DEUTSCHE BÖRSE GROUP

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Half-yearly financial report

Quarter 2 / 2017

Deutsche Börse Group: key figures

		Quarter ended 30 Jun 2017	30 Jun 2016	Six months ended 30 Jun 2017	30 Jun 2016
Consolidated income statement					
Net revenue (total revenue less volume-related costs)	€m	623.6	600.7	1,247.0	1,211.2
thereof net interest income from banking business	€m	33.5	21.1	63.4	39.7
Operating costs (staff costs and other operating expenses)	€m	–271.4	–284.5	–545.0	–565.7
Earnings before interest, tax, depreciation and amortisation (EBITDA)	€m	353.8	310.8	821.2[1)]	641.7
Depreciation, amortisation and impairment losses	€m	–39.6	–31.8	–75.5	–62.8
Earnings before interest and tax (EBIT)	€m	314.2	279.0	745.7[1)]	578.9
Net profit for the period attributable to Deutsche Börse AG shareholders	€m	176.3	183.5	456.4	382.1
Earnings per share (basic)	€	0.94	0.98	2.44	2.05
Consolidated cash flow statement					
Cash flows from operating activities excluding CCP positions	€m	–	–	729.2	519.5
Consolidated balance sheet (as at 30 June)					
Non-current assets	€m	11,838.0	16,362.7	11,838.0	16,362.7
Equity	€m	4,586.4	4,260.9	4,586.4	4,260.9
Non-current interest-bearing liabilities	€m	1,687.3	2,543.7	1,687.3	2,543.7
Performance indicators					
Employees (average FTEs for the period)		5,575	5,098	5,491	5,083
EBIT margin, based on net revenue	%	50	46	60[1)]	48
Tax rate[2)]	%	27.0	27.0	27.0	27.0
Gross debt / EBITDA[2)]		1.3	1.6	1.3	1.6
Interest coverage ratio[2)]	%	35.2	25.0	35.2	25.0
The shares					
Opening price	€	86.16	74.99	76.42	81.39
Closing price (as at 30 June)	€	92.42	73.54	92.42	73.54
Market indicators					
Eurex					
Number of contracts	m	478.8	465.9	924.9	933.5
Xetra®, Börse Frankfurt and Tradegate					
Trading volume (single-counted)	€bn	365.1	349.0	726.6	734.3
Clearstream					
Value of securities deposited (average for the period)	€bn	13,428	13,019	13,443	12,990
Global Securities Financing (average outstanding volume for the period)	€bn	454.8	524.6	470.5	527.4
Transparency and stability key figures					
Proportion of companies reporting in accordance with maximum transparency standards[3)]	%	91	91	91	91
Number of calculated indices		12,111	11,839	12,111	11,839
Number of sustainable index concepts		115	50	115	50
System availability of cash market trading system (Xetra)	%	100	100	100	99.999
System availability of derivatives market trading system (T7®/Eurex®)	%	99.999	99.889	99.989	99.944
Market risk cleared via Eurex Clearing (gross monthly average)	€bn	14,068	15,727	14,678	15,566

1) Including a non-recurring effect related to the disposal of shares in BATS Global Markets, Inc. in Q1/2017
2) Adjusted for non-recurring items
3) Ratio of the market capitalisation of companies listed in the Prime Standard (for shares) to the market capitalisation of all companies listed on Frankfurter Wertpapierbörse (FWB®, the Frankfurt Stock Exchange)

Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Q2/2017: Deutsche Börse increases revenues and earnings

Quarterly results at a glance

- Deutsche Börse Group's net revenue grew by 4 per cent in the second quarter of 2017, to €623.6 million (Q2/2016: €600.7 million), which was mainly attributable to the post-trade business of its subsidiary Clearstream
- Operating costs amounted to €271.4 million (Q2/2016: €284.5 million). However, adjusted for non-recurring items (in particular in connection with the planned merger with London Stock Exchange Group plc in the previous year's quarter, as well as the integration of acquired companies), operating costs amounted to €245.4 million (Q2/2016: €245.1 million).
- Group earnings before interest, tax, depreciation and amortisation (EBITDA) amounted to €353.8 million (Q2/2016: €310.8 million). Adjusted for non-recurring items, Deutsche Börse Group increased its EBITDA by 7 per cent to €379.5 million (Q2/2016: €356.3 million). Adjusted net profit for the period attributable to Deutsche Börse AG shareholders grew by 7 per cent to €232.8 million (Q2/2016: €218.5 million).
- During the second quarter of 2017, the Group recognised €33.0 million in tax provisions for a potential tax back payment in connection with an out-of-court settlement with the U.S. Office of Foreign Assets (OFAC), the US export control authority.
- Basic earnings per share amounted to €0.94 for an average of 186.8 million shares. Adjusted for non-recurring items, they amounted to €1.25 (Q2/2016: €0.98 for 186.8 million shares; adjusted: €1.17).
- For financial year 2016, Deutsche Börse AG distributed a dividend of €2.35 per no-par value share to its shareholders (for financial year 2015: €2.25).
- Following completion of the acquisition of Nodal Exchange Holdings, LLC, the company has been fully consolidated by the Group since 3 May 2017. As a result of the acquisition, the Group increased its economic stake in European Energy Exchange AG from 63 per cent to 75 per cent.
- Even though business development during the first half of 2017 was slightly below the company's expectations, from Deutsche Börse Group's view it is still possible to achieve the lower end of its earnings forecast for the 2017 financial year. This is subject to a positive development in the cyclical environment – especially in terms of higher volatility on the equity markets, compared to the first six months of 2017.

Group interim management report

Fundamental information about the Group

The fundamental information about the Group described on pages 18 to 31 of the 2016 financial report is still valid in principle. However, there have been changes to the basis of consolidation.

Comparability of figures

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 quarterly statement contains financial indicators excluding figures from discontinued operations.

Within Deutsche Börse Group's organisation, the allocation of revenue and costs to individual segments was changed. Due to these changes, the following adjustments were made to segment reporting; previous year's figures were adjusted accordingly.

- Effective as from Q1/2017, 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).
- Effective as from Q1/2017, 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 "Other" item within the Eurex segment (previously under Infrastructure Services in the Market Data + Services segment).
- Effective as from Q1/2017, the definitions of line items were changed within the Xetra segment, due to the introductions of the new line item "partner markets", among others.

Furthermore, there were changes to the basis of consolidation in the second quarter of 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, starting with this interim report, Deutsche Börse Group will separately disclose operating costs as well as depreciation and amortisation, introducing earnings before interest, taxes, depreciation and amortisation (EBITDA) as an additional parameter. The previous year's figures were adjusted accordingly.

Material related party disclosures

Detailed material related-party disclosures can be found in note 17 of the notes to the consolidated financial statements.

Report on the economic position

The company's business operations and macroeconomic and sector-related environment have not changed significantly compared with the presentation in the 2016 financial report (pages 18 to 19 and 33 to 34).

There were no changes in corporate strategy and management in the second quarter of 2017. For a comprehensive presentation, please refer to the details provided in the 2016 financial report (pages 22 to 27).

Research and development activities

As a service provider, Deutsche Börse Group does not engage in research and development activities comparable to those of manufacturing companies. As a result, this Group interim management report does not contain a detailed research and development report. However, Deutsche Börse does develop and operate its own trading and clearing systems as well as system solutions designed to achieve its structural growth objectives. Thus, the company works constantly to maintain and enhance the technology leadership and stability of its electronic systems in the interests of its customers and the systemic stability of the financial markets. For instance, Xetra® trading was migrated to the new T7® trading technology in early July. In February, Clearstream's securities settlement was migrated to TARGET2-Securities (T2S), which is the uniform, pan-European settlement system of the European Central Bank (ECB).

Results of operations

Results of operations in the second quarter of 2017

Macroeconomic conditions remained largely unchanged during the second quarter of 2017. The ECB adhered to its policy of monetary easing: the negative deposit rate of –0.4 per cent, and the so-called quantitative easing (QE) measures, were maintained. However, the interest rate turnaround initiated in the US during 2016 was confirmed by two additional interest rate hikes in March and June 2017. Economic conditions in the euro area stabilised; German corporates in particular reported mostly solid results. Accordingly, the benchmark indices DAX® and STOXX® reached record levels. Furthermore, the markets regained trust in a united Europe, given the recent election outcomes in Austria, the Netherlands and France. On the contrary, overall disillusionment prevailed after the US presidential elections in

Key figures on results of operations of Deutsche Börse Group (reported)

		Quarter ended			Six months ended		
		30 Jun 2017	30 Jun 2016	Change	30 Jun 2017	30 Jun 2016	Change
				%			%
Net revenue	€m	623.6	600.7	4	1,247.0	1,211.2	3
Operating costs	€m	271.4	284.5	–5	545.0	565.7	–4
EBITDA	€m	353.8	310.8	14	821.2	641.7	28
Depreciation and amortisation	€m	39.6	31.8	25	75.5	62.8	20
EBIT	€m	314.2	279.0	13	745.7	578.9	29
Net profit for the period attributable to Deutsche Börse AG shareholders	€m	176.3	183.5	–4	456.4	382.1	19
Earnings per share (basic)	€	0.94	0.98	–4	2.44	2.05	19

November 2016: investors withdrew capital at a larger scale, and invested – at least parts thereof – in Europe. Given the fairly stable economic and political situation in Europe, volatility (measured in terms of the VDAX®) – which is one of the key drivers of trading activity on the cash and derivatives markets – remained at extremely low levels on average during the quarter. It increased only temporarily on individual – mostly political – events, such as the elections in France and the UK.

In this market environment, Deutsche Börse Group's net revenue increased by 4 per cent compared to the second quarter of 2016. Net revenue comprises sales revenue plus net interest income from banking business and other operating income, less volume-related costs. As in the first quarter, the main driver of this development was the Clearstream segment with a growth rate of 10 per cent, and in particular the custody business of the national central securities depository (CSD), as well as net interest income from banking business, which grew given the improved interest rate environment. The cash and derivatives markets accelerated as well, while the Market Data + Services (MD+S) segment could not quite reach the level of the previous year's quarter due to the deconsolidation of Market News International Inc.

Net interest income from banking business, generated in the Clearstream segment with cash customer deposits under custody, and in the Eurex segment with its clearing houses, increased to €33.5 million in the second quarter of 2017 (Q2/2016: €21.1 million), mainly driven by accelerated net interest income in the Clearstream segment. Net interest income grew mainly due to the rising interest rate in the US – the Fed has raised its key interest rate twice in the course of the year 2017.

Operating costs comprise staff costs and other operating expenses. Staff costs rose by 13 per cent, mainly as a result of higher staff numbers, due to the internalisation of external staff at the end of 2016, and expenses for share-based remuneration, which was markedly higher than in the same quarter of the previous year, on account of the higher share price. In contrast, other operating expenses declined significantly, due to the lower number of external staff. Moreover, non-recurring effects – mainly comprising provisions of €10.5 million for potential fines related to the ongoing public prosecutor's investigation, €6.1 million for the integration of acquired companies and €4.4 million for efficiency programmes – were down €14.1 million year-on-year, to €26.4 million. Total operating costs were thus 5 per cent below those of the previous year's quarter. Adjusted for non-recurring effects, operating costs were slightly higher than in the same period of the previous year.

To facilitate transparency in reporting costs and results, Deutsche Börse Group also discloses earnings before interest, taxes, depreciation and amortisation (EBITDA) as an additional parameter. EBITDA rose by 14 per cent year-on-year in the second quarter of 2017; adjusted for non-recurring effects the increase was 7 per cent. The figure includes a result from equity investments of €1.6 million (Q2/2016: €−5.4 million).

Key figures on results of operations of Deutsche Börse Group (adjusted)

		Quarter ended			Six months ended		
		30 Jun 2017	30 Jun 2016	Change	30 Jun 2017	30 Jun 2016	Change
				%			%
Net revenue	€m	623.6	600.7	4	1,247.0	1,211.2	3
Operating costs	€m	245.4	245.1	0	490.5	494.4	–1
EBITDA	€m	379.5	356.3	7	759.7	719.1	6
Depreciation and amortisation	€m	39.2	30.7	28	74.4	61.2	22
EBIT	€m	340.3	325.6	5	685.3	657.9	4
Net profit for the period attributable to Deutsche Börse AG shareholders	€m	232.8	218.5	7	465.0	439.8	6
Earnings per share (basic)	€	1.25	1.17	7	2.49	2.35	6

Over the past years, Deutsche Börse Group has undertaken extensive investments in its infrastructure, in order to maintain its technological lead. Accordingly, depreciation and amortisation of €39.6 million exceeded the previous year's figure (Q2/2016: €31.8 million).

Deutsche Börse Group's financial result amounted to €−18.1 million in the second quarter of 2017 (Q2/2016: €−17.8 million); adjusted for non-recurring effects, it stood at €−15.9 million (Q2/2016: €−17.8 million).

The reported tax quote in the second quarter of 2017 was 39.1 per cent. Adjusted for non-recurring effects, it stood at 27.0 per cent. The non-recurring effects are primarily due to tax provisions in the amount of €33.0 million for a potential subsequent tax payment related to the settlement reached with the U.S. Treasury Department's Office of Foreign Assets Control (OFAC). In 2013, Deutsche Börse Group had already reviewed whether the payment may be tax-deductible and concluded that it was after having consulted with tax advisors. In letters dated April and June 2017, and a tax assessment dated 19 July 2017, the Luxembourg tax authority has denied such deductibility. After consultation with further tax and legal advisors and re-examination of the facts, Deutsche Börse Group is of the opinion that there are still good reasons and a likelihood that the court will decide in favour of the Group. Notwithstanding this opinion, Deutsche Börse Group has recognised provisions in the amount of €33.0 million. However, Deutsche Börse Group will take all necessary and appropriate measures in order to defend itself against these tax demands.

Results of operations in the first half of 2017

Business development in the first half of 2017 was essentially in line with the performance seen in the second quarter: strong growth rates were posted in the post-trade business, while trading revenue was impacted by the low stock market volatility and the sustained investor unrest. Although traded volumes in the cash and derivatives markets exceeded the previous year's levels in some asset classes, overall net revenue in the Xetra segment exceeded the figure for the same period of the previous year only slightly; in the Eurex and MD+S segments, it was slightly lower year-on-year.

Deutsche Börse Group's total net revenue for the first half of 2017 rose by 3 per cent year-on-year. Net interest income from banking business increased significantly to €63.4 million (H1/2016: €39.7 million).

Operating costs were lower at the half-year point; adjusted for non-recurring effects, they were stable in spite of markedly higher costs for share-based remuneration. Non-recurring effects related to operating costs totalled €55.6 million (H1/2016: €72.9 million), essentially comprising €10.7 million in costs related to the planned merger with LSEG, which was prohibited in the first quarter of 2017, provisions of €10.5 million for potential fines related to the ongoing public prosecutor's investigation, plus costs for the integration of acquired companies (€14.0 million), litigation costs (€10.7 million), and costs for efficiency measures (€9.5 million).

Deutsche Börse Group's EBITDA for the first half of 2017 amounted to €821.2 million (H1/2016: €641.7 million); the result from equity investments includes €116.6 million in non-recurring revenue from the disposal of the remaining stake in BATS Global Markets, Inc during the first quarter of 2017. Adjusted for non-recurring effects, the Group's EBITDA rose by 6 per cent. Expenses for depreciation, amortisation and impairment losses rose by 20 per cent.

The Group's financial result for the first six months of 2017 was €–36.4 million (H1/2016: €–38.0 million). Adjusted for non-recurring factors, the financial result amounted to €–34.2 million (H1/2016: €–38.0 million).

Comparison of results of operations with the forecast for 2017

Even though business development during the first half of 2017 was slightly below the company's expectations, from Deutsche Börse Group's view it is still possible to achieve the lower end of its earnings forecast for the 2017 financial year. This is subject to a positive development in the cyclical environment – especially in terms of higher volatility on the equity markets, compared to the first half of 2017. For details on data used for the forecast, see the report on expected developments.

Deutsche Börse AG shares: key figures

		Quarter ended		Six months ended	
		30 Jun 2017	30 Jun 2016	30 Jun 2017	30 Jun 2016
Earnings per share (basic)	€	0.94	0.98	2.44	2.05
Earnings per share (basic, adjusted)	€	1.25	1.17	2.49	2.35
Opening price[1]	€	86.16	74.99	76.42	81.39
High[2]	€	98.42	82.14	98.42	83.00
Low[2]	€	84.76	70.17	74.73	69.80
Closing price (as at 30 June)	€	92.42	73.54	92.42	73.54
Number of shares (as at 30 June)	m	193.0	193.0	193.0	193.0
Market capitalisation (as at 30 June)	€bn	17.8	14.2	17.8	14.2

1) Closing price on preceding trading day
2) Intraday price

Eurex segment

Q2/2017

Regarding the Eurex segment, trading volumes of the key business areas – financial derivatives (Eurex Exchange), commodities (EEX) and foreign exchange (360T) – developed differently in the second quarter of 2017. While Eurex Exchange reached double-digit growth rates for interest rate derivatives, growth figures for index derivatives were down year-on-year due to the low volatility on equity markets. In the commodities business, traded volumes in gas and emission rights improved, while the electricity market declined. The daily foreign-exchange (FX) trading volumes on the 360T platform continued to grow in the second quarter.

Growth rates generated with interest rate derivatives in the Eurex Exchange business area during the second quarter of 2017 were driven by two factors in particular: the interest rate turnaround initiated in the US, and market participants' expectations that the ECB will adjust its monetary policy in the coming two years as well – by ending negative interest rates and cutting back its QE measures. Long-term interest rate derivatives in particular benefited from these expectations. In addition, trading in interest rate derivatives on French government bonds increased during France's presidential elections (May and June 2017). Trading volumes in Italian government bonds increased significantly as well, against the background of the renewed discussion about the credit quality of Italian banks and the support they receive from the Italian government. This led to a widening in Italian government bond spreads, which in turn fuelled demand for related derivatives.

However, index derivatives' trading volumes – the largest product group – did not reach the level seen in the previous year's quarter, in which the Brexit referendum was held. Persistently low market volatility led to an absence of incentives to trade, and did not inspire investors to adjust their investment strategies or restructure their portfolios. Conversely, trading volumes of volatility derivatives soared by 81 per cent during the second quarter of 2017 – which is proof of the fact that the new asset classes have become increasingly important.

Eurex segment: key indicators

	Quarter ended 30 Jun 2017	30 Jun 2016	Change	Six months ended 30 Jun 2017	30 Jun 2016	Change
FINANCIAL KEY FIGURES	€m	€m	%	€m	€m	%
Net revenue	263.3	261.7	1	530.4	539.0	–2
Equity index derivatives	109.3	117.1	–7	212.8	242.6	–12
Interest rate derivatives	52.6	46.3	14	111.9	93.6	20
Equity derivatives	10.5	10.9	–4	20.8	20.8	0
Commodities (EEX)	49.2	53.5	–8	102.5	108.5	–6
Foreign exchange (360T)	16.3	16.3	0	32.8	32.1	2
Other (including repo business, XBID and net interest income from banking business)	25.4	17.6	44	49.6	41.4	20
Operating costs	117.3	110.0	7	230.6	226.4	2
EBITDA	145.3	145.6	0	416.2	307.8	35
EBITDA (adjusted)	155.8	163.7	–5	323.8	338.9	–4
Depreciation and amortisation	20.1	17.4	16	39.1	34.7	13
EBIT	125.2	128.2	–2	377.1	273.1	38
EBIT (adjusted)	135.9	146.6	–7	285.5	304.8	–6
PERFORMANCE INDICATORS						
Financial derivatives	m contracts	m contracts	%	m contracts	m contracts	%
Derivatives[1]	478.8	465.9	3	924.9	933.5	–1
Equity index derivatives[2]	233.7	244.5	–4	444.5	503.5	–12
Interest rate derivatives	147.5	128.4	15	314.4	260.1	21
Equity derivatives[3]	97.6	92.8	5	165.9	169.7	–2
Commodities[4]	TWh / m t CO_2	TWh / m t CO_2	%	TWh / m t CO_2	TWh / m t CO_2	%
Electricity	919.4[5]	1,214.0	–24	1,861.0[5]	2,247.8	–17
Gas	432.2	409.0	6	929.1	954.6	–3
Emissions trading	359.8	225.9	59	649.1	468.6	39
FX business	€bn	€bn	%	€bn	€bn	%
Average daily outstanding volume on 360T	62.9	60.4	4	61.0	58.9	4

1) Due to rounding differences, the total shown does not equal the sum of the individual figures.
2) Including index-dividend and volatility derivatives, the amount for 2016 has been adjusted accordingly.
3) Including equity-dividend and ETF derivatives, the amount for 2016 has been adjusted accordingly.
4) Volume traded on EEX in terawatt-hours (TWh) for power and gas trading and in million CO_2 tonnes for trading in emission rights
5) Including Nodal Exchange (131.4 TWh)

EEX group's business development was also characterised by low volatility levels. The power derivatives market was particularly affected: it declined by 24 per cent in line with overall decreasing market trends, while the spot power market grew slightly. Burdening factors included the challenging regulatory environment – in particular, discussions concerning price zones and the possible separation of the German and the Austrian price zones – as well as the French ARENH tariff, in conjunction with the surprise shutdown of nuclear power stations in France. EEX group was also able to gain additional market share in the trading of natural gas, thanks to its broad product range and high pricing quality, which enabled EEX group to increase trading volumes amid a stable overall market. Trading in emission rights, one of EEX's smaller business areas in terms of revenue, generated significant double-digit volume growth rates. This also applies to trading in agricultural products, which migrated from Eurex to the EEX trading platform two years ago.

During the period under review, Deutsche Börse was able to further increase the daily FX trading volumes on 360T – and its market share – relative to the volumes traded at comparable trading platforms. Due to the lack of macroeconomic stimulus, the FX market was generally suffering from low volatility and small fluctuations in the main currencies. The market gained momentum towards the end of the quarter, due to an improving euro/US dollar exchange rate, immediately translating into considerably higher daily volumes. This growth was generated despite an overall declining market environment, and was mainly driven by trading activity of new clients. 360T continued to grow its client portfolio across all regions and market segments – and clients clearly appreciate the capabilities of this trading platform. This was also evident in the three Euromoney awards recently won by 360T, for best "Speed of Execution", "Variety of Dealers" and "Breadth of Currencies".

First half of 2017

The result for the first six months of 2017 was largely in line with the result for the second quarter, given that the macroeconomic conditions remained pretty much unchanged during the course of the year. During the first six months of the year, trading in interest rate derivatives clearly accelerated, whereas trading activity in equity index derivatives declined due to the low volatility level. In the commodities business, emissions trading increased, the power markets decreased while the gas business remained stable. FX trading on the 360T trading platform further accelerated during the first six months of 2017, while traded FX volumes on comparable trading platforms stagnated.

Xetra segment

Q2/2017

European cash markets gained momentum during the second quarter of 2017, despite persistently subdued volatility. One reason for this development was that investors with global portfolios withdrew capital from US dollar investments to gain exposure in other capital markets. Another factor was that Deutsche Börse Group, with its Xetra®, Börse Frankfurt and Tradegate marketplaces, benefited from individual events such as the elections in France and the UK – although at a lower scale compared to domestic cash markets in those countries. Sound economic conditions in Germany and solid results disclosed by German corporates translated into higher valuation levels and slightly increased Xetra trading volumes compared to the previous year's quarter. Furthermore, Deutsche Börse Group was able to stabilise its market share in the trading of DAX constituents on European trading platforms during the second quarter of 2017. Deutsche Börse Group has maintained a consistent market share of around 65 per cent, after a temporary decline to below 60 per cent in the previous year.

Trading volumes of exchange-traded funds (ETFs) also increased year-on-year. Assets under management in ETFs amounted to €452.6 billion (Q2/2016: €358.2 billion), an increase of 26 per cent. The segment's trading volume declined by 11 per cent to €36.1 billion in the second quarter of 2017 (Q2/2016: €40.6 billion).

Low interest rates as well as a market phase characterised by overall uncertainty boosted the demand for Xetra-Gold® as an investment instrument – being a bearer bond backed by physical gold – to a new record level. At the end of the second quarter 2017, 167.6 tonnes of gold were held in custody in Deutsche Börse's vaults (30 June 2016: 81.7 tonnes), which is twice the amount compared to the previous year. At a price of €35.04 per bond (Xetra closing price as at 30 June 2017), the value of gold held in custody amounts to €5.9 billion (30 June 2016: €3.1 billion). Xetra-Gold is the most actively traded security amongst all the exchange-traded commodities (ETCs) available on Xetra: the aggregate order book turnover was €741.2 million in the second quarter of 2017, representing an ETC market share of 48 per cent.

On 1 March 2017, the new “Scale” growth segment was launched at the Frankfurt Stock Exchange. The new segment offers an attractive access point to investors and growth capital, particularly for small and medium-sized enterprises (SMEs). Scale caters to the needs of issuers and investors alike: since its market launch, three equity admissions to trading and two bond issues were realised. All in all, the “going public” market accelerated during the second quarter of 2017: against the background of low interest rates and a stable economic environment, a series of companies went public. These companies intend to use an admission to trading or initial public offering (IPO) as an opportunity to raise equity. During the second quarter, Deutsche Börse featured five new listings with a total placement volume of roughly €1.1 billion. Delivery Hero AG was able to raise the highest equity amount: this Prime Standard IPO reached an issuing volume of €870 million. In addition, two companies raised debt capital via corporate bonds. The issuing volume, as shown in the prospectuses, totalled €90 million.

Since the beginning of July, Deutsche Börse Group has been using its T7® trading technology for Xetra trading at the Frankfurt Stock Exchange, thus now running Xetra cash market and Eurex derivatives trading on a single systems platform. At present, T7 is used by Eurex Exchange, EEX and BSE (formerly Bombay Stock Exchange Ltd.). The Vienna Stock Exchange as well as the Irish Stock Exchange will soon migrate their systems to T7. The new system reduces latency – i.e. time for processing an order in the system – even further. Harmonising Xetra and Eurex trading technology also produces significant synergies, and means lower development and maintenance costs for those participants who are active on both markets. Furthermore, regulatory requirements and technical updates can also be integrated into the trading system more quickly and efficiently.

Xetra segment: key indicators

	Quarter ended			Six months ended		
	30 Jun 2017	30 Jun 2016	Change	30 Jun 2017	30 Jun 2016	Change
FINANCIAL KEY FIGURES	€m	€m	%	€m	€m	%
Net revenue	43.4	41.1	6	86.4	84.5	2
Trading	26.9	26.5	2	54.6	54.6	0
Central counterparty for equities	9.4	8.0	18	17.5	16.6	5
Listing	3.3	2.9	14	6.5	5.3	23
Partner markets (incl. Eurex Bonds®)	3.8	3.7	3	7.8	8.0	–3
Operating costs	21.3	23.4	–9	45.3	44.1	3
EBITDA	24.4	18.5	32	43.9	41.2	7
EBITDA (adjusted)	26.3	20.5	28	47.6	44.8	6
Depreciation and amortisation	1.9	1.3	46	3.6	2.6	38
EBIT	22.5	17.2	31	40.3	38.6	4
EBIT (adjusted)	24.4	19.2	27	44.0	42.2	4
PERFORMANCE INDICATORS	€bn	€bn	%	€bn	€bn	%
Trading volume (order book turnover, single-counted)						
Xetra®	333.4	320.6	4	659.4	676.5	–3
Börse Frankfurt	11.1	10.8	3	23.8	22.4	6
Tradegate Exchange	20.6	17.6	17	43.4	35.4	23

First half of 2017

While the business development in the Xetra segment slightly declined in the first quarter of 2017, it increased year-on-year during the second quarter despite persistently low volatility. Trading volumes also improved compared to previous quarters, while the weaker phase observed during the second half of 2016 appears to have been overcome.

Clearstream segment

Q2/2017

At the beginning of February, Clearstream migrated the domestic settlement business of its national central securities depositories (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 assets under custody in the domestic CSD businesses, and by adjusting the pricing model in the CSD business.

In the international business, the value of securities held in custody remained stable while settlement transactions increased year-on-year, thus driving net revenue. Average cash customer deposits were up 4 per cent year-on-year. Besides the effect of this increase in volume, net interest income from banking business benefited from the charging of negative interest rates to clients (in some cases with a mark-up). In addition, rebounding interest rate levels in the US – with two interest hikes in 2017, the latest by 0.25 per cent in June – gave a boost to net interest income, given that around 51 per cent of cash deposits is denominated in US dollar. Consequently, net interest income generated with daily cash balances increased considerably.

The Investment Funds Services business stayed on track for solid growth by gaining new issuers for its services and increasing assets held in custody, partly due to capital inflows from the US. Since some of these business gains came with a fee holiday in the beginning, the segment now sees the full impact of these gains. At the same time, Clearstream continues to attract new clients as partners in the hedge fund business. In June 2017, Vontobel chose 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 Global Securities Financing (GSF) business, the average outstanding volume decreased by 13 per cent. Since the ECB began to provide plenty of liquidity on the market as part of its QE programme, volumes declined considerably, in particular with regard to the GC Pooling® product. Simultaneously, order flows shifted towards smaller, higher priced lending volumes, raising GSF net revenue overall.

Clearstream segment: key indicators

	Quarter ended 30 Jun 2017	Quarter ended 30 Jun 2016	Change	Six months ended 30 Jun 2017	Six months ended 30 Jun 2016	Change
FINANCIAL KEY FIGURES	€m	€m	%	€m	€m	%
Net revenue	216.1	196.3	10	436.7	387.3	13
International business (ICSD)	104.8	104.5	0	216.3	206.8	5
Domestic business (CSD)	33.7	27.5	23	62.5	57.0	10
Investment Funds Services	32.1	30.5	5	67.2	59.7	13
Global Securities Financing	19.6	18.0	9	40.7	35.1	16
Net interest income from banking business	25.9	15.8	64	50.0	28.7	74
Operating costs	97.9	103.5	–5	196.4	202.2	–3
EBITDA	118.2	92.7	28	240.3	185.3	30
EBITDA (adjusted)	127.0	109.7	16	259.0	214.9	21
Depreciation and amortisation	14.1	10.4	36	26.0	20.4	27
EBIT	104.1	82.3	26	214.3	164.9	30
EBIT (adjusted)	113.0	99.8	13	233.2	195.2	19
PERFORMANCE INDICATORS						
International business (ICSD)	€ bn	€ bn	%	€ bn	€ bn	%
Value of securities deposited (average value)	6,709	6,782	–1	6,762	6,735	0
Domestic business (CSD)	€ bn	€ bn	%	€ bn	€ bn	%
Value of securities deposited (average value)	4,525	4,378	3	4,522	4,407	3
Investment Funds Services	€ bn	€ bn	%	€ bn	€ bn	%
Value of securities deposited (average value)	2,194	1,859	18	2,159	1,848	17
Global Securities Financing	€bn	€bn	%	€bn	€bn	%
Outstanding volume (average value)	454.8	524.6	–13	470.5	527.4	–11
Net interest income from banking business	€bn	€bn	%	€bn	€bn	%
Outstanding volume (daily average value) [1]	14.0	13.5	4	14.6	13.2	10

1) Contains amounts that are or were restricted by EU and US sanctions of around €1.5 billion in Q2/2017 (Q2/2016: €1.5 billion) and €1.6 billion in H1/2017 (H1/2016: €1.5 billion)

First half of 2017

Business development in the first half of 2017 did not differ significantly from the segment's performance in the second quarter: net revenue in the funds and GSF businesses grew significantly, and so did net interest income in particular due to rebounding interest rates in the US and Clearstream's re-charging of negative interest rates in the euro zone. In the CSD business Clearstream's strategy to attract additional custody volumes in the light of T2S migration has paid off.

Market Data + Services segment

Q2/2017

Licence fees in the Index business of the MD+S segment rose year-on-year by 16 per cent. This was driven by higher assets under management in ETFs tracking the European capital markets, as well as by growing issuance of structured products on STOXX indices. Thanks to this, the segment more than offset lower trading volumes in equity index derivatives on STOXX and Deutsche Börse indices.

The core business of the Data Services area took a fundamentally positive development, driven by the introduction of new products and the broadening of the customer base. However, the segment was not able to entirely compensate for the disposal of Market News International Inc. (MNI) in July 2016. In addition, positive non-recurring effects from the reversal of provisions translated into a markedly higher comparative figure for the second quarter of 2016. In response to new regulatory requirements, the segment is currently working on a significant expansion of its range of reporting solutions, which will be integrated into the Regulatory Reporting Hub, and rolled out with the coming into force of MiFID II on 1 January 2018.

The decline in net revenue recognised in Infrastructure Services was mainly due to the transfer of revenue items to other segments (for further details, please refer to the "comparability of figures" section). Deutsche Börse's Infrastructure Services area also markets the Group's trading technology. The early renewal of the agreement between Deutsche Börse and Malta Stock Exchange is testament to strong demand for the Group's trading technology from other marketplace operators, reflecting the technology's reliability and capabilities. Deutsche Börse and Malta Stock Exchange extended their trading technology agreement for another five years, until 31 December 2021.

First half of 2017

The development during the first six months of 2017 was broadly in line with that of the second quarter. Overall net revenue decreased slightly year-on-year, driven mainly by the deconsolidation of subsidiaries – besides the aforementioned sale of MNI, Infobolsa S.A. had already been sold in the first quarter of 2016 – and by weaker trading in equity index derivatives.

Market Data + Services segment: key indicators

		Quarter ended			Six months ended	
	30 Jun 2017	30 Jun 2016	Change	30 Jun 2017	30 Jun 2016	Change
FINANCIAL KEY FIGURES	€m	€m	%	€m	€m	%
Net revenue	100.8	101.6	–1	193.5	200.4	–3
Data Services	38.1	42.7	–11	78.1	84.0	–7
Index	35.0	30.2	16	60.0	59.1	2
Infrastructure Services	27.7	28.7	–3	55.4	57.3	–3
Operating costs	34.9	47.6	–27	72.7	93.0	–22
EBITDA	65.9	54.0	22	120.8	107.4	12
EBITDA (adjusted)	70.4	62.4	13	129.3	120.5	7
Depreciation and amortisation	3.5	2.7	30	6.8	5.1	33
EBIT	62.4	51.3	22	114.0	102.3	11
EBIT (adjusted)	67.0	60.0	12	122.6	115.7	6

Financial position

Cash flow

Deutsche Börse Group generated cash flows from operating activities before changes in reporting date-related CCP positions of €729.2 million in the first half of 2017 (H1/2016: €519.5 million).

The increase in cash flows from operating activities was primarily attributable to the decrease in working capital by €102.8 million (H1/2016: €81.8 million). This decrease mainly results from a reduction in current receivables.

Deutsche Börse Group made tax payments in the amount of €102.7 million in the first half of 2017 (H1/2016: €169.6 million).

Including the changes in the CCP positions, cash flows from operating activities were €674.0 million (H1/2016: €1,309.1 million). The change in CCP positions compared to the first six months of 2016 was due to GC Pooling transactions that were not delivered as at the end of financial 2015 totalling US$869.5 million. These could not be delivered on due date (31 December 2015) and were only delivered on 4 January 2016 because a clearing participant failed to provide the necessary cash in good time.

Cash inflows from investing activities amounted to €970.5 million in H1/2017 (H1/2016: €783.9 million). This was due in particular to cash inflows from the sale or maturity of financial instruments totalling €1,518.1 million (H1/2016: €20.5 million). Investments in intangible assets and property, plant and equipment amounted to €67.1 million (H1/2016: €77.3 million). In addition, Deutsche Börse Group acquired financial instruments with an original term of more than three months for a total value of €315.0 million (H1/2016: €80.9 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.

During the first half of 2016, the sale of International Securities Exchange (ISE) had contributed significantly to cash flow from investing activities. In the second quarter of 2016, ISE was sold for a price of US$1,100.0 million, respectively €989.6 million. The disposal of interest in ISE led to cash inflows totalling €916.2 million (adjusted for cash funds held by the disposed entities in the amount of €13.0 million, cash outflows from hedging activities, as well as further adjustments). The transaction ultimately generated capital gains after tax amounting to €564.9 million.

Cash outflows from financing activities of €449.8 million were recorded in the first half of 2017 (H1/2016: cash outflows of €518.5 million). These were mainly attributable to the €439.0 million dividend payment for financial year 2016 (H1/2016: €420.1 million). No commercial paper was issued or repaid in the first six months of 2017; in the first half of 2016, €400.0 million of commercial paper was issued and €495.0 million repaid on maturity.

As a result, cash and cash equivalents as at 30 June 2017 amounted to €1,046.1 million (30 June 2016: €23.0 million). Other cash and bank balances amounted to €1,415.2 million (30 June 2016: €1,498.3 million).

Capital management
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 that the Group's profit targets were raised in July 2015 in connection with the announcement of the "Accelerate" growth strategy, 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 2016, Deutsche Börse AG paid a dividend of €2.35 per no-par value share on 22 May 2017 (2016 for financial year 2015: €2.25). The adjusted distribution ratio was 54 per cent (2016 for financial year 2015: 55 per cent).

Furthermore, Deutsche Börse AG announced in April that it will launch a share repurchase programme with a volume of around €200 million during the second half of 2017. At present it is intended to start the share repurchase programme until end of September. The objective of this repurchase programme is to achieve a balanced use of approximately €1 billion in proceeds from the disposal of ISE in 2016. In addition to the planned share repurchases, the company plans to use the funds primarily for organic growth, as well as for value-creating external growth.

The company's clients generally expect it to maintain conservative interest service cover and leverage ratios, and to achieve good credit ratings. Therefore, the Group targets a minimum consolidated interest service cover ratio (defined as the ratio of EBITDA to interest expenses from financing activities) of 16. During the first half of 2017, Deutsche Börse Group achieved this target, with an interest service cover ratio of 35.2 (H1/2016: 25.0). This figure is based on relevant interest expenses of €21.6 million and adjusted EBITDA of €759.7 million.

The parameters used to calculate interest service cover include interest expenses for financing Deutsche Börse Group, less interest expenses of Group entities which are also financial institutions – including Clearstream Banking S.A., Clearstream Banking AG and Eurex Clearing AG. Interest expenses unrelated to financing the Group are not taken into consideration for calculating interest service cover.

Moreover, Deutsche Börse Group targets a maximum ratio of interest-bearing gross debt to EBITDA of 1.5 at Group level. During the first half of 2017, the Group achieved a 1.3 ratio of gross debt to EBITDA. This figure is based on gross debt of €1,987.3 million, and adjusted EBITDA of €759.7 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. In its latest rating dated 25 July 2017, S&P affirmed the AA credit rating of Deutsche Börse AG and maintained the stable outlook.

Net assets

The following section shows excerpts from the consolidated statement of financial position, describing material changes to net assets. The full consolidated statement of financial position is shown in the consolidated financial statements.

The decline in non-current assets was largely due to a decrease in financial instruments held by central counterparties. This asset item is matched by a liability item in the same amount.

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, since €599.1 million in bonds maturing in the 2018 financial year are shown under "other current liabilities".

Consolidated balance sheet (extract)

	30 Jun 2017 €m	30 Jun 2016 €m
ASSETS		
Non-current assets	11,838.0	16,362.7
thereof intangible assets	4,105.5	3,968.3
thereof goodwill	2,773.9	2,719.2
thereof other intangible assets	927.9	870.0
thereof financial assets	1,739.1	2,002.1
thereof receivables and securities from banking business	1,581.6	1,676.9
thereof financial instruments held by central counterparties	5,815.5	10,212.0
Current assets	153,115.3	210,626.0
thereof financial instruments held by central counterparties	105,043.4	160,286.9
thereof restricted bank balances	30,127.5	29,175.1
thereof other cash and bank balances	1,415.2	1,498.3
EQUITY AND LIABILITIES		
Equity	4,586.4	4,260.9
Liabilities	160,356.4	222,727.8
thereof non-current liabilities	8,001.8	13,299.9
thereof financial instruments held by central counterparties	5,815.5	10,212.0
thereof interest-bearing liabilities	1,687.3	2,543.7
thereof deferred tax liabilities	228.1	226.2
thereof current liabilities	152,365.1	209,427.9
thereof liabilities from banking business	16,100.9	18,876.3
thereof financial instruments held by central counterparties	104,544.0	159,747.1
thereof cash deposits by market participants	30,127.5	29,175.1

Report on post-balance sheet date events

For details on the investigation proceedings by the prosecutor's office against the Chief Executive Officer of Deutsche Börse AG see the risk report.

Risk report

Deutsche Börse Group provides detailed information on its operating environment, strategy, principles, organisation, processes, methods and concepts of its risk management in its 2016 financial report on pages 73 to 95. The assessment of operational, financial, business and project-related risks did not change significantly in the period under review.

Operational risks for Deutsche Börse Group relate to availability, processing, material goods, as well as litigation and business practice. Further information concerning operational risk and the measures to mitigate them can be found in Deutsche Börse Group's 2016 financial report on pages 82 to 88.

In its 2012 corporate report, Deutsche Börse Group informed about proceedings, Peterson vs Clearstream Banking S.A., the first Peterson proceeding, initiated by various plaintiffs seeking turnover of certain customer positions held in Clearstream Banking S.A.'s securities omnibus account with Citibank NA, and asserting direct claims against Clearstream Banking S.A. for damages of US$250 million. That matter was settled between Clearstream Banking S.A. and the plaintiffs and the direct claims against Clearstream Banking S.A. were abandoned.

In July 2013, the US court ordered turnover of the customer positions to the plaintiffs, ruling that these were owned by Bank Markazi, the Iranian central bank. Bank Markazi appealed, and the decision was affirmed on 9 July 2014 by the Second Circuit Court of Appeals, and then by the US Supreme Court on 20 April 2016. Once the process of distribution of funds to the plaintiffs is complete, a related case, Heiser vs Clearstream Banking S.A., also seeking turnover of the same assets, should be dismissed.

On 30 December 2013, a number of US plaintiffs from the first Peterson case, as well as other US plaintiffs, filed a complaint targeting turnover of certain blocked assets that Clearstream Banking S.A. holds as a custodian in Luxembourg. In 2014, the defendants in this action, including Clearstream Banking S.A., moved to dismiss the case. On 19 February 2015, the US court issued a decision granting the defendants' motions and dismissing the lawsuit. On 6 March 2015, the plaintiffs appealed the decision to the Second Circuit Court of Appeals, which heard oral arguments in the case on 8 June 2016.

On 2 April 2014, Clearstream Banking S.A. was informed that the United States Attorney for the Southern District of New York has opened a grand jury investigation against Clearstream Banking S.A. due to Clearstream Banking S.A.'s conduct with respect to Iran and other countries subject to US sanction laws. Clearstream Banking S.A. is cooperating with the US attorney.

On 14 October 2016, a number of US plaintiffs filed a complaint naming Clearstream Banking S.A. and other entities as defendants. The complaint in this proceeding, Havlish vs Clearstream Banking S.A., is based on similar assets and allegations as in the Peterson proceedings. The complaint seeks turnover of certain assets that Clearstream Banking S.A. holds as a custodian in Luxembourg. The complaint also asserts direct claims against Clearstream Banking S.A. and other defendants and purports to seek damages of up to approximately US$6.6 billion plus punitive damages and interest.

A dispute has arisen between MBB Clean Energy AG (MBB), the issuer of a bond eligible in Clearstream Banking AG, and end investors. MBB issued a first tranche of the bond in April 2013 and a second tranche of the bond in December 2013. The global certificates for the two tranches of the bond were delivered into Clearstream Banking AG by the paying agent of the issuer. The dispute relates to the non-payment of the second tranche of the bond with a nominal value of €500 million and the purported lack of validity of the bond. Clearstream Banking AG's role in the dispute on the purported lack of validity of the MBB Clean Energy AG bond is primarily to safekeep the global note, deposited by the paying agent of the issuer, as national central securities depository. At this stage, it is unclear if and to what extent potential damages exist and if so who would ultimately be responsible. Insolvency proceedings have meanwhile been opened in respect of the issuer, MBB Clean Energy AG.

On 1 February 2017, Deutsche Börse AG announced that the public prosecutor's office in Frankfurt/Main investigated at Deutsche Börse AG in respect of a share purchase by its Chief Executive Officer which was carried out on 14 December 2015 in implementation of the Executive Board's remuneration programme as approved by the Supervisory Board of Deutsche Börse AG. On 18 July 2017, the public prosecutor's office in Frankfurt/Main transferred a notification of hearing to Deutsche Börse AG. According to this notification of hearing the public prosecutor's office intends to formally involve the company in the ongoing investigation proceedings against the Chief Executive Officer of the company, Carsten Kengeter. In the notification of hearing the public prosecutor, with regard to the company, holds out the prospect that two fines totalling €10.5 million could be imposed on Deutsche Börse AG in accordance with section 30 Gesetz über Ordnungswidrigkeiten (OWiG, German Act on Regulatory Offences) due to an alleged violation of the insider trading prohibition in December 2015 and an alleged failure to disclose an ad hoc announcement in January 2016. The obligatory review of the notification of hearing by the company is currently ongoing, taking into account all the relevant facts. Following the consultation of experts, the company continues to believe the allegations made are unfounded in all respects. According to IFRS requirements, the Group has recognised provisions amounting to €10.5 million in this respect in the second quarter of 2017.

Deutsche Börse Group is exposed to financial risks mainly in the form of credit risk and liquidity risk in the financial institutions of the Clearstream Holding group and Eurex Clearing AG. In addition, the Group's cash investments and receivables are subject to credit risk. The majority of cash investments involve short-term transactions that are collateralised, thus minimising liquidity risk as well as market price risk from cash investments. Market price risk is immaterial for the entire Group. Further information on financial risks can be found on pages 88 to 93 of the 2016 financial report.

Business risk reflects the sensitivity of the Group to macroeconomic developments and its vulnerability to event risk, such as regulatory initiatives or changes in the competitive environment. In addition, it includes the Group's strategic risk, which relates to the impact of risk on the business strategy and any resulting adjustment to the strategy. Furthermore, external factors such as a lack of investor confidence in the financial markets may impact financial performance. Further information concerning business risks can be found on pages 93 and 94 of the 2016 financial report.

Currently, the Group is pursuing several major projects. These are constantly monitored to identify risks at an early stage and enable appropriate countermeasures to be taken. Further information concerning project risks can be found in the 2016 financial report on page 94.

The Group evaluates its risk situation on an ongoing basis. Taking into account the stress test calculations performed, the required economic capital and earnings at risk as well as the risk management system, which it considers to be effective, the Executive Board of Deutsche Börse AG is of the opinion that the risk-bearing capacity of the Group is sufficient. A significant change in the Group's risk profile cannot be identified by the Executive Board at present.

Report on opportunities

Deutsche Börse Group's management of opportunities aims to identify and assess opportunities as early as possible and to initiate appropriate measures in order to take advantage of opportunities and transform them into business success. At present, the Executive Board cannot identify any significant change in the Group's opportunities that were described in detail in the 2016 corporate report on pages 95 to 100. The implementation of products and services identified as growth opportunities is based on the "Accelerate" growth strategy, which is described in more detail in the corporate report.

Report on expected developments

The report on expected developments describes how Deutsche Börse Group is expected to perform in financial year 2017. It contains statements and information on events in the future. These forward-looking statements and information are based on the company's expectations and assumptions at the time of publication of this report. In turn, these are subject to known and unknown opportunities, risks and uncertainties. Numerous factors influence the Group's success, its business strategy and financial results. Many of these factors are outside the company's control. Should opportunities, risks, or uncertainties materialise or one of the assumptions made turn out to be incorrect, the actual development of the Group could deviate either positively or negatively from the expectations and assumptions contained in the forward-looking statements and information contained in this report on expected developments.

Deutsche Börse Group is not planning any fundamental change to its operating policies in the coming years.

Development of results of operations

For the remainder of financial year 2017, Deutsche Börse Group does not expect any material deviation from the forecasts for its operating environment made in its 2016 consolidated financial statements. However, during the first half-year, volatility on equity markets in particular was very low indeed – also reflected in the development of net revenue, which was up 3 per cent year-on-year during the first six months, yet fell short of the Group's target growth rate of between 5 per cent and 10 per cent for the full year 2017.

Breaking down net revenue increases and decreases by cyclical and structural factors, the Group generated net revenue growth of around 5 per cent that was attributable to structural factors. Key drivers of this growth were Clearstream's national and international custody, funds and collateral management businesses, the index business at MD+S, as well as new products and volatility derivatives at Eurex. Whilst cyclical factors provided support in Clearstream's banking business and for trading activities in interest rate derivatives, overall they led to a decline in Deutsche Börse Group's net revenue, mainly due to a decline in traded index derivative contracts. Adding consolidation effects, this resulted in net revenue declining by 2 per cent.

For the full year, the company expects the structural growth observed during the first six months to continue during the second half of the year. Given that 'Brexit' negotiations regarding the United Kingdom's exit from the European Union have now commenced, and in view of the impending elections in Germany and Italy in autumn, equity market volatility could furthermore increase temporarily during the second half of 2017 – at least temporarily. Assuming an improvement in this factor, which is decisive for traded volumes, net revenue driven by cyclical factors is also set to rise on aggregate during the second half of the year.

Against this background, from Deutsche Börse Group's view it is still possible to achieve the lower end of the forecast range of between 5 per cent and 10 per cent for its financial year 2017. Net revenue growth expected during the forecast period is based on pro-forma net revenue of approximately €2,389 million achieved in 2016.

Within the scope of its "Accelerate" growth strategy, in 2015, Deutsche Börse Group introduced principles for managing operating costs (incl. depreciation and amortisation). The core element of these principles is to ensure the scalability of the Group's business model. To this end, the Group continuously manages operating costs (incl. depreciation and amortisation) adjusted for non-recurring items relative to the development of net revenue.

With regard to the forecast earnings growth of 10 to 15 per cent, it is Deutsche Börse Group's view that it is still possible to reach the low end of the forecast range, especially in case of rising stock market volatility.

The assumptions on which the forecast is based, together with the reconciliation of net revenue and operating costs (incl. depreciation and amortisation), are set out on pages 100 to 107 of the 2016 financial report.

Development of the Group's financial position

The company expects cash flows from operating activities to remain clearly positive in the future; these are Deutsche Börse Group's main financing instrument. In the period under review, the company plans to invest amounts of around €150 million per year in intangible assets and property at Group level. The investments will serve primarily to develop new products and services in the Eurex and Clearstream segments and enhance existing ones. The total mainly comprises investments in the trading infrastructure and risk management functionalities.

Within the framework of a programme to optimise its capital structure, 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's 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 preserve a stable distribution to shareholders. Given that the Group's profit targets were raised in July 2015, in connection with the announcement of the "Accelerate" growth strategy, the company aims for a dividend payout ratio in the middle of the range between 40 and 60 per cent going forward.

Moreover, until 2012 the company distributed a part of freely available funds to shareholders, via share buy-backs. Since 2013, these funds have been used predominantly to support the company's development, as well as to fulfil credit rating and regulatory capital requirements. Against the background of the growth strategy "Accelerate", the company anticipates that in future, freely available funds will increasingly be applied not only to support the Group's organic growth, but also to complementary external growth options.

Consolidated income statement

for the period 1 January to 30 June 2017

	Note	Quarter ended 30 Jun 2017 €m	30 Jun 2016 €m	Six months ended 30 Jun 2017 €m	30 Jun 2016 €m
Sales revenue		663.4	644.8	1,329.8	1,303.2
Net interest income from banking business		33.5	21.1	63.4	39.7
Other operating income	4	9.1	5.8	15.3	10.4
Total revenue		**706.0**	**671.7**	**1,408.5**	**1,353.3**
Volume-related costs		–82.4	–71.0	–161.5	–142.1
Net revenue (total revenue less volume-related costs)		**623.6**	**600.7**	**1,247.0**	**1,211.2**
Staff costs		–159.4	–140.9	–311.3	–283.5
Other operating expenses	5	–112.0	–143.6	–233.7	–282.2
Operating costs[1]		**–271.4**	**–284.5**	**–545.0**	**–565.7**
Result from equity investments		1.6	–5.4	119.2	–3.8
Earnings before interest, tax, depreciation and amortisation (EBITDA)		**353.8**	**310.8**	**821.2**	**641.7**
Depreciation, amortisation and impairment losses		–39.6	–31.8	–75.5	–62.8
Financial income		0.5	1.0	2.9	1.2
Financial expense		–18.6	–18.8	–39.3	–39.2
Earnings before tax (EBT)		**296.1**	**261.2**	**709.3**	**540.9**
Other tax		–0.3	–0.4	–0.7	–0.7
Income tax expense		–115.4	–71.0	–241.9	–145.1
Net profit for the period from continuing operations		**180.4**	**189.8**	**466.7**	**395.1**
Net profit for the period from discontinued operations		**–**	**563.6**	**–**	**570.4**
Net profit for the period		**180.4**	**753.4**	**466.7**	**965.5**
Net profit for the period attributable to Deutsche Börse AG shareholders		176.3	747.1	456.4	952.5
Net profit for the period attributable to non-controlling interests		4.1	6.3	10.3	13.0
Earnings per share (basic) (€)		**0.94**	**4.00**	**2.44**	**5.10**
from continuing operations		0.94	0.98	2.44	2.05
from discontinued operations		–	3.02	–	3.05
Earnings per share (diluted) (€)		**0.94**	**4.00**	**2.44**	**5.10**
from continuing operations		0.94	0.98	2.44	2.05
from discontinued operations		–	3.02	–	3.05

1) Since the second quarter of 2017, operating costs have contained staff costs and other operating expenses; depreciation, amortisation and impairment losses are disclosed separately. Prior-year figures have been adjusted accordingly.

Consolidated statement of comprehensive income

for the period 1 January to 30 June 2017

	Note	30 Jun 2017 €m	Quarter ended 30 Jun 2016 €m	30 Jun 2017 €m	Six months ended 30 Jun 2016 €m
Net profit for the period reported in consolidated income statement		**180.4**	**753.4**	**466.7**	**965.5**
Items that will not be reclassified to profit or loss:	8				
Changes from defined benefit obligations		–1.1	–31.7	24.7	–56.3
Deferred taxes		0.3	8.6	–6.7	15.4
		–0.8	**–23.1**	**18.0**	**–40.9**
Items that may be reclassified subsequently to profit or loss:	8				
Exchange rate differences from continuing operations		–14.3	–9.9	–12.4	–2.2
Other income from investments from continuing operations accounted for using the equity method		–0.2	–0.2	0.8	–0.6
Exchange rate differences from discontinued operations		–	–139.4	–	–200.7
Remeasurement of cash flow hedges		–1.6	0.7	–1.9	1.4
Remeasurement of other financial instruments		4.4	85.8	–82.1	90.7
Deferred taxes from continuing operations		3.1	–39.1	45.0	–39.6
Deferred taxes from discontinued operations		–	123.5	–	147.2
		–8.6	**21.4**	**–50.6**	**–3.8**
Other comprehensive income after tax		**–9.4**	**–1.7**	**–32.6**	**–44.7**
Total comprehensive income		**171.0**	**751.7**	**434.1**	**920.8**
thereof Deutsche Börse AG shareholders		170.4	745.9	426.9	908.4
thereof non-controlling interests		0.6	5.8	7.2	12.4
Total comprehensive income attributable to Deutsche Börse AG shareholders					
thereof continuing operations		170.4	198.2	426.9	391.5
thereof discontinued operations		–	547.7	–	516.9

Consolidated balance sheet

as at 30 June 2017

Assets

	30 Jun 2017 €m	31 Dec 2016 €m	30 Jun 2016 €m
NON-CURRENT ASSETS			
Intangible assets			
Software	309.9	203.8	206.3
Goodwill	2,773.9	2,721.1	2,719.2
Payments on account and construction in progress	93.8	188.9	172.8
Other intangible assets	927.9	859.9	870.0
	4,105.5	**3,973.7**	**3,968.3**
Property, plant and equipment			
Fixtures and fittings	35.2	35.9	35.8
Computer hardware, operating and office equipment	74.2	75.4	64.3
Payments on account and construction in progress	1.6	2.2	1.7
	111.0	**113.5**	**101.8**
Financial assets			
Investments in associates and joint ventures	35.5	34.3	31.6
Other equity investments	93.0	255.4	274.5
Receivables and securities from banking business	1,581.6	1,604.8	1,676.9
Other financial instruments	28.6	26.0	18.4
Other loans	0.4	0.4	0.7
	1,739.1	**1,920.9**	**2,002.1**
Financial instruments of the central counterparties	5,815.5	5,856.6	10,212.0
Other non-current assets	9.6	13.2	11.8
Deferred tax assets	57.3	62.5	66.7
Total non-current assets	**11,838.0**	**11,940.4**	**16,362.7**
CURRENT ASSETS			
Receivables and other current assets			
Financial instruments of the central counterparties	105,043.4	107,909.6	160,286.9
Receivables and securities from banking business	15,756.1	13,465.5	18,268.3
Trade receivables	494.7	669.8	414.2
Receivables from related parties	1.1	2.0	2.0
Income tax receivables	106.2	107.6	98.7
Other current assets	171.1	514.2	880.8
Assets held for sale	–	–	1.7
	121,572.6	**122,668.7**	**179,952.6**
Restricted bank balances	30,127.5	27,777.6	29,175.1
Other cash and bank balances	1,415.2	1,458.1	1,498.3
Total current assets	**153,115.3**	**151,904.4**	**210,626.0**
Total assets	**164,953.3**	**163,844.8**	**226,988.7**

Equity and liabilities

	30 Jun 2017 €m	31 Dec 2016 €m	30 Jun 2016 €m
EQUITY			
Subscribed capital	193.0	193.0	193.0
Share premium	1,327.8	1,327.8	1,326.0
Treasury shares	–311.4	–311.4	–315.5
Revaluation surplus	18.8	41.5	5.6
Accumulated profit	3,230.8	3,231.4	2,910.4
Shareholders' equity	**4,459.0**	**4,482.3**	**4,119.5**
Non-controlling interests	127.4	142.2	141.4
Total equity	**4,586.4**	**4,624.5**	**4,260.9**
NON-CURRENT LIABILITIES			
Provisions for pensions and other employee benefits	149.3	167.9	204.2
Other non-current provisions	114.0	117.0	110.8
Deferred tax liabilities	228.1	235.7	226.2
Interest-bearing liabilities	1,687.3	2,284.7	2,543.7
Financial instruments of the central counterparties	5,815.5	5,856.6	10,212.0
Other non-current liabilities	7.6	7.9	3.0
Total non-current liabilities	**8,001.8**	**8,669.8**	**13,299.9**
CURRENT LIABILITIES			
Tax provisions	349.7	274.3	295.2
Other current provisions	139.1	178.3	104.8
Financial instruments of the central counterparties	104,544.0	107,479.4	159,747.1
Liabilities from banking business	16,100.9	13,840.3	18,876.3
Other bank loans and overdrafts	14.2	0.1	18.6
Trade payables	270.5	471.2	210.8
Liabilities to related parties	1.1	3.6	1.1
Cash deposits by market participants	30,127.5	27,777.6	29,175.1
Other current liabilities	818.1	525.7	998.9
Total current liabilities	**152,365.1**	**150,550.5**	**209,427.9**
Total liabilities	**160,366.9**	**159,220.3**	**222,727.8**
Total equity and liabilities	**164,953.3**	**163,844.8**	**226,988.7**

Consolidated cash flow statement

for the period 1 January to 30 June 2017

	Note	Six months ended 30 Jun 2017 €m	30 Jun 2016 €m
Net profit for the period		466.7	965.5
Depreciation, amortisation and impairment losses	6	75.5	67.1
Increase/(decrease) in non-current provisions		3.1	–14.2
Deferred tax expense/(income)	8	24.0	–10.7
Other non-cash expense/(income)		45.2	–2.6
Changes in working capital, net of non-cash items:		113.3	81.8
Decrease/(increase) in receivables and other assets		141.4	–15.3
(Decrease)/increase in current liabilities		–27.8	98.1
Decrease in non-current liabilities		–0.3	–1.0
Net loss/(gain) on disposal of non-current assets		1.4	–567.4
Cash flows from operating activities excluding CCP positions		**729.2**	**519.5**
Changes from liabilities from CCP positions		–440.1	630.5
Changes in receivables from CCP positions		384.9	159.1
Cash flows from operating activities		**674.0**	**1,309.1**
Payments to acquire intangible assets		–49.0	–58.3
Payments to acquire property, plant and equipment		–18.1	–19.0
Payments to acquire non-current financial instruments		–315.0	–80.9
Payments to acquire investments in associates and joint ventures		–8.0	0
Payments to acquire subsidiaries, net of cash acquired		–157.5	4.3
Effects of the disposal of (shares in) subsidiaries, net of cash disposed		0	917.3
Net decrease in current receivables and securities from banking business with an original term greater than three months		909.8	14.6
Proceeds from disposals of available-for-sale non-current financial instruments		608.3	5.9
Cash flows from investing activities		**970.5**	**783.9**

	Note	Six months ended 30 Jun 2017 €m	30 Jun 2016 €m
Payments to non-controlling interests		–10.8	–3.4
Repayment of short-term financing		0	–495.0
Proceeds from short-term financing		0	400.0
Dividends paid		–439.0	–420.1
Cash flows from financing activities		**–449.8**	**–518.5**
Net change in cash and cash equivalents		1,194.7	1,574.5
Effect of exchange rate differences		–1.7	27.9
Cash and cash equivalents as at beginning of period		–146.9	–1,579.4
Cash and cash equivalents as at end of period	13	**1,046.1**	**23.0**
Additional information to payments reflected within cash flows from operating activities:			
Interest income and other similar income		179.5	90.6
Dividends received		4.3	2.1
Interest paid		–148.2	–82.4
Income tax paid		–102.7	–169.6

Consolidated statement of changes in equity

for the period 1 January to 30 June 2017

				thereof included in total comprehensive income	
			Six months ended		Six months ended
	Note	30 Jun 2017 €m	30 Jun 2016 €m	30 Jun 2017 €m	30 Jun 2016 €m
Subscribed capital					
Balance as at 1 January		193.0	193.0		
Balance as at 30 June		**193.0**	**193.0**		
Share premium					
Balance as at 1 January		1,327.8	1,326.0		
Balance as at 30 June		**1,327.8**	**1,326.0**		
Treasury shares					
Balance as at 1 January		–311.4	–315.5		
Balance as at 30 June		**–311.4**	**–315.5**		
Revaluation surplus	8				
Balance as at 1 January		41.5	–5.3		
Changes from defined benefit obligations		24.7	–56.3	24.7	–56.3
Remeasurement of other financial instruments		–82.1	90.7	–82.1	90.7
Remeasurement of cash flow hedges		–1.1	1.4	–1.1	1.4
Deferred taxes		35.8	–24.9	35.8	–24.9
Balance as at 30 June		**18.8**	**5.6**		
Accumulated profit	2, 8				
Balance as at 1 January		3,231.4	2,357.9		
Dividends paid		–439.0	–420.1	0	0
Acquisition of the interest of non-controlling shareholders in European Energy Exchange AG		–6.5	0	0	0
Net profit for the period attributable to Deutsche Börse AG shareholders		456.4	952.5	456.4	952.5
Exchange rate differences and other adjustments		–13.7	–127.8	–9.0	–202.9
Deferred taxes		2.2	147.9	2.2	147.9
Balance as at 30 June		**3,230.8**	**2,910.4**		
Shareholders' equity as at 30 June		**4,459.0**	**4,119.5**	**426.9**	**908.4**

	Note	30 Jun 2017 €m	Six months ended 30 Jun 2016 €m	thereof included in total comprehensive income 30 Jun 2017 €m	Six months ended 30 Jun 2016 €m
Shareholders' equity (brought forward)		4,459.0	4,119.5	426.9	908.4
Non-controlling interests					
Balance as at 1 January		142.2	139.0		
Acquisition of the interest of non-controlling shareholders in European Energy Exchange AG		7.3	0	0	0
Changes due to capital increases	8	–29.6	–9.8	0	0
Changes due to share in net income of subsidiaries for the period	8	10.3	13.0	10.3	13.0
Exchange rate differences and other adjustments		–2.8	–0.8	–3.1	–0.6
Total non-controlling interests as at 30 June		127.4	141.4	7.2	12.4
Total as at 30 June		4,586.4	4,260.9	434.1	920.8

Notes to the interim financial statements

Basis of preparation

1. Accounting policies

Deutsche Börse AG ("the company") is incorporated as a German public limited company ("börsennotierte Kapitalgesellschaft") and is domiciled in Germany. The company's registered office is in Frankfurt/Main.

The interim financial statements have been prepared in compliance with the International Financial Reporting Standards (IFRSs) and the related interpretations issued by the Financial Reporting Standards Interpretations Committee (IFRIC), as adopted by the European Union in accordance with Regulation No. 1606/2002 of the European Parliament and of the Council on the application of International Accounting Standards.

The endorsement proceedings for the adoption into EU law of the amendments made to IAS 12 "Recognition of Deferred Tax Assets for Unrealised Losses", IAS 7 "Statement of Cash Flows" (IASB Disclosure Initiative), and IFRS 12 "Disclosure of Interests in Other Entities" (Annual Improvements Project 2014–2016) have not been completed. These amendments have no impact on the presentation of the financial statements; accordingly, the interim financial statements are also consistent with IFRSs in the version published by the International Accounting Standards Board (IASB).

No additional amendments and interpretations to those that were applied as at 31 December 2016 have been applied in this half-yearly financial report.

Furthermore, IAS 34 ("Interim Financial Reporting") was applied. The income tax expense for the interim reporting period was calculated using a forecast effective Group tax rate of 27 per cent. The nominal tax rates used when calculating the Group tax rate ranged between 12.5 and 40 per cent. Deferred tax assets were recognised for tax loss carry-forwards at the end of the interim reporting period where these can be expected to be realised within the next five tax periods.

In accordance with the provisions of the Wertpapierhandelsgesetz (WpHG, German Securities Trading Act), these interim financial statements are supplemented by a Group interim management report. Both parts of the report were subject to a review by the external auditors ("prüferische Durchsicht").

2. Group structure

European Energy Exchange AG, Leipzig, Germany, (EEX) founded EEX US Holdings, Inc., Wilmington, Delaware (USA), as a wholly owned subsidiary in March 2017. With effect from 3 May 2017, EEX US Holdings acquired 100 per cent of the equity in Nodal Exchange Holdings, LLC, Tysons Corner, Virginia (USA), (Nodal Exchange). Part of the transaction was carried out indirectly by EEX US Holdings acquiring the shares in Lex Holdings II, LLC, Wilmington, Delaware (USA). Nodal Exchange is a regulated derivatives exchange which offers over 1,000 electric power and natural gas contracts at hundreds of unique locations allowing market participants to hedge against price risks in the United

States. All of the transactions on Nodal Exchange are cleared through its clearing house, Nodal Clear, LLC, Tysons Corner, Virginia (USA), a derivatives clearing organisation under the Commodity Exchange Act that is regulated by the U.S. Commodity Futures Trading Commission (CFTC).

The purchase price was US$206.9 million (€189.6 million) paid in cash. Since the completion of the transaction on 3 May 2017, EEX US Holdings, together with the other entities acquired as part of the transaction, has been fully consolidated into the consolidated financial statements of Deutsche Börse AG.

The preliminary purchase price allocation is based on the following assumptions:

Goodwill resulting from the business combination with Nodal Exchange group

	Preliminary goodwill calculation 3 May 2017 €m
Consideration transferred	
Purchase price	189.6
Non-controlling interests	–47.3
Acquired bank balances	–13.8
Total consideration	**128.5**
Acquired assets and liabilities	
Customer relationships	55.0
Exchange and clearing licences	24.5
Trade names	4.9
Software and other intangible assets	5.8
Other non-current assets	0.2
Restricted bank balances	421.0
Other current assets	2.3
Cash deposits by market participants	–402.7
Deferred tax liabilities on temporary differences	–9.0
Other current liabilities	–1.5
Non-controlling interests	–28.5
Total assets and liabilities acquired	**72.0**
Goodwill (partly tax-deductible)	**56.5**

The acquired goodwill resulting from the transaction amounts to US$61.6 million (€56.5 million), and mainly reflects expected revenue synergies to be generated by higher trading volumes given that Nodal Exchange is part of a larger corporate group, which will increase the attractiveness of its service and product offerings. Furthermore, Deutsche Börse expects that the global gas business will profit from the shared customer base.

The full consolidation of Nodal Exchange group generated a rise of US$2.0 million (€1.7 million) in sales revenue as well as an increase of US$ 56.7 thousand (€50.2 thousand) in earnings after tax and offsetting of non-controlling interests. Full consolidation as at 1 January 2017 would have led to a rise of US$8.4 million (€7.7 million) in sales revenue and an increase of US$ 1.0 million (€0.9 million) in earnings after tax and offsetting of non-controlling interests.

As described in note 2 of the 2016 financial report, Deutsche Börse AG exercised a call option on shares of Tradegate AG Wertpapierhandelsbank, Berlin, Germany, (Tradegate AG) on 21 December 2016. After the regulatory approval was granted on 24 April 2017, Deutsche Börse AG increased its interest by 4.96 percentage points. In addition, Deutsche Börse AG further increased its interest in Tradegate AG by 0.18 percentage points on 13 July 2017, improving its shareholding to 20 per cent minus one share. Tradegate AG continues to be classified as an associate and is accounted for using the equity method.

The shares held in Index Marketing Solutions Limited, London, United Kingdom, which was classified as an associate and accounted for using the equity method, were divested on 9 March 2017.

With effect from 12 April 2017, the company name of Global Markets Exchange Group International LLP, London, United Kingdom, was changed to LDX International Group LLP.

3. Seasonal influences and valuations

The Group's revenues are influenced more by the volatility and the transaction volumes on the capital markets than by seasonal factors. Owing to a concentration of costs for projects only coming to completion in the fourth quarter, costs in the fourth quarter tend to be higher than in the first three quarters of the financial year.

Consolidated income statement disclosures

4. Other operating income (continuing operations)

Composition of other operating income

	Quarter ended		Six months ended	
	30 Jun 2017 €m	30 Jun 2016 €m	30 Jun 2017 €m	30 Jun 2016 €m
Rental income from sublease contracts	0.2	0.2	0.6	0.5
Income from agency agreements	0.4	0.1	0.6	0.2
Income from impaired receivables	0.2	0.3	0.4	1.0
Miscellaneous	8.3	5.2	13.7	8.7
Total	**9.1**	**5.8**	**15.3**	**10.4**

5. Other operating expenses (continuing operations)

Composition of other operating expenses

	Quarter ended 30 Jun 2017 €m	30 Jun 2016 €m	Six months ended 30 Jun 2017 €m	30 Jun 2016 €m
Costs for IT service providers and other consulting services	30.6	76.4	79.2	138.5
IT costs	22.8	24.2	46.7	48.1
Premises expenses	18.1	16.3	35.3	33.2
Non-recoverable input tax	10.7	10.4	20.2	22.8
Travel, entertainment and corporate hospitality expenses	5.4	6.0	11.1	11.7
Advertising and marketing costs	4.1	–0.8	7.6	0.9
Non-wage labour costs and voluntary social benefits	4.4	3.4	7.6	6.7
Insurance premiums, contributions and fees	3.8	3.7	7.0	6.8
Cost of agency agreements	0.9	0.9	1.8	1.8
Supervisory Board remuneration	0.5	1.4	1.4	2.0
Miscellaneous	10.7	1.7	15.8	9.7
Total	**112.0**	**143.6**	**233.7**	**282.2**

Costs for IT service providers and other consulting services relate mainly to expenses in connection with software development. These costs also contain expenses for strategic and legal consulting services as well as for audit activities.

Consolidated balance sheet disclosures

6. Intangible assets and property, plant and equipment

As at 30 June 2017, intangible assets amounted to €4,105.5 million (31 December 2016: €3,973.7 million).

This item primarily consists of goodwill in the amount of €2,773.9 million (31 December 2016: €2,721.1 million), other intangible assets (licences, trade names and customer relationships) in the amount of €927.9 million (31 December 2016: €859.9 million), internally developed software in the amount of €277.3 million (31 December 2016: €168.3 million) as well as payments on account and construction in progress of €93.8 million (31 December 2016: €188.9 million).

The increase in goodwill of €52.8 million was primarily due to the reveal of hidden reserves in connection with the initial consolidation of Nodal Exchange group (€56.5 million; see note 2 for further details), and to currency translation effects (€3.6 million).

The increase in other intangible assets in the amount of €68.0 million was particularly driven by the changes to the basis of consolidation described above (see note 2), contributing €84.4 million. This was partly offset by amortisation in the amount of €13.0 million.

The increase in internally developed software in the amount of €109.0 million was primarily due to reclassifications from construction in progress (€137.3 million). The reclassifications largely concern the development of solutions connected to the migration to the pan-European securities settlement platform (TARGET2-Securities) within the Clearstream and Xetra segments as well as the development of the "One CLS Settlement & Reporting" system in the Clearstream segment. This was partly offset by amortisation in the amount of €33.9 million as well as additions recognised in connection with the changes to the basis of consolidation described above (€3.5 million).

The decline in construction in progress in the amount of €95.1 million mainly comprises additions (€41.6 million), additions recognised in connection with the changes to the basis of consolidation (€2.2 million; see note 2) as well as reclassifications into internally developed software (€137.3 million).

Property, plant and equipment totalled €111.0 million as at 30 June 2017 (31 December 2016: €113.5 million).

7. Financial assets

Financial assets totalled €1,739.1 million as at 30 June 2017 (31 December 2016: €1,920.9 million). The decline was primarily due to the decrease in other equity investments in the amount of €162.4 million given the disposal of the shares held in BATS Global Markets Inc. and CBOE Holdings Inc.

Due to the unsatisfactory economic development of a company in which Deutsche Börse AG holds an interest, an impairment loss totalling €1.0 million was recognised in the first six months of 2017 (H1/2016: €6.1 million).

8. Equity

In financial year 2017, equity decreased by €38.1 million to €4,586.4 million (31 December 2016: €4,624.5 million). It includes net profit for the period attributable to Deutsche Börse AG shareholders of €456.4 million and the dividend in the amount of €439.0 million distributed by Deutsche Börse AG that had an offsetting effect.

The decline of €22.7 million in the revaluation surplus is mainly due to the changes in defined benefit obligations and the revaluation of an existing subsidiary.

Exchange rate differences and deferred taxes thereon recognised directly in equity in the total amount of €–6.8 million had an impact on the change in equity.

Non-controlling interests decreased by €14.8 million in the reporting period.

9. Pension provisions

Pension provisions are measured using the projected unit credit method in accordance with IAS 19 on the basis of actuarial reports. As at 30 June 2017, the discount rate for pension plans and other employee benefits was 1.90 per cent in Germany and Luxembourg (31 December 2016: 1.75 per cent; 30 June 2016: 1.50 per cent); in Switzerland, the discount rate used was unchanged as against year-end 2016, at 0.60 per cent (30 June 2016: 0.80 per cent).

10. Interest-bearing liabilities

The euro bonds issued by Deutsche Börse AG have a carrying amount of €2,286.4 million (31 December 2016: €2,284.7 million) and a fair value of €2,441.8 million (31 December 2016: €2,457.7 million). This total amount comprises the following items: €1,687.3 million recognised in "interest-bearing liabilities" (31 December 2016: €2,284.7 million) as well as bonds maturing in the 2018 financial year disclosed under "other current liabilities" in the amount of €599.1 million (31 December 2016: nil).

11. Total assets

The decline in consolidated total assets by €6.9 billion to €165.0 billion as at 30 June 2017 (31 March 2017: €171.9 billion) depends to a significant extent on the financial instruments of the central counterparties, receivables and liabilities from banking business as well as cash deposits by market participants. The level of these items can vary widely on a daily basis according to customers' needs and actions.

12. Fair value hierarchy

Financial assets and liabilities that are measured at fair value are allocated to the following three hierarchy levels: financial assets and liabilities are allocated to level 1 if there is a quoted price for identical assets and liabilities in an active market that can be accessed by the entity. They are allocated to level 2 if the inputs on which fair value measurement is based are observable either directly or indirectly; these inputs must be based on market expectations. Financial assets and liabilities are allocated to level 3 if the fair value is determined on the basis of unobservable inputs.

As at 30 June 2017, financial assets and liabilities measured at fair value were allocated to the hierarchy levels 1 to 3 as follows:

Fair value hierarchy

	Fair value as at 30 Jun 2017	thereof attributable to:		
		Level 1	Level 2	Level 3
	€m	€m	€m	€m
Recurrently carried at fair value				
ASSETS				
Financial assets held for trading				
Derivatives				
Non-current financial instruments of the central counterparties	5,815.5	0	5,815.5	0
Current financial instruments of the central counterparties	104,934.7	0	104,934.7	0
Current receivables and securities from banking business	0.7	0	0.7	0
Other non-current assets	0.1	0	0	0.1
Total	**110,751.0**	**0**	**110,750.9**	**0.1**
Available-for-sale financial assets				
Equity instruments				
Other equity investments	45.9	39.3	0	6.6
Total	**45.9**	**39.3**	**0**	**6.6**
Debt instruments				
Other financial instruments	24.5	24.5	0	0
Non-current receivables and securities from banking business	1,581.6	1,581.6	0	0
Current receivables and securities from banking business	351.2	351.2	0	0
Total	**1,957.3**	**1,957.3**	**0**	**0**
Total assets	**112,754.2**	**1,996.6**	**110,750.9**	**6.7**
LIABILITIES				
Financial liabilities held for trading				
Derivatives				
Non-current financial instruments of the central counterparties	–5,815.5	0	–5,815.5	0
Current financial instruments of the central counterparties	–104,435.3	0	–104,435.3	0
Liabilities from banking business	–84.6	0	–84.6	0
Other non-current liabilities	–1.5	0	0	–1.5
Other current liabilities	–1.9	0	0	–1.9
Contingent purchase price components				
Other non-current liabilities	–0.2	0	0	–0.2
Total liabilities	**–110,339.0**	**0**	**–110,335.4**	**–3.6**

As at 30 June 2016, financial assets and liabilities measured at fair value were allocated to the hierarchy levels 1 to 3 as follows:

Fair value hierarchy

	Fair value as at 30 Jun 2016	thereof attributable to:		
		Level 1	Level 2	Level 3
	€m	€m	€m	€m
Recurrently carried at fair value				
ASSETS				
Financial assets held for trading				
Derivatives				
Non-current financial instruments of the central counterparties	10,212.0	0	10,212.0[1]	0
Current financial instruments of the central counterparties	159,367.7	0	159,367.7[1]	0
Current receivables and securities from banking business	22.3	0	22.3	0
Total	**169,602.0**	**0**	**169,602.0**	**0**
Available-for-sale financial assets				
Equity instruments				
Other equity investments	214.5	207.9	0	6.6
Total	**214.5**	**207.9**	**0**	**6.6**
Debt instruments				
Other financial instruments	18.4	18.4	0	0
Non-current receivables and securities from banking business	1,676.9	1,676.9	0	0
Current receivables and securities from banking business	461.2	461.2	0	0
Total	**2,156.5**	**2,156.5**	**0**	**0**
Total assets	**171,973.0**	**2,364.4**	**169,602.0**	**6.6**
LIABILITIES				
Financial liabilities held for trading				
Derivatives				
Non-current financial instruments of the central counterparties	10,212.0	0	10,212.0[1]	0
Current financial instruments of the central counterparties	158,827.9	0	158,827.9[1]	0
Liabilities from banking business	2.2	0	2.2	0
Other current liabilities	3.9	0	0	3.9
Contingent purchase price components				
Other non-current liabilities	1.0	0	0	1.0
Other current liabilities	0.1	0	0	0.1
Total liabilities	**169,047.1**	**0**	**169,042.1**	**5.0**

1) Classification adjusted

During the first half of 2017, the value of an investment was measured at fair value for the first time. Due to the stock exchange listing of this company, prices were available on active markets in March 2017 and the investment was allocated to level 1.

Financial assets and financial liabilities listed in levels 2 and 3 are measured as follows.

The derivatives listed in level 2 comprise forward foreign exchange transactions. The fair value of the forward foreign exchange transactions is determined on the basis of the forward foreign exchange rates for the remaining period to maturity as at the balance sheet date.

The fair value of the financial instruments held by central counterparties allocated to level 2 is determined by market transactions for identical or similar assets in markets that are not active and by option pricing models based on observable market prices.

As at the balance sheet date, the items allocated to level 3 and their measurements were as follows:

Development of financial instruments in level 3

	Assets			Liabilities		Total
	Other equity investments €m	Other non-current €m	Other current €m	Other non-current €m	Other current €m	€m
Balance as at 1 Jan 2017	**6.5**	**0.1**	**0.3**	**–1.7**	**–6.7**	**–1.5**
Diposals	–0.4	0	–0.3	0	1.4	0.7
Unrealised capital gains recognised in income	0	0	0	0	3.4	3.4
Other operating income	0	0	0	0	3.4	3.4
Changes recognised in the revaluation surplus	0.5	0	0	0	0	0.5
Balance as at 30 Jun 2017	**6.6**	**0.1**	**0**	**–1.7**	**–1.9**	**3.1**

The value of an equity investment listed in level 3 is reviewed annually by the issuer, who may initiate transactions. In the first half of 2017, fair value measurement led to a €0.5 million gain recognised directly in equity.

At the beginning of the first half of 2017, this item included an equity fund, the fair value of which was calculated on the basis of the net asset value determined by the issuer. The shares held in the equity fund were entirely disposed during the first two quarters of the year, translating into disposals of €0.4 million.

As at 30 June 2017, the carrying amount of the call option disclosed under “other non-current assets” totalled €0.1 million, as before.

The item “other current assets” declined by €0.3 million during the second quarter of 2017 given that the underlying business was fulfilled.

As at 30 June 2017, the fair value of the purchase price component disclosed under “other non-current liabilities” totalled €0.2 million, as before. The purchase price component is measured on the basis of an internal discounted-cash-flow model, which discounts the expected future payment obligations to the measurement date using interest rates that are appropriate to the risk.

At the beginning of the year, the item “other non-current liabilities” included derivative financial instruments from an incentive programme of Eurex Frankfurt AG, with a carrying amount of €1.5 million. As at the reporting date of 30 June 2017, the carrying amount was unchanged, at €1.5 million. The item “other current liabilities” included derivative financial instruments from an incentive programme of Eurex Clearing AG, with a carrying amount of €3.4 million. As at 30 June 2017, the carrying amount was €1.9 million. At 31 January 2017, the first tranche of Eurex Clearing AG’s incentive programme expired. Accordingly, the derivative was disposed of (€1.4 million recognised directly in equity), and derecognised through profit or loss (€0.1 million). The resulting income was disclosed as “other operating income”. The financial instruments were regularly measured at fair value through profit or loss using an internal model at the quarterly reporting dates. The model takes into account the criteria underlying the conditional repayment of the grant made by Eurex Clearing AG, and Eurex Frankfurt AG. The criteria include, in particular, non-financial indicators such as the expected number of customers in a specific market segment as well as expected trading volumes. They are continuously monitored, while taking into account possible adjustments. In order to do this, customer information is also used. Since this is an internal model, the parameters can differ from those of the settlement date. However, the derivative financial instruments will not exceed an amount of €3.0 million, and €1.5 million, respectively: this amount arises if the beneficiaries of the incentive programme fulfil the conditions and a repayment of the contribution is not taken into consideration.

Furthermore, derivative financial instruments related to contingent repayment claims in connection with advance payments disclosed under the “other current liabilities” item were derecognised through profit or loss (€3.3 million). The resulting income was disclosed as “other operating income”.

The fair values of other financial assets and liabilities not measured at fair value are derived as follows:

The bonds issued by Deutsche Börse Group have a fair value of €2,441.8 million (31 December 2016: €2,457.7 million) and are disclosed under “interest-bearing liabilities”. Thereof, €599.1 million (31 December 2016: nil) are disclosed under “other current liabilities”. The fair value of such instruments is based on the debt instruments’ quoted prices. Hence, debt instruments were allocated to level 2.

The carrying amounts of the following items represent a reasonable approximation of their fair value:

- unlisted equity instruments whose fair value generally cannot be reliably determined on a continuous basis and which are reported under the “financial assets” item; these are carried at cost less any impairment losses
- other loans, which are reported under “financial assets”
- other receivables and other assets as well as current receivables from banking business, to the extent that these are measured at amortised cost
- restricted bank balances
- cash and other bank balances
- cash deposits by market participants
- other current liabilities

Other disclosures

13. Reconciliation to cash and cash equivalents

Reconciliation to cash and cash equivalents

	30 Jun 2017 €m	1 Jan 2017 €m
Restricted bank balances	30,127.5	27,777.6
Other cash and bank balances	1,415.2	1,458.1
Financial instruments of the central counterparties (netted)	499.4	430.2
less bank loans and overdrafts	–14.2	–0.1
	32,027.9	**29,665.8**
Reconciliation to cash and cash equivalents		
Current receivables and securities from banking business	15,756.1	13,465.5
less loans to banks and customers with an original maturity of more than three months	–158.3	–1,068.1
less available-for-sale debt instruments	–351.2	–592.2
Current liabilities from banking business	–16,100.9	–13,840.3
Current liabilities from cash deposits by market participants	–30,127.5	–27,777.6
	–30,981.8	**–29,812.7**
Cash and cash equivalents	**1,046.1**	**–146.9**

14. Earnings per share

Under IAS 33, earnings per share are calculated by dividing the net profit for the period attributable to Deutsche Börse AG shareholders by the weighted average number of shares outstanding.

Diluted earnings per share are determined by adding the number of potentially dilutive ordinary shares that may be acquired under the share-based payment programmes to the average number of shares. In order to calculate the number of potentially dilutive ordinary shares, the exercise prices were adjusted by the fair value of the services still to be provided.

When determining diluted earnings per share, all stock bonus plan (SBP) and long-term sustainable investment (LSI) tranches for which cash settlement has not been resolved are assumed to be equity-settled – regardless of the actual accounting in accordance with IFRS 2.

There were the following potentially dilutive rights to purchase shares as at 30 June 2017:

Calculation of the number of potentially dilutive ordinary shares

Tranche	Exercise price €	Adjustment of the exercise price according to IAS 33[1)] €	Average number of outstanding options 30 Jun 2017	Average price for the period[2)] €	Number of potentially dilutive ordinary shares 30 Jun 2017
2013	0	0	12,780	89.03	12,780
2014[3)]	0	0	19,566	89.03	19,566
2017[4)]	0	0	11,208	89.03	11,208

1) According to IAS 33.47 (a) for share options and other share-based payment arrangements, the issue price and the exercise price shall include the fair value of any goods or services to be supplied to the entity in the future under the share option or other share-based payment arrangement.
2) Volume-weighted average price of Deutsche Börse AG shares on Xetra for the period 1 January to 30 June 2017
3) This relates to share options under the Long-term Sustainable Instrument for senior executives. As the 2014 tranche options will only be granted in future financial years, the number indicated for the balance sheet date may change subsequently.
4) This relates to share options under the Group Share Plan (GSP).

As the volume-weighted average share price was higher than the adjusted exercise prices for the 2014 tranche, these options are considered dilutive under IAS 33 as at 30 June 2017.

Calculation of earnings per share (basic and diluted)

	Quarter ended 30 Jun 2017	 30 Jun 2016	Six months ended 30 Jun 2017	 30 Jun 2016
Number of shares outstanding as at beginning of period	186,805,015	186,723,986	186,805,015	186,723,986
Number of shares outstanding as at end of period	186,805,015	186,723,986	186,805,015	186,723,986
Weighted average number of shares outstanding	186,805,015	186,723,986	186,805,015	186,723,986
Number of potentially dilutive ordinary shares	40,482	119,587	43,554	36,805
Weighted average number of shares used to compute diluted earnings per share	186,845,497	186,843,573	186,848,569	186,760,791
Net income for the period (€m)	176.3	747.1	456.4	952.5
from continued operations (€m)	176.3	183.5	456.4	382.1
from non-continued operations (€m)	–	563.6	–	570.4
Earnings per share (basic) (€)	**0.94**	**4.00**	**2.44**	**5.10**
from continued operations (€)	0.94	0.98	2.44	2.05
from non-continued operations (€)	–	3.02	–	3.05
Earnings per share (diluted) (€)	**0.94**	**4.00**	**2.44**	**5.10**
from continued operations (€)	0.94	0.98	2.44	2.05
from non-continued operations (€)	–	3.02	–	3.05

As at 30 June 2017, 18,402 options were excluded from the calculation of the weighted average number of potentially dilutive shares, as their effect during the reporting period is not dilutive.

15. Segment reporting (continuing operations)

Composition of sales revenue by segment

		Quarter ended		Six months ended
	30 Jun 2017 €m	30 Jun 2016 €m	30 Jun 2017 €m	30 Jun 2016 €m
External sales revenue				
Eurex	264.3	270.2	535.3	556.1
Xetra	48.0	46.5	97.3	95.9
Clearstream	252.4	230.8	505.7	456.3
Market Data + Services	98.7	97.3	191.5	194.9
Total external sales revenue	**663.4**	**644.8**	**1,329.8**	**1,303.2**
Internal sales revenue				
Clearstream	0.7	1.9	3.0	3.8
Market Data + Services	10.5	10.0	20.2	21.3
Total internal sales revenue	**11.2**	**11.9**	**23.2**	**25.1**

Net interest income from banking business

		Quarter ended		Six months ended
	30 Jun 2017 €m	30 Jun 2016 €m	30 Jun 2017 €m	30 Jun 2016 €m
Gross interest income				
Eurex	53.7	38.1	97.9	76.1
Clearstream	41.5	11.8	81.0	23.4
Total gross interest income	**95.2**	**49.9**	**178.9**	**99.5**
Interest expense				
Eurex	–46.1	–32.8	–84.5	–65.1
Clearstream	–15.6	4.0	–31.0	5.3
Total interest expense	**–61.7**	**–28.8**	**–115.5**	**–59.8**
Total	**33.5**	**21.1**	**63.4**	**39.7**

Net revenue

		Quarter ended		Six months ended
	30 Jun 2017 €m	30 Jun 2016 €m	30 Jun 2017 €m	30 Jun 2016 €m
Eurex[1)]	263.3	261.7	530.4	539.0
Xetra	43.4	41.1	86.4	84.5
Clearstream[1)]	216.1	196.3	436.7	387.3
Market Data + Services[1)]	100.8	101.6	193.5	200.4
Total	**623.6**	**600.7**	**1,247.0**	**1,211.2**

1) Effective as from Q1/2017, revenue generated in connection with managed services is disclosed within the Clearstream segment, and revenue generated in connection with the development of a central platform for the intraday power market (XBID) is disclosed within the Eurex segment. Both had been previously disclosed in the Market Data + Services segment. Amounts for 2016 have been adjusted accordingly.

Operating costs[1)]

		Quarter ended		Six months ended
	30 Jun 2017	30 Jun 2016	30 Jun 2017	30 Jun 2016
	€m	€m	€m	€m
Eurex	117.3	110.0	230.6	226.4
Xetra	21.3	23.4	45.3	44.1
Clearstream	97.9	103.5	196.4	202.2
Market Data + Services	34.9	47.6	72.7	93.0
Total	**271.4**	**284.5**	**545.0**	**565.7**

1) Since the second quarter of 2017, operating costs have contained staff costs and other operating expenses; depreciation, amortisation and impairment losses are disclosed separately. Prior-year figures have been adjusted accordingly.

Earnings before interest, tax, depreciation and amortisation (EBITDA)

		Quarter ended		Six months ended
	30 Jun 2017	30 Jun 2016	30 Jun 2017	30 Jun 2016
	€m	€m	€m	€m
Eurex	145.3	145.6	416.2	307.8
Xetra	24.4	18.5	43.9	41.2
Clearstream	118.2	92.7	240.3	185.3
Market Data + Services	65.9	54.0	120.8	107.4
Total	**353.8**	**310.8**	**821.2**	**641.7**

Investment in intangible assets and property, plant and equipment

		Six months ended
	30 Jun 2017	30 Jun 2016
	€m	€m
Eurex	21.4	23.2
Xetra	4.6	4.1
Clearstream	30.5	30.8
Market Data + Services	10.7	8.9
Total	**67.2**	**67.0**

16. Financial liabilities and other risks

Interest-bearing liabilities

The following expected payment obligations arose from interest-bearing liabilities as at 30 June 2017:

Expected payment obligations from interest-bearing liabilities

	Expected payment obligations at	
	30 Jun 2017 €m	30 Jun 2016 €m
Up to 1 year	645.6	60.9
1 to 5 years	739.0	1,635.6
More than 5 years	1,146.8	1,169.1
Total	**2,531.4**	**2,865.6**

Other risks

Peterson vs Clearstream Banking S.A., Citibank NA et al. ("Peterson I") and Heiser vs Clearstream Banking S.A.
In its 2012 corporate report, Deutsche Börse Group informed about proceedings, Peterson vs Clearstream Banking S.A., the first Peterson proceeding, initiated by various plaintiffs seeking turnover of certain customer positions held in Clearstream Banking S.A.'s securities omnibus account with its US depository bank, Citibank NA, and asserting direct claims against Clearstream Banking S.A. for damages of US$250 million. That matter was settled between Clearstream Banking S.A. and the plaintiffs and the direct claims against Clearstream Banking S.A. were dismissed.

In July 2013, the US court ordered turnover of the customer positions to the plaintiffs, ruling that these were owned by Bank Markazi, the Iranian central bank. Bank Markazi appealed, and the decision was affirmed on 9 July 2014 by the Second Circuit Court of Appeals, and then by the US Supreme Court on 20 April 2016. Once the process of distribution of funds to the plaintiffs is complete, a related case, Heiser vs Clearstream Banking S.A., also seeking turnover of the same assets, should be dismissed.

Peterson vs Clearstream Banking S.A. ("Peterson II")
On 30 December 2013, a number of US plaintiffs from the first Peterson case, as well as other US plaintiffs, filed a complaint targeting certain blocked assets that Clearstream Banking S.A. holds as a custodian in Luxembourg. In 2014, the defendants in this action, including Clearstream Banking S.A., moved to dismiss the case. On 19 February 2015, the US court issued a decision granting the defendants' motions and dismissing the lawsuit. On 6 March 2015, the plaintiffs appealed the decision to the Second Circuit Court of Appeals who held oral proceedings on 8 June 2016.

Criminal investigations against Clearstream Banking S.A.
On 2 April 2014, Clearstream Banking S.A. was informed that the United States Attorney for the Southern District of New York has opened a grand jury investigation against Clearstream Banking S.A. due to Clearstream Banking S.A.'s conduct with respect to Iran and other countries subject to US sanction laws. Clearstream Banking S.A. is cooperating with the US attorney.

Havlish vs Clearstream Banking S.A. ("Havlish")
On 14 October 2016, a number of US plaintiffs filed a complaint naming Clearstream Banking S.A. and other entities as defendants. The complaint in this proceeding, Havlish vs Clearstream Banking S.A., is based on similar assets and allegations as in the Peterson proceedings. The complaint seeks turnover of certain assets that Clearstream Banking S.A. holds as a custodian in Luxembourg. The complaint also asserts direct claims against Clearstream Banking S.A. and other defendants and purports to seek damages of up to approximately US$6.6 billion plus punitive damages and interest.

Dispute between MBB Clean Energy AG and end investors
A dispute has arisen between MBB Clean Energy AG (MBB), the issuer of a bond eligible in Clearstream Banking AG, and end investors. MBB issued a first tranche of the bond in April 2013 and a second tranche of the bond in December 2013. The global certificates for the two tranches of the bond were delivered into Clearstream Banking AG by the paying agent of the issuer. The dispute relates to the non-payment of the second tranche of the bond with a nominal value of €500 million and the purported lack of validity of the bond. Clearstream Banking AG's role in the dispute on the purported lack of validity of the MBB Clean Energy AG bond is primarily to safekeep the global note, deposited by the paying agent of the issuer as national central securities depository. At this stage, it is unclear if and to what extent potential damages exist and if so who would ultimately be responsible. Insolvency proceedings have meanwhile been opened in respect of the issuer, MBB Clean Energy AG.

Investigations by public prosecutor
On 1 February 2017, Deutsche Börse AG announced that the public prosecutor's office in Frankfurt/Main investigated at Deutsche Börse AG in respect of a share purchase by its Chief Executive Officer which was carried out on 14 December 2015 in implementation of the Executive Board's remuneration programme as approved by the Supervisory Board of Deutsche Börse AG. Such programme provides for an investment of the Executive Board members in shares of Deutsche Börse AG. On 18 July 2017, the public prosecutor's office in Frankfurt/Main transferred a notification of hearing to Deutsche Börse AG. According to this notification of hearing the public prosecutor's office intends to formally involve the company in the ongoing investigation proceedings against the Chief Executive Officer of the company, Carsten Kengeter. In the notification of hearing the public prosecutor, with regard to the company, holds out the prospect that two fines totalling €10.5 million could be imposed on Deutsche Börse AG in accordance with section 30 Gesetz über Ordnungswidrigkeiten (OWiG, German Act on Regulatory Offences) due to an alleged violation of the insider trading prohibition in December 2015 and an alleged failure to disclose an ad hoc announcement in January 2016. The obligatory review of the notification of hearing by the company is currently ongoing, taking into account all the relevant facts. Following the consultation of experts, the company continues to believe the allegations made are unfounded in all respects. According to IFRS requirements, the Group has recognised provisions amounting to €10.5 million in this respect in the second quarter of 2017.

In addition to the matters described above and in prior disclosures, Deutsche Börse Group is from time to time involved in various legal proceedings that arise in the ordinary course of its business. Deutsche Börse Group recognises provisions for litigation and regulatory matters when it has a present obligation from an event in the past, an outflow of resources with economic benefit to settle the obligation is probable and it is possible to reliably estimate the amount. In such cases, there may be an exposure to loss in excess of the amounts accrued. When these conditions are not met, Deutsche Börse Group does not recognise a provision. As a litigation or regulatory matter develops, Deutsche Börse Group evaluates on an ongoing basis whether the requirements to recognise a provision are met. Deutsche Börse Group may not be able to predict what the eventual loss or range of loss related to such matters will be. Deutsche Börse Group does not believe, based on currently available information, that the results of any of these various proceedings will have a material adverse effect on its financial statements as a whole.

Tax risks

Due to its business activities in various countries, Deutsche Börse Group is exposed to tax risks. A process has been developed to recognise and evaluate these risks, which – in the first place – are recognised depending on the probability they will arise. In a second step, these risks are measured on the basis of their expected value. In case it is more probable than not that the risks will arise, a tax provision is recognised. Deutsche Börse Group continuously reviews if the preconditions for the recognition of corresponding tax provisions are met.

17. Material business transactions with related parties

Related parties as defined by IAS 24 are members of the executive bodies of Deutsche Börse AG as well as the companies classified as associates of Deutsche Börse AG, investors and investees, and companies that are controlled or significantly influenced by members of the executive bodies.

Business relationships with related parties

The following table shows transactions entered into within the scope of business relationships with non-consolidated companies of Deutsche Börse AG during the first six months of 2017. All transactions were concluded at prevailing market terms.

Transactions with related parties

	Amount of the transactions revenues – quarter ended 30 Jun		Amount of the transactions expenses – quarter ended 30 Jun		Amount of the transactions revenues – six months ended 30 Jun		Amount of the transactions expenses – six months ended 30 Jun		Outstanding balances receivables as at 30 Jun		Outstanding balances liabilities as at 30 Jun	
	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m	2017 €m	2016 €m
Associates	3.3	3.0	–4.5	–2.9	6.3	6.2	–8.4	–5.2	1.5	2.6	–1.2	–0.6
Joint ventures	0	0.3	0	0	0	0.3	0	0	0	0	0	0
Other shareholdings	0	0	0	–0.6	0	0	0	–0.6	0	0	0	–0.6
Total sum of business transactions	**3.3**	**3.3**	**–4.5**	**–3.5**	**6.3**	**6.5**	**–8.4**	**–5.8**	**1.5**	**2.6**	**–1.2**	**–1.2**

Monetary business relationships with key management personnel

Key management personnel are persons who directly or indirectly have authority and responsibility for planning, directing and controlling the activities of Deutsche Börse Group. The Group defines the members of the Executive Board and the Supervisory Board as key management personnel for the purposes of IAS 24.

European Commodity Clearing Luxembourg S.à r.l., Luxembourg, (ECC Luxembourg), – a subsidiary of European Commodity Clearing AG and therefore a member of the EEX group – entered into an agency agreement for the exercise of the managing director function with IDS Lux S.à r.l., Luxembourg. The subject of the agreement is to provide a natural person for the function of managing director in the management of ECC Luxembourg. In addition to this position as managing director of ECC Luxembourg, this person is also a member of the key management personnel at IDS Lux S.à r.l. During the first half of 2017, ECC Luxembourg paid approximately €7.0 thousand for these management services.

A member of the board of directorss of STOXX Ltd., Zurich, Switzerland, also holds a key management position within law firm Lenz & Staehelin AG, Geneva, Switzerland. Deutsche Börse Group reported expenses to this law firm of approximately €234.5 thousand in the first half of 2017.

On the board of directors of Powernext SA, Paris, France – one of the subsidiaries of European Energy Exchange AG, Leipzig, Germany – there are representatives of Powernext SA's other shareholders. These shareholder representatives also hold key positions in Powernext SA's shareholder companies, GRTgaz, Bois-Colombes, France, parent company of 3GRT, Tarascon, France, and EDEV S.A., Courbevoie, France. During the first six months of 2017, Powernext SA rendered development and maintenance services for customised software solutions in the area of market coupling and balancing, as well as in connection with an electronic trading platform for 3GRT. In this context, the company generated €262.0 thousand in revenue during the first half of 2017.

The board of directors of LuxCSD S.A., Luxembourg, an associate from Deutsche Börse Group's perspective, comprises two members of management of fully consolidated subsidiaries within Deutsche Börse Group who are maintaining a leading position within these subsidiaries, too. LuxCSD S.A. holds business transactions with Clearstream Banking S.A., Luxembourg, Clearstream Services S.A., Luxembourg, Clearstream International S.A., Luxembourg, and Clearstream Banking AG, Frankfurt/Main, Germany. Within the scope of these transactions there have been expenses in the amount of €496.4 thousand and revenue in the amount of €914.1 thousand during the first six months of 2017.

Furthermore, an executive board member of Clearstream Banking AG concurrently holds an executive position within Deutsche Börse Commodities GmbH, Frankfurt/Main, Germany, an associate of Deutsche Börse Group. In the first half of 2017, Deutsche Börse Group generated approximately €1,778.6 thousand in revenue as well as €7,694.5 thousand in expenses with Deutsche Börse Commodities GmbH.

Two members of Deutsche Börse AG's Executive Board are members of the supervisory board of China Europe International AG, Frankfurt/Main, Germany, (CEINEX) as well. This company is a joint venture of Shanghai Stock Exchange Ltd., Shanghai, China, China Financial Futures Exchange, Shanghai, China, and Deutsche Börse AG. In the first half of 2017, Deutsche Börse Group generated approximately €76.1 thousand in revenue and €8.4 thousand in expenses with CEINEX.

Other business relationships with key management personnel

Selected executives of Deutsche Börse Group subsidiaries also hold key management positions within the Clearstream pension fund ("association d'épargne-pension", ASSEP). This defined benefit plan, established in favour of Luxembourg staff of Clearstream International S.A., Clearstream Banking S.A., as well as Clearstream Services S.A., is funded through cash payments to the ASSEP under Luxembourg law.

18. Employees (continuing operations)

Employees

	Quarter ended		Six months ended	
	30 Jun 2017	30 Jun 2016	30 Jun 2017	30 Jun 2016
Average number of employees during the period	5,575	5,098	5,491	5,083
Employed as at the balance sheet date	5,613	5,116	5,613	5,116

The increase in the number of employees results largely from the internalisation of external service providers.

There was an average of 5,183 full-time equivalent (FTE) employees during the second quarter of 2017 (Q2/2016: 4,730).

19. Events after the balance sheet date

For details on the investigation proceedings by the public prosecutor's office against the Chief Executive Officer of Deutsche Börse AG see note 16.

Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles for interim financial reporting, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group in accordance with German accepted accounting principles, and the interim management report of the Group includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group for the remaining months of the financial year.

Frankfurt/Main, 26 July 2017

Deutsche Börse AG
The Executive Board

Carsten Kengeter

Andreas Preuss

Gregor Pottmeyer

Hauke Stars

Jeffrey Tessler

Review report

To Deutsche Börse Aktiengesellschaft, Frankfurt/Main

We have reviewed the condensed interim consolidated financial statements – comprising the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated cash flow statement, consolidated statement of changes in equity and selected explanatory notes – together with the interim group management report of Deutsche Börse Aktiengesellschaft, Frankfurt/Main, for the period from 1 January to 30 June 2017 that are part of the semi annual financial report according to § 37 w WpHG ("Wertpapierhandelsgesetz": "German Securities Trading Act"). The preparation of the condensed interim consolidated financial statements in accordance with IAS 34 "Interim Financial Reporting" as adopted by the EU, and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports, is the responsibility of the company's management. Our responsibility is to issue a report on the condensed interim consolidated financial statements and on the interim group management report based on our review.

We performed our review of the condensed interim consolidated financial statements and the interim group management report in accordance with the German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the review so that we can preclude through critical evaluation, with a certain level of assurance, that the condensed interim consolidated financial statements have not been prepared, in material aspects, in accordance with IAS 34 "Interim Financial Reporting" as adopted by the EU, and that the interim group management report has not been prepared, in material aspects, in accordance with the requirements of the WpHG applicable to interim group management reports. A review is limited primarily to inquiries of company employees and analytical assessments and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot issue an auditor's report.

Based on our review, no matters have come to our attention that cause us to presume that the condensed interim consolidated financial statements have not been prepared, in material respects, in accordance with IAS 34 "Interim Financial Reporting" as adopted by the EU, or that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports.

Frankfurt/Main, 26 July 2017

KPMG AG Wirtschaftsprüfungsgesellschaft

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