation.

In the GSF business, average outstanding volumes decreased by 11 per cent. After the ECB began to provide plenty of liquidity on the market as part of its QE programme, volumes declined considerably, especially in GC Pooling. At the same time, order flows shifted towards smaller, higher-priced lending volumes, raising GSF net revenue overall.

Average cash customer deposits were up 4 per cent year-on-year. Besides the effect of this increase in volume, interest rate levels in the US – with three interest hikes in 2017, the latest by 0.25 per cent in December – gave a boost to net interest income, given that around 53 per cent of cash deposits is denominated in US dollar. Consequently, net interest income generated with daily cash balances increased considerably.

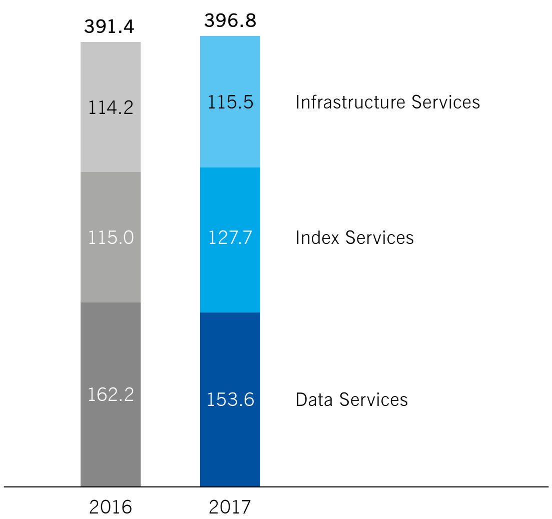
Net revenue in the Clearstream segment

€ million



Net revenue in the Market Data + Services segment

€ million



Market Data + Services segment
The core business of the Market Data + Services segment is the development, production and marketing of capital market information, technology and infrastructure services to clients worldwide. These services include real-time trading and market signals, as well as indices such as EURO STOXX 50 and DAX. Capital market participants subscribe to this information, or licence it for their own use, processing, or dissemination. The segment generates much of its net revenue on the basis of long-term client relationships; it is relatively independent of trading volumes and capital markets volatility. The assets and liabilities related to its subsidiary Market News International Inc. (MNI) were sold by way of an asset deal, effective 8 July 2016. Deutsche Börse AG already sold its 50 per cent stake in Infobolsa S.A. in February 2016. The net revenue of the segment comprises the business areas Data Services (39 per cent), Index Services (32 per cent), and Infrastructure Services (29 per cent).

Market Data + Services slightly increased net revenue during the year under review. In the previous year, operating profit also included net revenue of MNI and Infobolsa, which were deconsolidated in 2016. Operating costs declined by 18 per cent, adjusted by 8 per cent, due to strict cost management and deconsolidation effects, amongst other factors. Accordingly, the segment's EBITDA rose considerably by 18 per cent, adjusted by 7 per cent.

The Data Services business area mainly involves the marketing of licences for real-time trading and market signals, and for the provision of historical data to banks, trading firms and fund management companies. The most important products in this respect are order book data from the cash and derivatives markets, as well as reference data of Deutsche Börse and its partner exchanges. The segment's core business took a fundamentally positive development, driven by the introduction of new products and licensing models. However, the segment was not able to entirely compensate for the disposal of MNI. Moreover, the release of provisions increased the comparative figure for that year. Adjusted for these effects, Data Services revenues were slightly higher than in the previous year.

In its Index Services business area, which it conducts through its STOXX Ltd. subsidiary, Deutsche Börse gene-rates revenue from calculating and marketing indices and benchmarks, which banks and fund management companies use as underlying instruments or benchmark references for financial instruments, investment vehicles and securities portfolios. The extensive range of indices offered by STOXX Ltd. provides issuers with a wealth of opportunities for creating financial instruments for most diverse investment strategies. As one of Deutsche Börse Group's growth drivers, the index business

Market Data + Services segment: key figures

	2017	2016	Change
Financial key figures	€m	€m	%
Net revenue	396.8	391.4	1
Operational costs	150.2	182.9	–18
EBITDA	246.6	208.5	18
EBITDA (adjusted)	259.1	241.5	7
Depreciation, amortisation and impairment losses	14.2	10.9	30
EBIT	232.4	197.6	18
EBIT (adjusted)	245.1	230.9	6
Performance indicators	€bn	€bn	%
Assets under management in ETFs on STOXX® indices (annual average)	77.0	61.1	26
Assets under management in ETFs on DAX® indices (annual average)	28.7	26.0	10

maintained its growth momentum during the year under review – due, in particular, to higher volumes of ETFs based on STOXX indices and thus higher licence fees. Revenues from issuance of structured products based on STOXX indices were also up year-on-year. In this way, the index business more than offset the decline in revenues due to lower trading volumes in equity index derivatives on STOXX and Deutsche Börse indices traded at Eurex Exchange. At the same time, STOXX continued to persevere with its internationalisation strategy, expanding its presence in Hong Kong in order to respond to expectations of clients in the Asia/Pacific region in the best possible way.

The Infrastructure Services business area generates revenue primarily from connectivity services for trading and clearing participants. Revenue generated from these services rose during the year under review, thanks to the segment's success in convincing a constantly rising number of clients to opt for data connections with higher bandwidth, or for new connectivity models. In addition, Infrastructure Services provides development and operational services for technology clients outside the Group – such as partner exchanges, banks acting as Designated Sponsors, or the German regional stock exchanges. Deutsche Börse operates technology on behalf of partner exchanges in Dublin, Vienna, Sofia, Ljubljana, Prague, Budapest, on Malta and the Cayman Islands, as well as domestic exchanges operated by brokers and banks in Frankfurt/Main, Berlin, Dusseldorf, Hamburg/Hanover and Munich. Dublin-based Irish Stock Exchange also migrated to the new T7 trading technology – proof of the reliability and performance of Deutsche Börse Group's IT services.

Development of profitability

Deutsche Börse Group's return on shareholders' equity expresses the ratio of net income after taxes to average equity available to the Group during the course of 2017. At 18.8 per cent, return on shareholders' equity exceeded the previous year's ratio in the 2017 financial year (2016: 17.3 per cent). Adjusted for the non-recurring effects described in the "Results of operations" section, the return on equity amounted to 18.4 per cent (2016: 19.4 per cent).

Financial position

Cash flow

Cash and cash equivalents at Deutsche Börse Group comprise cash and bank balances to the extent that these do not result from reinvesting current liabilities from cash deposits by market participants as well as receivables and liabilities from banking business with an original maturity of three months or less. Cash and cash equivalents as at 31 December 2017 amounted to €580.2 million (31 December 2016: €–146.9 million). Cash and cash equivalents were negative on the reporting date for the previous year – especially due to financial assets with a maturity of more than three months. The latter do not qualify as cash and cash equivalents and the cash flows associated with them have been allocated to investing activities. Cash and bank balances amounted to €1,297.6 million as at 31 December 2017 (31 December 2016: €1,458.1 million).

Deutsche Börse Group's cash flow from operating activities is relevant only to a limited extent as it includes in particular CCP positions, which are subject to significant fluctuations on the reporting date. Due to this, the following refers in particular to the cash flow from operating activities excluding CCP positions. In the 2017 financial year, Deutsche Börse Group generated €1,107.2 million (2016: €856.6 million) in cash flow from operating activities, excluding changes in CCP positions on the reporting date.

Moreover, Deutsche Börse Group paid taxes in the amount of €308.8 million during the 2017 financial year (2016: €277.8 million). The increase in tax payments was largely due to €32.5 million in tax back payments for previous years, resulting from an out-of-court settlement reached with the U.S. Office of Foreign Assets Control (OFAC), the US export control authority, in 2013.

Other non-cash income amounted to €96.4 million (2016: €52.3 million); this was, in particular, due to income from the sale of shares in BATS Global Markets, Inc. and ICE US Holding Company L.P. The transactions generated cash of €274.7 million in total, reported under cash flows from investing activities.

Taking the change in CCP positions into account, cash flow from operating activities amounted to €1,056.2 million (2016: €1,621.4 million).

Cash inflows from investing activities amounted to €181.9 million in the 2017 financial year (2016: €578.5 million).

The acquisition of Nodal Exchange Holdings, LLC by EEX for a purchase price of US$206.9 million (equivalent to €189.6 million) involved a cash outflow of €157.5 million. Cash inflows from investing activities in the 2016 financial year were attributable, in particular, to the sale of shares in ISE group, which generated cash of €916.3 million (adjusted for cash and cash equivalents sold of €13.0 million that were originally included in the cash amount). Furthermore, the sale of shares in Infobolsa S.A. generated cash of €1.1 million (adjusted for cash and cash equivalents sold of €7.1 million).

In addition, cash inflows of €859.1 million (2016: €149.9 million) resulted from maturities of securities with an original maturity of more than one year as well as from the disposal of shares.

Cash outflows of €312.4 million (2016: €178.9 million) were due to the acquisition of long-term financial instruments.

At €149.2 million, investments in intangible assets and property, plant and equipment were below the prior-year level (2016: €164.9 million); most were made in the Clearstream and Eurex segments. Clearstream's investments related primarily to the expansion of its settlement and collateral management systems, while Eurex invested in its trading and clearing systems.

Cash outflows from financing activities stood at €501.0 million in the 2017 financial year (2016: cash inflows of €848.8 million). Cash outflows of €28.2 million were attributable to the purchase of treasury shares, within the scope of the share repurchase programme which commenced in November 2017.

Consolidated cash flow statement (condensed)

	2017 €m	2016 €m
Cash flows from operating activities (excluding CCP positions)	1,107.2	856.6
Cash flows from operating activities	1,056.2	1,621.4
Cash flows from investing activities	181.9	578.5
Cash flows from financing activities	–501.0	–848.8
Cash and cash equivalents as at 31 December	580.2	–146.9
Cash and other bank balances as at 31 December	1,297.6	1,458.1

Additional cash outflows totalling €39.3 million were related to dividend distributions to non-controlling shareholders of subsidiaries, and to increases of shareholdings in already fully consolidated subsidiaries. During the 2016 financial year. Deutsche Börse AG repaid private placements prior to maturity; this led to cash outflows of €321.6 million.

No commercial paper was outstanding as at 31 December 2017, unchanged from the year before.

In addition, Deutsche Börse AG distributed €439.0 million in dividends for the 2016 financial year (dividends for the 2015 financial year: €420.1 million).

As in previous years, the Group assumes it will have a strong liquidity base in financial year 2017 due to its positive cash flows from operating activities, adequate credit lines and flexible management and planning systems.

Operating leases

Deutsche Börse Group mainly uses operating leases for the office building in Eschborn that the Group moved into in the second half of 2010 and for the buildings used by Clearstream International S.A. in Luxembourg (see note 38 to the consolidated financial statements for details).

Liquidity management

Deutsche Börse Group primarily meets its operating liquidity requirements from internal financing, i.e. by retaining generated funds. The aim is to provide enough liquidity to cover operating costs for one quarter (currently between €150 million and €250 million). An intra-Group cash pool is used for pooling surplus cash as far as regulatory and legal provisions allow. All of the Group's cash investments are short-term in order to ensure rapid availability and are largely collateralised using liquid bonds from prime-rated issuers. Moreover, Deutsche Börse AG has access to external sources of financing, such as bilateral and syndicated credit lines, and a commercial paper programme (see note 36 to the consolidated financial statements for details on financial risk management). In recent years, Deutsche Börse AG has leveraged its access to the capital markets to issue corporate bonds in order to meet its structural financing needs.

Deutsche Börse Group's interest coverage ratio

Interest expense from financing activities	Issue volume	2017 €m	2016 €m
Fixed-rate bearer bond (term until March 2018)	€600 m	7.6	7.4
Fixed-rate bearer bond (term until October 2022)	€600 m	14.8	14.8
Fixed-rate bearer bond (term until October 2025)	€500 m	8.7	8.7
Fixed-rate bearer bond (hybrid bond)	€600 m	16.5	17.2
Private placements[1]	US$290 m	–	9.3
Commercial paper	€35 m – 2016[2] €0 m – 2017[2]	–	–
Other interest expense		4.4	4.5
Total interest expense (incl. 50 per cent of the hybrid coupon)		**43.7**	**53.3**
EBITDA (adjusted)		1,431.1	1,345.7
Interest coverage[3]		**32.7**	**25.3**

1) Bought back with the proceeds from the sale of ISE mid-2016
2) Annual average
3) EBITDA / interest expense from financing activities (includes 50 per cent of the interest on the hybrid bond)

Capital management

The company's clients generally expect it to maintain conservative interest coverage and leverage ratios, and to achieve good credit ratings. According to the definition of the rating agency, only 50 per cent of the Group's hybrid bond is deducted to determine gross debt as well as interest expenses. Therefore, the Group targets a minimum consolidated interest coverage ratio (defined as the ratio of EBITDA to interest expenses from financing activities) of 16. During the reporting period, Deutsche Börse Group achieved this target, with an interest coverage ratio of 32.7 (2016: 25.3). This figure is based on relevant interest expenses of €43.7 million and adjusted EBITDA of €1,431.1 million.

Data included for the purpose of calculating interest coverage comprises interest expenses incurred for financing Deutsche Börse Group, less interest expenses incurred by subsidiaries which are also financial institutions, including Clearstream Banking S.A., Clearstream Banking AG and Eurex Clearing AG. Interest expenses incurred which are not related to Group financing are not included in the calculation of interest coverage.

Moreover, Deutsche Börse targets a maximum ratio of interest-bearing gross debt to EBITDA of 1.5 at Group level. During the reporting period, the Group achieved the target ratio of gross debt to EBITDA of 1.4. This figure is based on gross debt of €1,988.4 million, and adjusted EBITDA of €1,431.1 million. Gross debt consisted of interest-bearing liabilities of €1,988.4 million.

Furthermore, the company endeavours to maintain the strong AA credit rating of Clearstream Banking S.A., in order to ensure the long-term success of its Clearstream securities settlement and custody segment. The activities of the Eurex Clearing AG subsidiary also require Deutsche Börse AG to have and maintain a strong credit quality.

Also, Deutsche Börse AG has publicly stated its intention to maintain certain additional financial indicators for Clearstream entities which the company believes to be consistent with an AA rating. Specifically, this involves a commitment to maintain minimum tangible equity (equity less intangible assets) of €700 million for Clearstream International S.A., and of €400 million for Clearstream Banking S.A. During the reporting period, Clearstream International S.A. fulfilled this commitment, reporting tangible equity of €1,206.6 million; the figure for Clearstream Banking S.A. was €1,213.6 million, also in line with this target. To the extent that the Clearstream subgroup has financial liabilities to non-banks, the subgroup is committed to a minimum interest coverage ratio of 25. During the reporting period as in the previous year, Clearstream had no financial liabilities to non-banks; for this reason, no interest coverage ratio is being reported.

Debt instruments issued by Deutsche Börse AG (outstanding as at 31 December 2017)

Type	Issue volume	ISIN	Term	Maturity	Coupon p.a.	Listing
Fixed-rate bearer bond	€600 m	DE000A1R1BC6	5 years	March 2018	1.125%	Luxembourg/ Frankfurt
Fixed-rate bearer bond	€600 m	DE000A1RE1W1	10 years	October 2022	2.375%	Luxembourg/ Frankfurt
Fixed-rate bearer bond	€500 m	DE000A1684V3	10 years	October 2025	1.625%	Luxembourg/ Frankfurt
Fixed-rate bearer bond (hybrid bond)	€600 m	DE000A161W62	Call date 5.5 years/ final maturity in 25.5 years	February 2021/ February 2041	2.75% (until call date)	Luxembourg/ Frankfurt

Dividends and share buy-backs

Deutsche Börse Group generally aims to distribute dividends equivalent to between 40 and 60 per cent of adjusted net profit for the period attributable to Deutsche Börse AG shareholders. In recent years (where the Group's net profit was lower), the dividend payout ratio was kept at the upper end of this range, in order to distribute stable dividends to shareholders. Given the expected Group's profit growth, the company aims for a dividend payout ratio in the middle of the range between 40 and 60 per cent going forward.

For financial year 2017, Deutsche Börse AG is proposing that the Annual General Meeting resolve to pay a dividend of €2.45 per no-par value share (2016: €2.35). This dividend corresponds to a distribution ratio of 53 per cent of net profit for the period attributable to Deutsche Börse AG shareholders, adjusted for non-recurring effects described in the "Results of operations" section (2016: 54 per cent, also adjusted for non-recurring effects). Given 186.3 million no-par value shares bearing dividend rights, this would result in a total dividend of €456.4 million (2016: €439.0 million). The aggregate number of shares bearing dividend rights is produced by deducting 6.4 million treasury shares from the ordinary share capital of 193.0 million shares.

Furthermore, Deutsche Börse AG announced in April 2017 that it would launch a share repurchase programme with a volume of around €200 million during the second half of 2017. The programme has been operational since 27 November 2017, and is scheduled for completion by end of March 2018 at the latest. On top of this, Deutsche Börse AG announced on 5 December 2017 that it will launch an additional share repurchase programme with a volume of around €200 million as well during the course of 2018. The company's objective, in the context of these repurchase programmes, is to achieve a balanced use of freely available funds of some €800 million. The company generally expects to use available funds primarily for organic growth, but also, secondarily, for complementary external development. Further details on the purchase of treasury shares within the scope of the share repurchase programme, pursuant to section 160 (1) no. 2 of the AktG are available in the notes to Deutsche Börse AG's annual financial statements, section "Equity".

Credit ratings

Deutsche Börse AG regularly has its credit quality reviewed by the Standard & Poor's (S&P) rating agency, while Clearstream Banking S.A. is rated by Fitch and S&P.

On 27 September 2017, Fitch Ratings affirmed the AA credit rating of Clearstream Banking S.A. with a stable outlook. The rating reflects Clearstream Banking's leading position in the post-trade business and its very low risk appetite, combined with strict risk management systems, diligent liquidity management, as well as its impeccable capitalisation.

On 24 November 2017, S&P affirmed the AA credit rating of Deutsche Börse AG, raising the outlook from "negative" to "stable".

Relevant key performance indicators

	2017 €m	2016 €m
Tangible equity of Clearstream International S.A. (as at the reporting date)	1,206.6	1,092.1
Tangible equity of Clearstream Banking S.A. (as at the reporting date)	1,213.6	1,179.4

Credit ratings

	Long-term	Short-term
Deutsche Börse AG		
Standard & Poor's	AA	A–1+
Clearstream Banking S.A.		
Fitch	AA	F1+
Standard & Poor's	AA	A–1+

On the same date, S&P affirmed the AA credit rating of Clearstream Banking S.A. with a stable outlook. The rating reflects the strong risk management, minimum debt levels, as well as Clearstream's strong position on the international capital markets, especially through its international custody and transaction business.

As at 31 December 2017, Deutsche Börse AG was one of only two DAX-listed companies that had been awarded an AA rating by S&P. The ratings histories of Deutsche Börse AG and Clearstream are given in the five-year overview.

Net assets

Material changes to net assets are described below; the full consolidated balance sheet is shown in the consolidated financial statements.

Deutsche Börse Group's non-current assets include primarily intangible assets and financial assets as well as financial instruments held by central counterparties. The last category represented the largest item. This asset item is matched by a liability item in the same amount. Receivables and securities from the banking business, which Deutsche Börse Group holds as financial assets, remained all about the same compared with the previous year, in line with goodwill and other intangible assets.

Consolidated balance sheet (extracts)

	31 Dec 2017 €m	31 Dec 2016 €m
ASSETS		
Non-current assets	10,883.7	11,939.7
thereof intangible assets	4,091.0	3,972.0
thereof goodwill	2,770.9	2,721.1
thereof financial assets	1,732.3	1,920.9
thereof receivables and securities from banking business	1,563.0	1,604.8
thereof financial instruments held by central counterparties	4,837.2	5,856.6
Current assets	124,257.7	151,904.4
thereof financial instruments held by central counterparties	79,510.7	107,909.6
thereof restricted bank balances	29,392.0	27,777.6
thereof other cash and bank balances	1,297.6	1,458.1
EQUITY AND LIABILITIES		
Equity	4,959.4	4,623.2
Liabilities	130,182.0	159,219.9
thereof non-current liabilities	7,023.8	8,669.8
thereof financial instruments held by central counterparties	4,837.2	5,856.6
thereof interest-bearing liabilities	1,688.4	2,284.7
thereof current liabilities	123,158.2	150,550.1
thereof financial instruments held by central counterparties	78,798.6	107,479.4
thereof cash deposits by market participants	29,215.3	27,777.6

Current assets decreased, driven in particular by financial instruments held by central counterparties and the decline of receivables and securities from banking business, while restricted bank balances increased. This was mainly driven by two factors: higher client cash deposits at Clearstream, and higher cash collateral provided by the clearing members of Eurex Clearing AG during the year under review.

The financing of assets was provided through equity and debt capital. Equity increased year-on-year, driven particularly by the accounting profit realised with the full disposal of the remaining stake in BATS Global Markets and ICE US Holding Company.

Non-current liabilities declined, driven mainly by two factors: firstly, financial instruments held by central counterparties decreased. This liability item is matched by an asset item in the same amount. Secondly, interest-bearing liabilities declined due to a reclassification of a bond in the amount of €599.8 million maturing in 2018.

The main changes within the non-current liabilities item occurred in the following areas:

- A decline in financial instruments held by central counterparties
- An increase of liabilities from cash deposits by market participants as a result of higher cash collateral provided by the clearing members of Eurex Clearing AG; the main reason for this increase was that clearing participants provided a larger proportion of cash compared to securities as collateral for Eurex Clearing AG during the reporting period

Overall, Deutsche Börse Group invested €149.2 million in the continued business in intangible assets and property, plant and equipment (capital expenditure or capex) in the reporting period (2016: €152.6 million). The Group's largest investments were made in the Clearstream and Eurex segments.

Working capital

Working capital comprises current assets less current liabilities, excluding technical closing-date items and commercial paper. Current assets, excluding technical closing-date items, amounted to €1,020.9 million (2016: €1,293.6 million). As Deutsche Börse Group collects fees for most of its services on a monthly basis, the trade receivables of €329.4 million included in current assets as at 31 December 2017 (31 December 2016: €669.8 million) were relatively low compared with net revenue. The current liabilities of the Group, excluding technical closing-date items, amounted to €1,280.1 million (2016: €1,452.8 million, excluding technical closing-date items). The Group therefore had slightly negative working capital of €259.2 million at the end of the year (2016: €159.4 million).

Technical closing-date items

The "receivables and securities from banking business" and "liabilities from banking business" balance sheet items on the balance sheet are technical closing date items that were strongly correlated in the reporting period and that fluctuated between approximately €13 billion and €17 billion (2016: between €14 billion and €20 billion). These amounts mainly represent customer balances in Clearstream's international settlement business.

The "financial instruments of the central counterparties" item relates to the function performed by Eurex Clearing AG and European Commodity Clearing AG: since the latter act as the central counter parties for Deutsche Börse Group's various markets, their financial instruments are carried in the balance sheet at their fair value. The financial instruments of the central counterparties are described in detail in the risk report and in notes 3, 15 and 36 to the consolidated financial statements.

Market participants linked to the Group's clearing houses partly provide collateral in the form of cash deposits, which are subject to daily adjustments. The cash deposits are generally invested on a secured basis overnight by the central counterparties and reported in the balance sheet under "restricted bank balances". The total value of cash deposits at the reporting dates relevant for the reporting period (31 March, 30 June, 30 September and 31 December) varied between €27 billion and €35 billion (2016: between €24 billion and €29 billion).

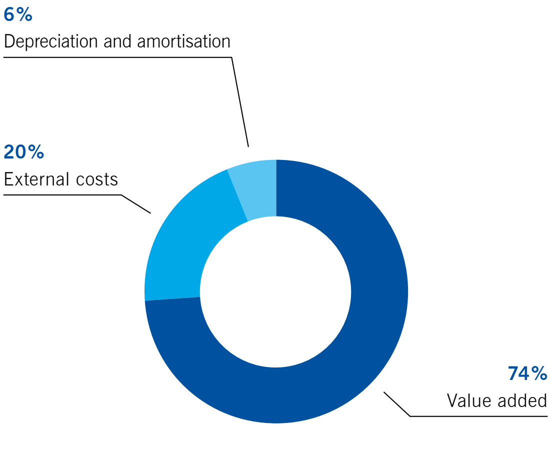
Value added: breakdown of company performance
Value added is calculated by subtracting depreciation and amortisation as well as external costs from the company performance. In 2017, the value added by Deutsche Börse Group amounted to €1,879.6 million (2016: €1,627.1 million). The breakdown shows that large portions of the generated value added flow back into the economy: 24 per cent (€456.4 million) benefit shareholders in the form of dividend payments, while 34 per cent (€638.3 million) was attributable to staff costs in the form of salaries and other remuneration components. Taxes accounted for 17 per cent (€311.0 million), while 2 per cent (€47.6 million) was attributable to external creditors. The 22 per cent value added that remained in the company (€410.2 million) is available for investments in growth initiatives, among other things (see "Origination of value added" and "Distribution of value added" charts).

Overall assessment of the economic position by the Executive Board

The economic environment in 2017 continued to show signs – in some cases clearly – of a continued recovery, both in Europe and on a global scale. Moreover, interest rates rose, at least in the US. Yet at the same time, volatility on the equity markets remained very low, reaching several historical lows during the second half of 2017. Against this background, equity index derivatives volumes declined significantly, whilst equities trading showed slight increases. The energy markets had to deal with temporary uncertainty, which negatively impacted volumes in power products for the German and Austrian markets – key volume drivers. In summary, these opposing factors led Deutsche Börse Group's financial performance to develop positively during the 2017 financial year, albeit below the range anticipated by the

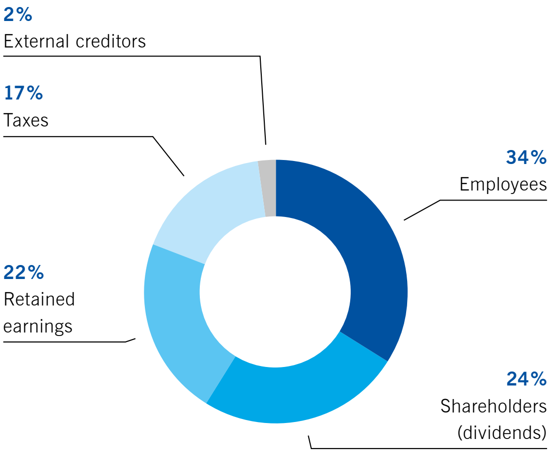
Origination of value added

Company performance: €2,532.8 million



Distribution of value added

Value added: €1,879.6 million



Executive Board. Overall, the Group recorded a 3 per cent increase in net revenue. Operating costs were down 5 per cent on 2016's figure during the year under review, largely due to lower costs incurred in connection with mergers and acquisitions. Adjusted by such effects, costs incurred decreased in 2017 by 1 per cent compared to the previous year. Adjusted for non-recurring effects, net profit for the period attributable to Deutsche Börse AG's shareholders was up by 6 per cent, and thus below the forecast range of between 10 per cent and 15 per cent.

The Executive Board believes that Deutsche Börse Group's financial position was extremely sound during the reporting period. The Group generated high operating cash flows, as in the previous year. Given the increase in adjusted EBITDA, Deutsche Börse Group was able to further improve the ratio of interest-bearing gross debt to EBITDA at Group level: at 1.4, the Group achieved its target of a ratio below the target level of 1.5.

Rating agencies again affirmed the Group's credit quality, awarding it excellent ratings in 2017. On 24 November 2017, Standard & Poor's affirmed the AA credit rating of Deutsche Börse AG raising the negative outlook to stable. On the same day, Standard & Poor's – just like Fitch Ratings on 2 September 2017 – affirmed the AA credit rating of Clearstream Banking S.A. Both ratings were assigned a stable outlook.

Deutsche Börse AG has offered its shareholders attractive returns for years – and financial year 2017 is no exception. At €2.45 (2016: €2.35), the dividend proposed for distribution to shareholders is above the prior-year level. In addition, the distribution ratio decreased slightly as a result of the improvement in earnings, falling from 54 per cent in the previous year to 53 per cent in the year under review (adjusted for non-recurring effects in both cases), and was thus in line with the Executive Board's forecast range of 40 to 60 per cent.

The Group's net assets, financial position and results of operations can be considered to be in an orderly state.

Deutsche Börse Group: five-year overview

		2013	2014	2015	2016	2017
Consolidated income statement						
Net revenue	€m	1,912.3	2,047.8	2,220.3[1]	2,388.7	2,462.3
thereof net interest income from banking business	€m	35.9[2]	37.6	50.6	84.0	132.6
Operating costs (excluding depreciation, amortisation and impairment losses)	€m	–1,064.0	–990.0	–1,164.2[1]	–1,186.4	–1,131.6
Earnings before interest, tax, depreciation and amortisation (EBITDA)	€m	857.6	1,136.1	1,054.6[1]	1,239.2	1,528.5
Depreciation, amortisation and impairment losses	€m	118.8	124.8	119.0	131.0	159.9
Net profit for the period attributable to Deutsche Börse AG shareholders	€m	478.4	762.3	613.3[1]	722.1	874.3
Earnings per share (basic)	€	2.60	4.14	3.31[1]	3.87	4.68
Consolidated cash flow statement						
Cash flows from operating activities	€m	728.3	677.3	10.1	1,621.4	1,056.2
Consolidated balance sheet						
Non-current assets	€m	8,796.9	11,267.2	14,386.9	11,938.7	10,883.7
Equity	€m	3,268.0	3,752.1	3,695.1	4,623.2	4,959.4
Non-current interest-bearing liabilities	€m	1,521.9	1,428.5[3]	2,546.5	2,284.7	1,688.4[3]
Performance indicators						
Dividend per share	€	2.10	2.10	2.25	2.35	2.45[4]
Dividend payout ratio	%	61[5]	58[5]	55[5]	54[5]	53[5][6]
Employees (average annual FTEs)		3,515	3,911	4,460[1]	4,731	5,183
Personnel expense ratio (staff costs / net revenue)	%	22[5]	23[5]	27	25	26
EBITDA margin, based on net revenue	%	45	55	48[1]	52	62
Tax rate	%	26.0[5]	26.0[5]	26.0	27.0	27.0[5]
Return on shareholders' equity (annual average)[7]	%	21	21	20[5]	19[5]	18[5]
Deutsche Börse shares						
Year-end closing price	€	60.20	59.22	81.39	77.54	96.80
Average market capitalisation	€bn	10.0	10.8	14.7	14.0	17.2
Rating key figures						
Gross debt / EBITDA		1.5[5]	1.5[5]	1.9[5]	1.5	1.4
Interest coverage ratio	%	20.1[5]	26.0[5]	23.2[1]	25.3	32.7
Deutsche Börse AG: Standard & Poor's	Rating	AA	AA	AA	AA	AA
Clearstream Banking S.A.: Standard & Poor's	Rating	AA	AA	AA	AA	AA
Fitch	Rating	AA	AA	AA	AA	AA
Market indicators						
Xetra®, Börse Frankfurt and Tradegate						
Trading volume (single-counted)[8]	€bn	1,157.6	1,282.6	1,635.7	1,377.0	1,467.6
Eurex®						
Number of contracts	m	2,191.9	2,097.9	1,672.6[1]	1,727.5	1,675.9
Clearstream						
Value of securities deposited (annual average)	€bn	11,626	12,215	13,274	13,075	13,465
Global Securities Financing (average outstanding volume for the period)	€bn	576.5	609.8	598.6	515.9	459.8

1) Figure for 2015 without consideration of ISE, which represents a discontinued operation due to its disposal as at 30 June 2016
2) Only Clearstream segment
3) Bonds that will mature in the following year are reported under "other current liabilities" (2014: €139.8 million, 2017: €599,8 million).
4) Proposal to the Annual General Meeting 2018
5) Adjusted for non-recurring effects; please refer to the consolidated financial statements for the respective financial year for adjustment details.
6) Amount based on the proposal to the Annual General Meeting 2018
7) Net profit for the period attributable to Deutsche Börse AG shareholders / average shareholders' equity for the financial year based on the quarter-end balance of shareholders' equity
8) Since Q3/2013, this figure has included warrants and certificates due to the full consolidation of Börse Frankfurt Zertifikate AG.

Acknowledgements

Published by
Deutsche Börse AG
60485 Frankfurt/Main
Germany
www.deutsche-boerse.com

Concept and layout
Lesmo GmbH & Co. KG, Dusseldorf
Deutsche Börse AG, Frankfurt/Main

Photographs
Thorsten Jansen (Portraits Joachim Faber and Executive Board)
Jörg Baumann (Title)

Financial reporting system
Combined management report, consolidated financial statements and notes produced in-house using firesys and SmartNotes.

Printed by
Kunst- und Werbedruck, Bad Oeynhausen

Publication date
16 March 2018

The German version of this report is legally binding. The company cannot be held responsible for any misunderstanding or misinterpretation arising from this translation.

We would like to thank all colleagues and service providers who participated in the compilation of this report for their friendly support.

Publications service
The Annual 2017 and the financial report 2017 are both available in German and English.

Order numbers
1000–4767 (German Annual)
1000–4768 (German financial report)
1010–4769 (English Annual)
1010–4770 (English financial report)

The corporate report 2017 of Deutsche Börse Group is available here:

as pdf and in a document library app on the internet:
www.deutsche-boerse.com/annual_report

CORPORATE REPORTS

as print version at Deutsche Börse Group's publication hotline:
Phone +49-(0) 69–2 11–1 15 10
Fax +49-(0) 69–2 11–1 15 11

Contact

Investor Relations
E-mail ir@deutsche-boerse.com
Phone +49-(0) 69–2 11–1 16 70
Fax +49-(0) 69–2 11–1 46 08
www.deutsche-boerse.com/ir_e

Group Sustainability
E-mail group-sustainability@deutsche-boerse.com
Phone +49-(0) 69–2 11–1 42 26
Fax +49-(0) 69–2 11–61 42 26
www.deutsche-boerse.com/sustainability

Group Marketing
E-mail corporate.report@deutsche-boerse.com
Phone +49-(0) 69–2 11–1 49 84
Fax +49-(0) 69–2 11–61 49 84

Registered trademarks