DEUTSCHE BÖRSE
GROUP

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Financial report 2015

Excerpt: risk report

Risk report

Deutsche Börse Group's core area of expertise includes solutions that enable its customers to efficiently manage risk and collateral. It is therefore all the more important for the Group to protect itself against risk. This section of the combined management report shows how the company deals with risk. Despite the continuing tensions in the financial system and the regulatory developments, the Group's risk profile remained largely stable with regard to financial risk. In contrast, operational risk increased. This is reflected in the regulatory capital requirements as well as in the required economic capital. The increase in operational risk is driven in particular by the increasingly international reach of the Group's business and higher availability risks, partially due to the increased threat of cyber crime. In addition, business risk has increased year-on-year. This is primarily due to the possibility of additional regulatory risks as well as increased competition.

Deutsche Börse's senior management further strengthened the Group's risk management in 2015. The first section of this risk report explains the enhanced risk management strategy and demonstrates how the Group manages its risk. In the second part of the report, the Group describes the

Corporate responsibility: key figures for Deutsche Börse Group

		2015	2014
Transparency			
Proportion of companies reporting in accordance with maximum transparency standards[1]	%	91	82
Number of indices calculated		11,403	10,825
Number of sustainable index concepts		35	25
Security and reliability			
Availability of cash market trading system (Xetra®)	%	99.999	99.981
Availability of derivatives market trading system (T7®)	%	99.930	99.986
Market risk cleared via Eurex Clearing (gross monthly average)	€bn	16,746	16,343
Supplier management			
Share of revenue generated with suppliers/service providers that have signed the Code of Conduct or have made voluntary commitments over and above those required under the Code	%	96.6	94.7
Compliance			
Punished cases of corruption		0	0
Proportion of business units reviewed for corruption risk	%	100	100
Number of employees trained in anti-corruption measures[2]		976	518
Number of justified customer complaints relating to data protection		0	0
Environment			
Direct and indirect energy consumption[3]	MWh	70,048	69,901
Greenhouse gas emissions[3]	t	13,997	13,200
thereof travel-based greenhouse gas emissions	t	7,304	7,111
Water consumption (volume of water sourced from municipal utilities)[3]	m³	81,599	70,049
Paper consumption (office supplies)[3]	t	135	105
Cash value of material administrative fines and total number of non-monetary penalties due to non-compliance with legal requirements in the environmental area	€	0	0
Corporate citizenship			
Corporate responsibility project expenses per employee[4]	€	226	383
Corporate volunteering days per employee	days	2	2

1) Ratio of the market capitalisation of companies listed in the Prime Standard (shares) to the market capitalisation of all companies listed on the Frankfurter Wertpapierbörse (FWB®, Frankfurt Stock Exchange) 2) In addition to initial training for new recruits, compliance training is performed at two-year intervals. As a result, the number of employees may differ significantly in a direct year-on-year comparison. 3) Locations in Frankfurt, Luxembourg, Prage, Cork and other centrally managed premises 4) Does not include social benefits or special leave expenses for corporate volunteering; the reduction of these sums in comparison with the previous year results from changes in included items.

main types of risk and shows how it assesses and manages them. In addition to the risk report, the Group sets out its future prospects in the report on opportunities. The third part provides a summary of the risk situation, together with an outlook on future developments in Deutsche Börse Group's risk management.

Deutsche Börse Group includes, among other companies, Clearstream Banking S.A. and Clearstream Banking AG, which form part of the Clearstream Holding group (hereinafter "Clearstream"), and Eurex Clearing AG. These financial institutions are subject to the banking supervision regime and its corresponding statutory requirements, and therefore already meet the strictest requirements for risk management. In addition, European Commodity Clearing AG, Eurex Bonds GmbH and Eurex Repo GmbH are also subject to the regulatory requirements set out in EMIR, CRD IV and MiFID (for details on the requirements, see note 20 to the consolidated financial statements). Rules and regulations directly affect the Group's financial institutions – Clearstream and Eurex Clearing AG, especially the Mindestanforderungen an das Risikomanagement (MaRisk, Minimum Requirements for Risk Management) issued by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin, German Federal Financial Supervisory Authority) and last adapted in December 2012, as well as Circular 12/552 (Central Administration, Internal Governance and Risk Management) issued by the Commission de Surveillance du Secteur Financier (CSSF, Luxembourg Financial Supervisory Authority). The so-called second pillar of Basel II contains requirements on how banks must manage their risks; accordingly, this also applies to Clearstream and Eurex Clearing AG. Moreover, pursuant to the Gesetz zur Abschirmung von Risiken und zur Planung der Sanierung und Abwicklung von Kreditinstituten und Finanzgruppen (RiskAbschG, German Act on Ringfencing and Recovery and Resolution Planning for Credit Institutions and Financial Groups), which was amended to implement the EU Banking Recovery and Resolution Directive (BRRD), Clearstream and Eurex Clearing AG have prepared recovery plans. Over and above this requirement, Deutsche Börse Group has also voluntarily prepared a Group-wide recovery plan – in particular, in the event that a restructuring might become necessary for Clearstream and/or Eurex Clearing AG. In 2014, at the request of the national supervisory authorities, Clearstream and Eurex Clearing AG made a substantial contribution to the resolution plans to be developed by the supervisory authorities. Management expects this work to continue. All other companies in the Group comply with best-in-class standards for comparable companies. As a result, risk management across the Group aims to meet the highest standards.

Deutsche Börse Group wants its risk management services offering to make a sustainable contribution to society. It achieves this in particular by ensuring integrity and safety on the markets in its role as a capital markets organiser, and by increasing the distribution efficiency of the markets through its price discovery function. Deutsche Börse Group also performs important risk management functions for its customers, such as providing client asset protection solutions, and thus contributes to the efficiency and systemic stability of the capital markets. The Group's risk management ensures that it can continuously offer these services. CR

Risk strategy and risk management

Deutsche Börse Group's risk strategy is aligned with its business model and business strategy. The Group provides the infrastructure for reliable and secure capital markets, assists constructively in their regulation and plays a leading role in all of the areas in which it does business. Deutsche Börse Group's risk strategy is based on three core principles:

1. Risk limitation – protecting the company against liquidation and ensuring its continued operation

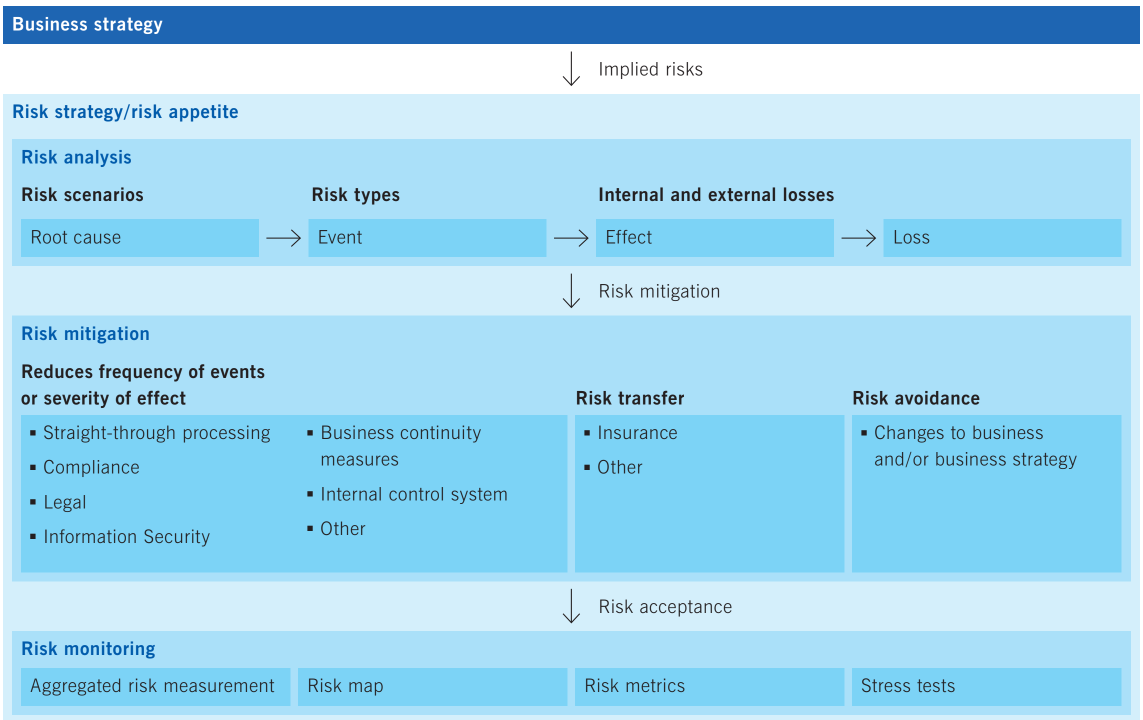
"Capital exhaustion should not occur more than once in 5,000 years and an operating loss may not be generated more than once every hundred years." This means that one goal is to ensure a probability of 99.98 per cent or more that the total capital will not be lost within the next twelve months. Another objective is to guarantee for a probability of 99.0 per cent or more that Deutsche Börse will at least break even, expressed in terms of its EBIT. In other words, this principle establishes how much risk the Group must be able to withstand while also determining its risk appetite.

2. Support for growth in the various business segments
"Risk management supports the business areas in expanding their business by working together to comprehensively identify and communicate risks." This principle aims to permit the Group to make informed strategic decisions within the scope of the risk appetite that it has defined.

3. Appropriate risk/return ratio
"The return on equity should exceed the cost of equity." Deutsche Börse Group has set itself the goal of ensuring that risk and return should be reasonably balanced, both for specific business areas in general and for individual regions, products and customers.

Management enhanced its risk management activities in 2015. Internally, these are based on the Group-wide strategy for detecting and managing risk, which is focused on its risk appetite, see the graphic entitled "Interlocking business strategy and risk strategy". Deutsche Börse AG's Executive Board has overall responsibility, and defines the framework, for risk management throughout the Group. Under these Group-wide risk management requirements, each business segment and each regulated company is responsible for managing its own risk. This coordinated process ensures, for example, that the Group and its companies can act just as quickly and effectively in the event that several systems fail simultaneously as if a single system fails.

Interlocking business strategy and risk strategy



Implementation in the Group's organisational structure and workflow

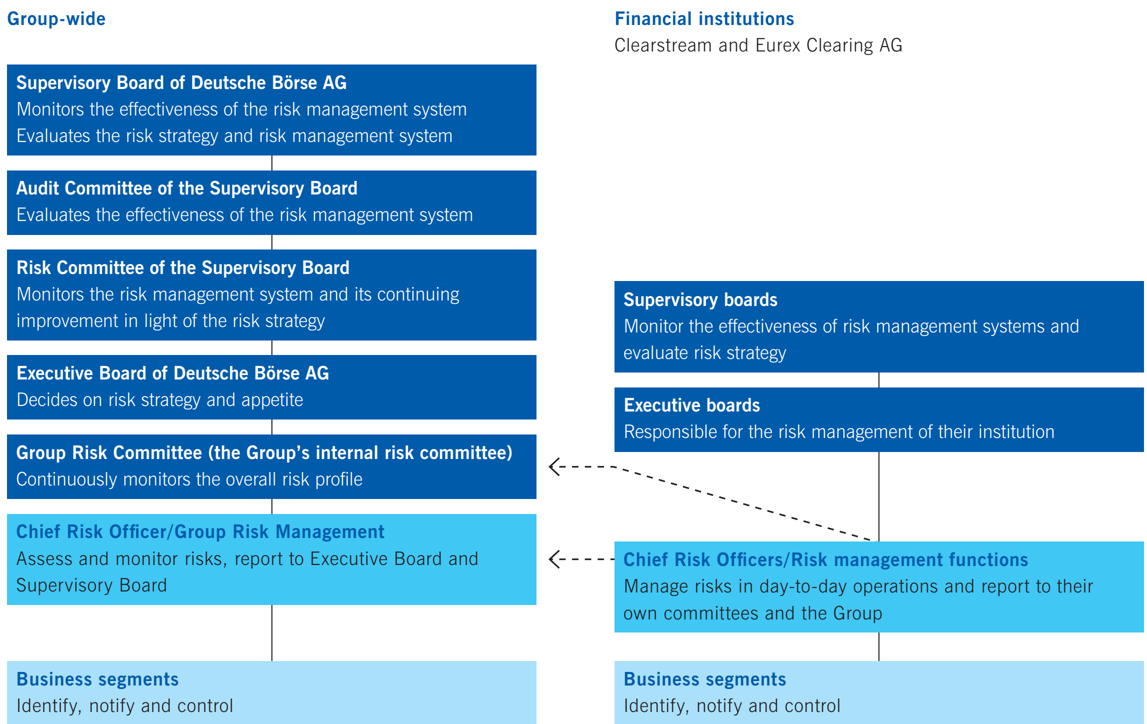
The risk strategy applies to the entire Deutsche Börse Group. Risk management functions, processes and responsibilities are binding for all Group employees and organisational units. To ensure that all employees are risk-aware, risk management is firmly anchored in the Group's organisational structure and workflows and is flanked by measures such as risk management training. The Executive Board is responsible for risk management overall, whereas within the individual companies it is the responsibility of the management. The boards and committees given below regularly receive comprehensive information on risks.

Deutsche Börse AG's Supervisory Board evaluates the effectiveness of the risk management system, its continuing development and oversees the monitoring of risks. The Supervisory Board has delegated the evaluation of the effectiveness of the risk management system to the Audit Committee. The new Risk Committee reviews the risk management system, its continuing improvement and oversees the monitoring of risks. In addition, it examines the risk strategy and risk appetite on an annual basis.

Deutsche Börse AG's Executive Board determines the Group-wide risk strategy and risk appetite and allocates the latter to the company's individual business segments and business units, respectively. It ensures that the Group's risk appetite is and remains compatible with its short- and long-term strategy, business and capital planning, risk-bearing capacity and remuneration systems. It also determines what parameters are used to assess risks, how risk capital is allocated and what procedures apply. It ensures that all business units comply with these requirements for the risk strategy, risk appetite and risk limits.

The Group Risk Committee (GRC) reviews the risk position of the Group every two months and involves the Executive Board in all decisive questions. The GRC is an internal Group committee,

Risk management – organisational structure and reporting lines



chaired by the Chief Financial Officer. In addition, the GRC regularly checks the levels of all parameters for appropriateness and, where necessary, makes recommendations to the Chief Risk Officer or the Executive Board, as to any adjustments that should be made.

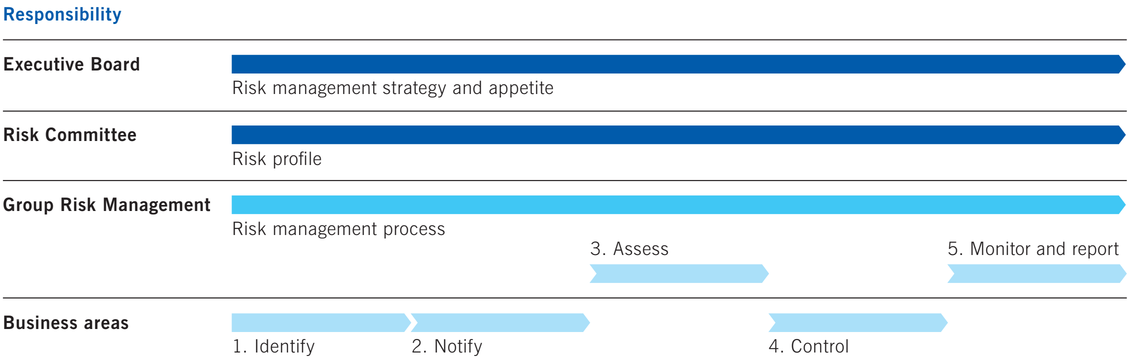
Group Risk Management (GRM) is headed by the Chief Risk Officer (CRO). This unit prepares the proposals to be adopted for risk levers, i.e. the Group's risk strategy, appetite, parameters, capital allocation and procedures. GRM continuously analyses and evaluates risks and produces quantitative and qualitative reports. These are submitted six times a year to the GRC, once a month to the Executive Board, once a quarter to the Risk Committee of the Supervisory Board and twice a year to the Supervisory Board. This system means that the responsible bodies can regularly check whether the risk limits defined in the strategy are being adhered to consistently. In addition, GRM recommends risk management measures.

The Group's regulated subsidiaries act in the same way, always ensuring that they meet the requirements of the Group. In particular, they adhere to the risk appetite framework allocated to them by Deutsche Börse Group. The relevant supervisory boards and their committees are involved in the process, as are the executive boards and the risk management functions within the various business areas. Clearstream and Eurex Clearing AG, the Group's financial institutions, implement customised versions of the risk strategy, using parameters and reporting formats that are compatible with the higher-level, Group-wide structure. At Clearstream, responsibility lies with the executive board of Clearstream Holding AG, which is supervised by its supervisory board, as well as the with corresponding governing bodies of Clearstream Banking S.A. and Clearstream Banking AG; at Eurex Clearing AG, responsibility again lies with the executive board, which is also monitored by the supervisory board.

Centrally coordinated risk management – a five-stage process

Risk management is implemented in a five-stage process. The objective is to identify all potential losses in good time, to record them centrally and to evaluate them in quantitative terms as far as possible; if necessary, management measures must then be recommended and their implementation monitored (see the graphic entitled "The five-stage risk management system"). The first stage identifies the risks and the possible causes of losses or operational hitches. In the second stage, the business areas regularly – or immediately, in urgent cases – report to GRM the risks that they have identified and quantified. In the third stage, GRM assesses the risk exposure, while in the fourth stage, the business areas manage the risks by avoiding, mitigating or transferring them, or by actively accepting them. The fifth and final stage involves, for example, monitoring different risk metrics and, where necessary, informing the responsible Executive Board members and committees of significant risks, their assessment and possible emergency measures. In addition to its regular monthly and quarterly reports, GRM compiles ad hoc reports for members of the executive and supervisory

The five-stage risk management system



boards. The risk management functions at Clearstream and Eurex Clearing AG report to the respective executive boards and supervisory boards. Internal Auditing is responsible for monitoring compliance with the risk management system.

Risk management approaches and methods

Deutsche Börse Group uses quantitative and qualitative risk management approaches and methods to monitor and manage its risk profile. The aim is to provide as complete a picture as possible of its risk situation at all times.

Deutsche Börse Group uses the same approach to assess and report operational, financial and business risk: its unregulated units also use value at risk (VaR) as the uniform measure. This quantifies the risks and represents the upper limit of the accumulated losses that Deutsche Börse Group may incur within a given period of time, e.g. for the next twelve months, and for a given probability or level of confidence. Principle 1 above also defines an assumed probability or confidence level for both liquidation and continued operation as a going concern. In addition, the regulatory capital requirements for the financial institutions are determined. Furthermore, Deutsche Börse Group applies stress tests to analyse its risks.

Liquidation principle: what risk can the capital cover?

The first part of Principle 1 of its risk strategy specifies that Deutsche Börse Group is not expected to exhaust its risk-bearing capacity in more than 0.02 per cent of all years. The Group uses VaR to determine the economic capital that it requires for this (required economic capital or EC). It calculates its EC for the liquidation principle at a confidence level of 99.98 per cent so that it can protect itself financially against extreme events in the following twelve months. In line with the prudence principle, the Group assumes a correlation of one between risk types.The ECs calculated for Clearstream and Eurex Clearing AG also meet the Pillar II requirements under Basel II.

Deutsche Börse Group determines its risk-bearing capacity on the basis of its reported equity in accordance with International Financial Reporting Standards (IFRSs). It adjusts this figure for precautionary reasons, for example to take into account the fact that it may not be possible to dispose of intangible assets at their carrying amounts in cases of extreme stress. Clearstream and Eurex Clearing AG determine their risk-bearing capacity on the basis of their regulatory capital (for details, see note 20 to the consolidated financial statements).

For management purposes, GRM regularly determines the ratio of the EC to the risk-bearing capacity. This indicator is known as the utilisation of risk-bearing capacity and it answers a key risk management question: how much risk can the Group afford and what risk is it currently exposed to? The level of EC required is determined on the basis of operational risk, market risk, credit risk and business risk. The ratio of EC to risk-bearing capacity remained within the stipulated maximum risk throughout the reporting period. If this were not the case, the Group would in a worst-case scenario exhaust its entire risk-bearing capacity and would have to be liquidated ("gone concern"). The liquidation concept therefore assumes that the Group has not had to be liquidated.

Going concern principle: what risks can be absorbed by earnings?

In addition, Deutsche Börse Group uses an approach that assumes an orderly continuation of the Group in the event of a crisis ("going concern") and that uses earnings at risk (EaR) as an indicator. This indicator corresponds to the second part of Principle 1 of the Group's risk strategy, i.e. that an operating loss may occur no more than once in a hundred years. In other words, there should be a probability of 99.0 per cent or more that Deutsche Börse should at least break even (profit for the period expressed in terms of its EBIT). Under the going concern principle, the EaR determined in this way is compared with the Group's risk appetite. Risk appetite is measured in terms of the projected EBIT and is allocated to the business segments.

Regulatory capital requirements
In addition, Clearstream and Eurex Clearing AG must calculate their capital requirements for various risk types (see the graphic entitled “Deutsche Börse Group’s risk profile”) in line with the Pillar I requirements under Basel II and Basel III. A standardised approach is used for analysing and evaluating credit and market risk; risk weightings are applied on the basis of the relevant counterparty ratings.

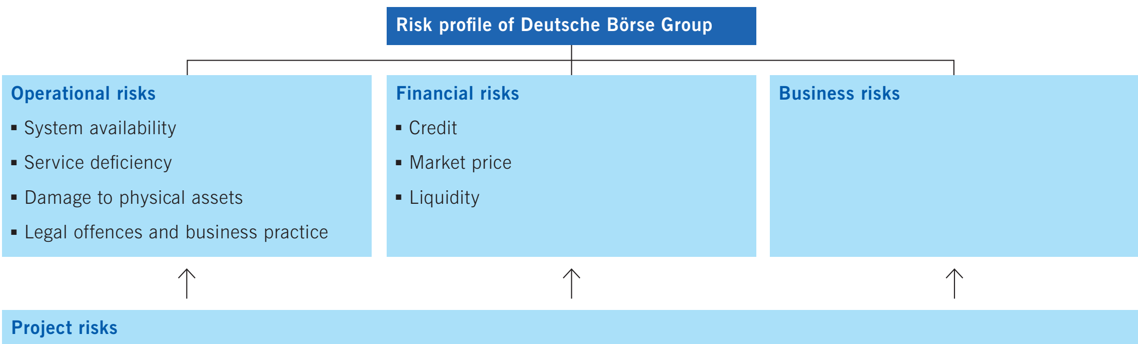
The approach taken for operational risk is different: Clearstream has used the significantly more complex advanced measurement approach (AMA) for this in all business units since 2008. This means that it meets the regulatory capital requirements for operational risk set out in the EU’s Capital Requirements Regulation (CRR). The method – which has been approved and is regularly tested by BaFin – allows regulatory capital to be allocated to the regulated units. Eurex Clearing AG uses the basic indicator approach to calculate its regulatory capital for operational risk. The basic indicator is calculated using the “relevant indicator”, which is derived from certain items in the income statement for the Eurex segment. A flat-rate amount of 15 per cent of the three-year average for this indicator is required as operational risk capital (for details, see note 20 to the consolidated financial statements).

Stress tests
Additionally, Clearstream uses stress tests to analyse its business risk as well as its operational and financial risk. Stress tests are also performed to determine the operational and financial risk at Eurex Clearing AG as well as Group-wide. These stress tests simulate the occurrence of extreme losses or an accumulation of major losses within a single year using defined potential risk scenarios. Both hypothetical scenarios and extreme market conditions that actually occurred in the past are calculated. Losses incurred by the Group itself in the past are not suitable because to date there has been only one case of loss on this scale (the 2013 settlement agreement with the Office of Foreign Assets Control ,OFAC). In addition, liquidity stress tests and inverse stress tests are also performed to establish the liquidity risk. These reverse stress tests determine the loss scenarios that would have to occur for the risk-bearing capacity to be exceeded.

Risk description

The following section describes the types of risk that Deutsche Börse Group generally has to manage and presents the risks it actually faces. It also explains the measures that Deutsche Börse Group uses to reduce the loss event and to minimise their financial effects. Firstly, however, what follows is a brief explanation of the risk profile, which differs from most other financial services providers, since financial risk plays a significantly smaller role for Deutsche Börse Group.

Deutsche Börse Group’s risk profile



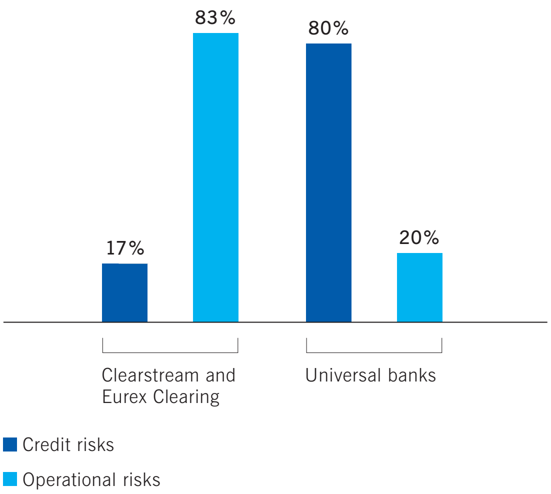
Risk profile
Deutsche Börse Group differentiates between the three standard types of risk: operational, financial and business risk. Project risks also exist but the Group does not specifically quantify these as their impact is already reflected in the three traditional risk types.

Low level of typical bank risk
The risks faced by Deutsche Börse Group's financial institutions differ fundamentally from those of other financial service providers. Clearstream and Eurex Clearing AG have a structurally lower risk in comparison with other banks because they act as intermediaries rather than, for example, having an own distinct business area that trades on the financial markets. Consequently, Deutsche Börse Group's financial institutions do not bear the substantial associated trade risk. On the contrary, they offer market participants services such as collateral and risk management to reduce their risk from trading activities. The Group's banking business mainly consists of providing reliable clearing, settlement and custody services, as well as collateral management.

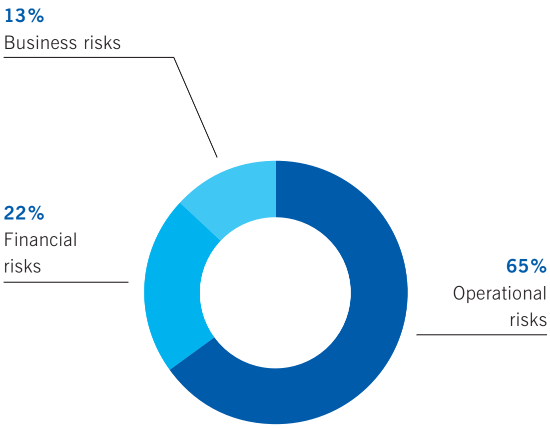
The regulatory capital requirements for Clearstream and Eurex Clearing AG are primarily due to operational risk (see the graphic entitled "Regulatory capital requirements for Clearstream and Eurex Clearing AG"). Information on the additional capital requirements under EMIR for Eurex Clearing AG and European Commodity Clearing AG is provided in note 20 to the consolidated financial statements.

Operational risk greater than financial and business risk
Utilisation of risk-bearing capacity in the liquidation principle and of risk appetite in the going concern principle are used as internal management indicators throughout Deutsche Börse Group (see the "Risk management approaches and methods" section for an explanation of these terms). In addition to the financial and operational risk already mentioned, business risk is also identified and assessed. This relates in particular to potential threats to revenue such as price pressure or loss in market share. Under the liquidation principle, financial risk amounts to approximately one-fifth of Deutsche Börse Group's total risk, while business risk represents 13 per cent of the total. This makes the third typical risk type all the more important for Deutsche Börse Group: at 65 per cent, operational risk accounts for more than half of the total risk (see the graphic entitled "Required economic capital for Deutsche Börse Group, by risk type").

Regulatory capital requirements for Clearstream and Eurex Clearing AG as at 31 December 2015



Required economic capital for Deutsche Börse Group, by risk type as at 31 December 2015



A large part of the risk is associated with the Clearstream and Eurex segments (see the graphic entitled “Required economic capital by segment”), in keeping with the proportion of sales revenue and earnings accounted for by this business. In contrast to the regulatory capital requirements, this calculation also includes business areas that are not covered by banking regulations.

A similar split can be seen for earnings at risk. Here, too, the business segments with the largest proportions of revenues and earnings – Clearstream and Eurex – have the largest shares of earnings at risk (see the “Earnings at risk by segment” graphic).

Börse Group assigns indicators to each risk exposure to estimate how likely it is to occur and what financial effect it could have. It distinguishes four probability levels (very low, low, medium and high) and four financial impact levels (low, medium, substantial and a risk to the company as a going concern). However, none of the risks assessed reach the fourth impact level either individually or in total; in other words, none jeopardises the existence of the Group as a going concern.

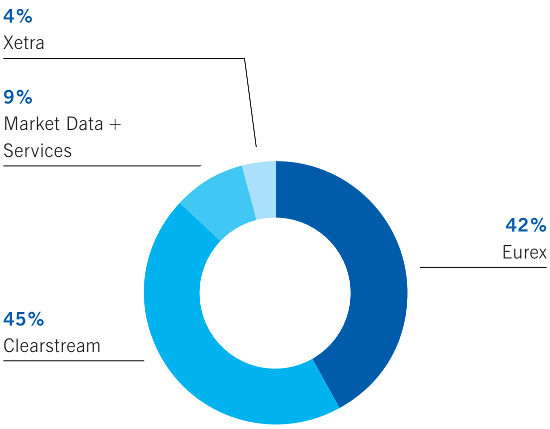
These categories can be used to assess the risk types given below as examples. The estimated probabilities of the risks occurring are categorised as follows:

- Very low: the probability of the risk occurring is less than 1 per cent
- Low: the probability of the risk occurring is equal to or greater than 1 per cent but less than 10 per cent
- Medium: the probability of the risk occurring is equal to or greater than 10 per cent but less than 50 per cent
- High: the probability of the risk occurring is equal to or greater than 50 per cent

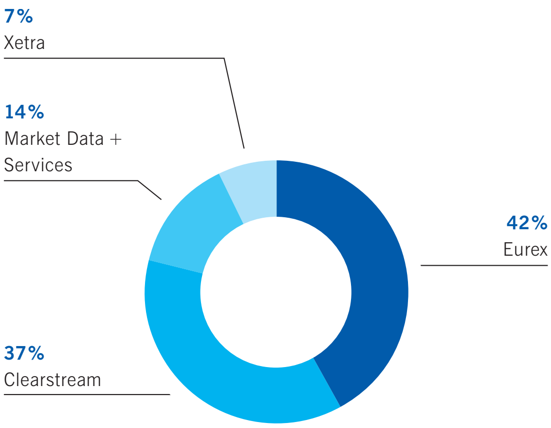
The estimated financial effects can be classified into the following four categories:

- Low: the financial loss could be up to 10 per cent of EBIT
- Medium: the financial loss could be up to 50 per cent of EBIT
- Substantial: the financial loss could be up to 100 per cent of EBIT
- Risk to the business as a going concern: the financial loss could be up to the available risk cover amount

Required economic capital by segment
as at 31 December 2015



Earnings at risk by segment
as at 31 December 2015



In the following, the risk types are first illustrated with specific examples and then explained in detail.

1. Operational risk
- Incorrect processing of client instructions (e.g. capital increases)
- Incorrect handling of the default of a large customer
- Losses from ongoing legal disputes
- Conflicting laws of different jurisdictions
- Failure of a trading system lasting up to one day

2. Financial risk
- Default of a credit counterparty
- Losses arising from the impairment of pension fund assets
- Default by a customer and an associated liquidity squeeze

3. Business risk
- Market share loss in European trading markets
- The return of the European government debt crisis

From today's perspective, none of these risks can lead to a substantial financial loss. Significant risks could arise only from a combination of extreme events that have a very low probability:

- Failure of a trading system lasting one week in a highly volatile market environment
- Simultaneous failure of several large systemically important banks
- Deliberate breaches of sanctions

These extreme events that could lead to a loss corresponding to more than 50 per cent of annual EBIT are rated as having a probability of less than 1 per cent. Such extreme events, also known as "tail risks", have not occurred to date. Tail risks may represent going concern threats for certain subsidiaries, for example if sanctions were to be deliberately contravened. GRM assesses these risks continuously and reports regularly to the Executive Board of Deutsche Börse Group on the results.

Operational risk

Operational risk for Deutsche Börse Group relates to availability, processing, material goods, litigation and business practice (see the graphic entitled "Operational risks at Deutsche Börse Group"). Personnel risks are not quantified directly, but influence the quantification process indirectly via the operational risk categories. Operational risk accounts for 65 per cent of the total Group risk.

System availability

Operational resources such as the Xetra® and T7® trading systems are essential for the services offered by Deutsche Börse Group. They should never fail, in order to ensure that market participants can trade securities or derivatives at any time and without delay. The Group therefore calculates the availability of these systems as an important risk indicator. In line with the Group's risk strategy, the business areas are responsible for monitoring the indicators.

The longer the downtime for one of these systems, the larger the potential loss. An outage could be caused by software or hardware issues, or in unlikely cases, the availability of the systems could be affected by acts of cyber crime. In the past, only limited failures have occurred both with Xetra and with T7 and its predecessor system. In practice, there has never been a system failure lasting longer than one day. Deutsche Börse Group has taken a number of measures to further minimise the risk of failure lasting an entire day or longer. This supports the view that the probability of a system failure lasting longer than a week in an extremely volatile market is very low. However, the potential financial effect of such an event could be significant if claims are justified and asserted.

In general, availability risk represents the largest operational risk for Deutsche Börse Group. The Group therefore subjects it to regular stress tests, which check not only what happens when its own systems fail but also when suppliers fail to deliver.

Service deficiency
Risks can also arise if a service provided to a customer is inadequate and this leads to complaints or legal disputes. One example would be errors in the settlement of securities transactions due to defective products and processes or mistakes in manual entries. A second example is errors in handling the default of a large clearing customer. To date, defaults are rare, no such handling errors have occurred and related processes are tested at least annually, which is why the probability is considered to be very low. The potential financial loss is put at medium.

Other sources of error may be attributable to suppliers or to product defects or mistakes that may lead to the loss of client assets or mistakes in accounting processes. The Group registers all complaints and formal objections as a key indicator of processing risk.

Damage to physical assets
Natural disasters, accidents, terrorism or sabotage are other operational risks that could, for example, cause the destruction of, or severe damage to, a data centre or office building. Business continuity management (BCM) aims at averting significant financial damage (see the graphic entitled Business continuity management).

Operational risks at Deutsche Börse Group

Operational risks

	System availability	Service deficiency	Damage to physical assets	Legal offences and business practice
Events	▪ Trading ▪ Clearing ▪ Settlement	▪ Deficiency of trading related services ▪ Loss of customer cash	▪ Damages or destruction of buildings ▪ Damages or destruction of datacentres	▪ Losses from ongoing legal conflicts ▪ Theft of customer cash ▪ Employment practice ▪ Contract risks ▪ Breach of sanctions provisions
Possible root causes	▪ Software flaws ▪ IT hardware flaws ▪ Inadequate information security ▪ Cyber crime	▪ Human errors ▪ Flawed internal processes ▪ Flawed data supply	▪ Force majeure ▪ Weather catastrophes ▪ Terror	▪ Legal violations ▪ Internal fraud ▪ External fraud

Legal offences and business practice

Losses can also result from ongoing legal proceedings. Deutsche Börse judges the probability that this operational risk will occur to be medium, although the losses involved could be substantial. As a result, GRM continually monitors ongoing legal proceedings. These can be brought if Deutsche Börse Group breaches laws or other requirements, enters into inadequate contractual agreements or fails to monitor and observe case law to a sufficient degree. Legal risk also includes losses due to fraud and labour law issues. This could entail, for example, losses resulting from insufficient anti-money laundering controls or breaches of competition law or of banking secrecy. Such operational risks can also arise if government sanctions are not observed, e.g. in case of conflicting laws of different jurisdictions, or in the event of breaches of other governmental or higher-order regulations.

On 12 November 2012, the Chicago Board Options Exchange (CBOE) filed a patent infringement law suit against the International Securities Exchange (ISE) (the "CBOE Litigation"). In the CBOE Litigation, CBOE alleges US$525 million in damages for infringement of three patents, which relate to systems and methods for limiting market-maker risk. ISE believes that CBOE's damages claim lacks merit because it is unsupported by the facts and the law. ISE intends to vigorously defend itself in this lawsuit. Upon ISE's motion, the case was stayed, pending the outcome of certain petitions filed by ISE with the U.S. Patent and Trademark Office (USPTO) in which ISE sought to invalidate the CBOE patents. On 2 March 2015, the USPTO has partially granted ISE's petitions and has issued decisions determining that all three CBOE patents are at least insofar invalid as they constitute unpatentable abstract ideas. These decisions have been appealed by CBOE to the U.S. Court of Appeals for the Federal Circuit. A decision on those appeals is expected in quarter 2 / 2016.

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 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. Bank Markazi has sought review in the Supreme Court. Once that process is complete, if the funds are turned over, a related case, Heiser vs Clearstream Banking S.A., also seeking turnover of the same assets, will 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 restitution 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.

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.

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. Provisional insolvency proceedings have meanwhile been opened in respect of the issuer, MBB Clean Energy AG.

Measures to mitigate operational risk

Deutsche Börse Group takes specific measures to reduce its operational risk. Among them are emergency and contingency plans, insurance policies, measures concerning information security and the physical safety of employees and buildings as well as precautions to ensure that the applicable rules are observed (compliance).

Emergency and contingency plans

It is essential for Deutsche Börse Group to provide its products and services as reliably as possible. The Group has to maintain its business operations and safeguard against emergencies and disasters. If its core processes and resources are not available, this represents not only a substantial risk for the entire Group but also even a potential systemic risk for the financial markets in general. As a result, Deutsche Börse Group has set up a system of emergency and disaster plans covering the entire Group (business continuity management, BCM). This covers all processes designed to ensure continuity of operations in the event of a crisis and significantly reduces availability risk. Measures include precautions relating to all important resources (systems, workspaces, employees, suppliers), including the redundant design of essential IT systems and the technical infrastructure, as well as emergency measures designed to mitigate the unavailability of employees or workspaces in core

Business continuity management

Emergency and crisis management process

Systems
- Trading, clearing and settlement systems designed to be available at all times
- Duplication of all data centres to contain failure of an entire location

Workstations
- Emergency arrangements for all essential functions
- Fully equipped emergency workspaces, ready for use at all times
- Remote access to systems by numerous employees

Employees
- Option to move essential areas of operations to other sites if staff in one site are not able to work
- Additional precautions to ensure that operations remain active in the event of a pandemic

Suppliers
- Contracts and agreed plans of action for suppliers and service providers to specify emergency procedures
- Careful and continuous check of suppliers' emergency preparations
- Replacement of suppliers that do not meet the requirements

functions at all important locations. Examples of such precautions are listed in the graphic entitled
"Business continuity management".

Preparations for emergencies and crises

The Group has introduced and tested a management process for emergencies and crises that enables it to respond quickly and in a coordinated manner. This is intended to minimise the effects on business processes and on the market and to enable a quick return to regular operations. All business segments have appointed emergency managers to act as central contacts and take responsibility during emergencies and crises. The emergency managers inform the Executive Board or raise the alarm with them in the case of severe incidents. In the event of a crisis, the Executive Board member responsible acts as the crisis manager. The emergency and contingency plans are tested regularly by realistically simulating critical situations. Such tests are generally carried out unannounced. The test results are evaluated based on the following criteria:

- Functionally effective: the measures must be technically successful.
- Executable: the employees must be familiar with the emergency procedure and be able to execute it.
- Timely: emergency measures must ensure that operations restart within the intended time period.

Information security

Information security attacks and cybercrime represent operational risks for Deutsche Börse Group. Cybercrime is increasingly becoming a focus for organised crime and now features high on the list of crime statistics year after year. It is a threat to all financial services providers, to credit institutions and to Deutsche Börse Group. Due to the growing danger from cyber criminals and increasing regulatory requirements, the Group is focused on mitigating these specific risks and expanding its information security measures.

The Group operates a situation centre (Computer Emergency Response Team, CERT), which detects and assesses threats from cybercrime in cooperation with national and international financial intelligence units at an early stage and coordinates risk mitigation measures in cooperation with the business areas. In addition, a process has been established to continually adapt information security at Deutsche Börse Group to the growing and constantly changing requirements and to incorporate regulatory requirements at an early stage. In 2015, Group Information Security launched an extensive programme designed to raise staff awareness for the responsible handling of information and to improve staff conduct in this aspect.

Physical security

Deutsche Börse Group places great importance on physical security issues. Corporate Security has developed an integral security concept to protect the company, its employees and values from external attacks. A highly qualified security staff assess the security situation permanently and are in close contact with local authorities and security departments of other companies.

In an increasingly competitive global market environment, know-how and confidential company information bear the potential of a major financial advantage to outsiders or competitors. Deutsche Börse applies state-of-the-art technology to prevent its knowledge from being obtained illegally, i.e. through wiretapping. Corporate Security is also responsible for the safety of employees on business trips and has established the worldwide "Travel Tracker" service in 2015.

Insurance policies

Operational risks that Deutsche Börse Group cannot or does not wish to bear itself are transferred to insurance companies, if this is possible at a reasonable price. The insurance policies are checked individually and are approved by Deutsche Börse AG's CFO.

Compliance CR

The compliance function, in cooperation with the individual business segments, has the task of protecting the Group against a variety of monetary and nonmonetary risks, such as reputational damage in the markets it serves, in light of supervisors, or the general public.

Deutsche Börse Group pursues an enterprise-wide approach to its compliance function, ensuring that applicable laws and regulatory requirements are followed with respect to individual legal entities, while aligning dedicated legal entity compliance and regulatory personnel through a common reporting structure to the Group Chief Compliance Officer. Wherever efficient and practical, the Group pursues the development of common compliance policies and supporting tools.

As a further step in the enhancement of Group compliance over the past few years, in the course of 2015, the compliance function was realigned into three sub-sections: Compliance Regulatory to identify and monitor evolving legal and regulatory requirements for the financial products and services the Group provides; Compliance Services to carry out monitoring and controls; and Compliance Strategy to pursue continuing improvement projects. The Group significantly increased its dedicated compliance personnel in major offices around the world, and closely aligned its work with the business areas and other control functions to form a solid second line of defence. Further investments continue to be made into compliance IT systems that provide for a more consistent and data driven approach to risk mitigation.

Deutsche Börse Group has significantly enhanced its due diligence procedures with respect to its customers, members and counterparties. Since its products and services as a provider of financial market infrastructures are often focused on other financial intermediaries at the wholesale level, our cooperative approach seeks to raise the standards throughout the industry and enhance the integrity of financial markets for all participants. Among the notable efforts championed by Deutsche Börse Group and Clearstream was the adoption in September 2015 by the International Securities Services Association (ISSA) of the Financial Crime Compliance Principles for Securities Custody and Settlement. The Group is committed to implementing and promoting these industry standards.

The compliance function will continue its efforts to strengthen the compliance culture throughout the Group. It pursues a best-in-class approach and contributes to the business strategy through an advisory role to develop solutions for our customers in the ever evolving financial regulatory environment.

Financial risks

Deutsche Börse Group classifies its financial risk into credit, market and liquidity risk (see the graphic entitled “Financial risk at Deutsche Börse Group”). At Group level, these risks account for about 22 per cent of the entire risk profile (this information only includes credit and market risk; liquidity risk is not quantified as part of the EC; see note 36 to the consolidated financial statements). They primarily apply to the Group’s financial institutions. As a result, the following explanation focuses on Clearstream and Eurex Clearing AG.

Credit risk

Credit risk describes the danger that a counterparty might not meet its contractual obligations, or not meet them in full. Measurement criteria include the degree to which the credit line has been utilised, the collateral deposited and concentration risk. Although Clearstream and Eurex Clearing AG often have short-term claims against counterparties totalling several billion euros overall, these are secured in most cases by collateral deposited by the market participants. The Group also regularly assesses the reliability of emergency plans for Eurex Clearing AG in the case of a credit default. The reliability of the emergency plans for Clearstream was assessed for the first time in 2015. It is planned to repeat this assessment on a regular basis and to develop it further.

Furthermore, Clearstream Banking S.A. is exposed to credit risk arising from its strategic securities lending transactions (ASLplus). Only selected banks act as borrowers. All borrowing transactions are fully collateralised. Only selected bonds may be used as collateral; these must be rated at least A+ by the Standard & Poor’s (S&P) rating agency or the equivalent from other agencies. In the case of short-term securities without individual ratings, the issuers must be rated at least A–1.

Clearstream grants credits to its customers in order to make settlement more efficient. This type of credit business is, however, fundamentally different from the classic lending business. First, credit is extended solely on a very short-term basis, normally for less than a day. Second, it is largely collateralised and granted to clients with high creditworthiness. Furthermore, the credit lines granted can be revoked at any time.

Under its terms and conditions, Eurex Clearing AG only enters into transactions with its clearing members. Clearing mainly relates to defined securities, rights, derivatives and emission allowances that are traded on specific stock exchanges. Eurex Clearing AG also offers this service for some over-the-counter (OTC) products such as interest rate swaps and forward rate agreements. It serves as an intermediary between the parties to the transaction (central counterparty) in order to reduce its customers’ credit risk by offsetting receivables. Clearing members deposit collateral with Eurex Clearing AG to reduce the bilateral default risk.

Financial risks at Deutsche Börse Group

To date, no default by a borrower with a secured credit line has resulted in material financial losses. Deutsche Börse Group continues to view the probability that one of its counterparties could become insolvent and that this could lead to losses for the Group as low. It considers the impact of such an event to be low if the credit line in question is collateralised and medium if it is uncollateralised. The probability of a counterparty to an uncollateralised credit defaulting is considered to be very low.

Credit risk can also arise from cash investments. The Treasury department is responsible here, and has Group-wide authority. Treasury largely makes collateralised investments of funds belonging to Group companies as well as Clearstream and Eurex Clearing AG customers. To date, counterparty default has not led to any material loss for the Group. The probability that the default of a counterparty to an uncollateralised cash investment could lead to a loss is considered to be low, although the financial loss itself could be significant. The financial impact of several large, systemically important banks defaulting simultaneously could have a medium impact. The probability of this scenario occurring is considered to be very low.

From 2016 onwards, investment losses on currencies for which Eurex Clearing AG has no access to the respective central banks will be borne, on a pro-rata basis, by Eurex Clearing AG and by those clearing members active in the currency where losses were incurred. The maximum amount which each clearing member will have to contribute in this manner is the total amount such clearing member has pledged with Eurex Clearing AG as cash collateral in this currency. The maximum amount to be borne by Eurex Clearing AG is €50 million.

Reducing credit risk

Clearstream and Eurex Clearing AG assess the creditworthiness of potential customers or counterparties to an investment before entering into a business relationship with them. The companies do this in the same way: they determine the size of individual customers' credit lines based on regular creditworthiness checks, which they supplement with ad hoc analyses if necessary. They define haircuts for securities posted as collateral depending on the risk involved, and continually review their appropriateness. Clearstream includes all relevant risk factors when determining the haircut and allocates a specific deduction to each. The total haircut is calculated by adding together the individual margins for the risk factors concerned.

In addition, in order to identify potential concentration risks from individual counterparties, Clearstream analyses the VaR at the level of the Clearstream Holding group. For this purpose, a credit risk VaR is calculated at the level of individual counterparties and compared with the overall credit risk VaR. Due to its business model, Clearstream focuses almost exclusively on financial sector customers. However, there is no material concentration of credit risk either on individual counterparties or on individual countries.

Given the size and volatility of its clients' liabilities, Eurex Clearing AG has developed a leading-edge collateral management system, which is described in detail in the following section.

Safety for both participants and the clearing house
Each clearing member must prove that it has capital equal to at least the amounts that Eurex Clearing AG has defined for the different markets. The amount of capital for which evidence must be provided depends on the risk. To mitigate Eurex Clearing AG's risk that clearing members might default before settling open transactions, members are obliged to deposit collateral in the form of cash or securities (margins) on a daily basis and, if required, to meet additional intraday margin calls.

Eurex Clearing AG only permits securities with a high credit quality to be used as collateral. It continually reviews what collateral it will accept and uses haircuts with a confidence level of at least 99.9 per cent to cover market risk. It applies an additional haircut to collateral from issuers in high-risk countries or excludes them from being furnished as collateral altogether. Risk inputs are checked regularly and the safety margins are calculated daily for each security. In addition, a minimum safety margin applies to all securities.

Margins are calculated separately for clearing member accounts and client accounts. Gains and losses resulting from intraday changes to the value of financial instruments are either settled in cash by the counterparties (variation margin) or deposited with Eurex Clearing AG as collateral by the seller due to the change in the equivalent value of the item (premium margin). In the case of bond, repo or equity transactions, the margin is collected from either the buyer or the seller (current liquidating margin), depending on how the transaction price performs compared to the current value of the financial instruments. The purpose of these margins is to offset gains and losses.

In addition, Eurex Clearing AG uses additional collateral to protect itself in the case of default by a clearing member against any risk that the value of the positions in the member's account will deteriorate in the period before the account is settled. This additional collateral is known as the additional margin in risk-based margining and the initial margin in the Prisma method (portfolio-based risk management). The target confidence level here is at least 99.0 per cent. Eurex Clearing AG checks regularly whether the margins match the requested confidence level and currently calculates the margins using both risk-based margining and the Prisma method. The new Prisma method is already available for the most important product groups: equity derivatives, equity index derivatives and derivatives on fixed-income products. The intention is for this method to fully replace risk-based margining by the end of December 2016. The new method takes the clearing member's entire portfolio as well as historical and stress scenarios into account when calculating the margin requirements. The objective is to cover market fluctuations for the entire liquidation period until the account is settled.

In addition to the margins for current transactions, each clearing member contributes to a clearing fund, with the contributions based on its individual risk profile. This fund is jointly liable for the financial consequences of a default by a clearing member to the extent that this cannot be covered by the member's individual margin, and its own and Eurex Clearing AG's contributions to the clearing fund. Eurex Clearing AG uses regular stress tests to check whether its clearing funds match the risks. This involves subjecting all current transactions and their collateral to market price fluctuations at a confidence level of at least 99.9 per cent. In order to be able to determine potential losses in excess of a clearing member's individual margins, the impact on the clearing fund of a potential default is simulated. Eurex Clearing AG has defined limits which, when exceeded, trigger an immediate adjustment to the size of the clearing fund if necessary. The following lines of defence are available for the case that a clearing member is unable to meet its obligations to Eurex Clearing AG due to a delay in performance or a default:

- First, the relevant clearing member's outstanding positions and transactions can be netted and/or closed from a risk perspective by entering into appropriate back-to-back transactions, or they can be settled in cash.
- Any potential shortfall that might be incurred in connection with such a closing or cash settlement, as well as the associated costs, would be covered in the first instance by the collateral provided by the clearing member concerned. As at 31 December 2015, collateral amounting to €56,550.4 million had been provided for the benefit of Eurex Clearing AG (after haircuts).
- After this, the relevant clearing member's contribution to the clearing fund would be used to cover the open amount. Contributions ranged from €1 million to €429 million as at 31 December 2015.
- Any remaining shortfall would initially be covered by a contribution to the clearing fund by Eurex Clearing AG. Eurex Clearing AG's contribution amounted to €50 million as at 31 December 2015.
- Only then would the other clearing members' contributions to the clearing fund be used proportionately. As at 31 December 2015, the volume of Eurex Clearing AG's clearing fund stood at €4,361.8 million. After the contributions have been used in full, Eurex Clearing AG can request additional contributions from each clearing member, which can be up to twice as high as their original clearing fund contributions.
- After this, a letter of comfort has been issued by Deutsche Börse AG. In it, Deutsche Börse AG states that it would provide Eurex Clearing AG with up to €700 million to cover any remaining losses. The letter of comfort may only be used for losses from on-exchange transactions.
- Finally, in the case of a shortfall, Eurex Clearing AG's remaining equity of €265 million as at 31 December 2015 would be utilised.

In the future, Eurex Clearing AG intends to adjust its capital structure in order to further strengthen the lines of defence. In particular, Eurex Clearing plans:

1. to increase its own clearing fund contribution by €50 million at the beginning of 2016 and to add a further €50 million in 2017 to in total €150 million, and
2. to make additional own contributions of maximum €300 million where Eurex Clearing requests additional contributions from clearing members, and in this context, to harmonise the waterfall structure in the event of a default (as outlined above) with the letter of comfort provided by Deutsche Börse AG of €600 million. The letter of comfort will be available to cover any losses.

In the event of default by a clearing member, the Default Management Process (DMP) is triggered. Its purpose is to rebalance the CCP, and thus to protect the non-defaulting participants from any negative consequences resulting from the default. Every product cleared by Eurex Clearing AG is clearly assigned to a so called liquidation group. Products within a single liquidation group share similar risk characteristics and can be liquidated simultaneously if a clearing member defaults. The DMP is conducted at liquidation group level; all positions held by the defaulted clearing member and belonging to the same liquidation group are jointly transferred to other participants via an auction or an independent sale. The clearing fund is segmented along these liquidation groups, based on their respective margin requirements. Should the cost of liquidation exceed the defaulter's resources, Eurex Clearing AG will always make a contribution itself before the mutual clearing fund is utilised. During liquidation, Eurex Clearing AG can convene committees of market experts (default management committees) to advise on and support all liquidation activities.

Eurex Clearing AG has dealt with three defaults of clearing members to date: Gontard & MetallBank, Lehman Brothers and MF Global. In all cases, the non-defaulters were fully protected by the CCP, as the liquidation costs were met without resort to Eurex Clearing AG's own capital or the clearing fund. A substantial portion of the defaulters' margin remained unused and was returned to them.

Deutsche Börse Group reduces its risk when investing funds belonging to Group companies and client funds by distributing investments across multiple counterparties, all with a high credit quality, by defining investment limits for each counterparty and by investing funds primarily in the short term and in collateralised form if possible. Investment limits are established for each counterparty on the basis of regular credit checks and using ad hoc analyses, as necessary. Since extending its licence as an investment and credit institution under the Kreditwesengesetz (German Banking Act), Eurex Clearing AG can also use Deutsche Bundesbank's permanent facilities.

Clearstream and Eurex Clearing AG run stress tests to analyse scenarios such as the default of their largest counterparty. The figures determined in this way are compared with the limits defined as part of the companies' risk-bearing capacity. In addition, the impact of several clearing counterparties defaulting at the same time is calculated for Eurex Clearing AG. A special stress test examines Clearstream Banking S.A.'s credit risk exposure from the settlement procedure with Euroclear. Moreover, inverse stress tests are calculated to determine the number of counterparties that would have to default for losses to exceed the risk cover amount. In the course of the stress tests run in financial year 2015, the identified risks have been further analysed and appropriate measures to reduce risk have been implemented.

Deutsche Börse Group tracks a variety of risk indicators in addition to its risk measures (EC, earnings at risk and the credit risk stress tests performed). These include the extent to which individual clients utilise their credit lines, and credit concentrations.

Market risk

Market risk in the operating business results from interest rate or currency fluctuations. Deutsche Börse Group measures this risk using earnings-based sensitivity analyses for extreme interest rate or exchange rate fluctuations. It avoids open currency positions whenever possible. Additional market risk could result from Deutsche Börse Group's ring-fenced pension plan assets (Contractual Trust Agreement, Clearstream pension plan in Luxembourg). At the end of 2014, the Group reduced the risk of market price fluctuations by deciding to invest a predominant proportion of the pension fund on the basis of an absolute return approach, including a value preservation mechanism. The probability of a significant market risk occurring in this context is low, and the Group also considers the impact to be low.

Liquidity risk

Liquidity risk applies if a Deutsche Börse Group company is unable to meet its daily payment obligations or if it can only do so at a higher refinancing cost. Operational liquidity requirements are met primarily internally by retaining funds generated. The aim is to maintain enough liquidity to meet operating costs for one quarter (currently between €150 million and €250 million). An intra-Group cash pool is used to pool surplus cash from subsidiaries on a Deutsche Börse AG level, as far as regulatory and legal provisions allow. Liquid funds are invested exclusively in the short term in order to ensure that they are available. Short-term investments are also largely secured by liquid bonds from first-class issuers. Deutsche Börse AG has access to short-term external sources of financing, such as agreed credit lines with individual banks or consortia, and a commercial paper programme. In recent years, Deutsche Börse AG has leveraged its access to the capital markets to issue corporate bonds in order to meet its structural financing needs.

Since Clearstream's investment strategy aims to be able to repay customer deposits at all times, liquidity limits are set carefully. In addition, extensive sources of financing are available at all times, such as ongoing access to the liquidity facilities at Deutsche Bundesbank and Banque Centrale du Luxembourg.

Due to its role as a central counterparty, Eurex Clearing AG has strict liquidity guidelines and its investment policy is correspondingly conservative. Regular analyses ensure the appropriateness of the liquidity guidelines. In addition, Eurex Clearing AG can use Deutsche Bundesbank's permanent facilities, as mentioned above.

The key liquidity risk for Deutsche Börse Group lies in customer default. If a clearing member of Eurex Clearing AG defaults, its member position is liquidated. If a Clearstream customer defaults, the – generally collateralised and intraday – credit line granted to increase settlement efficiency would be called in, and the collateral provided by the client could then be liquidated. Deutsche Börse Group estimates the probability of this risk to be low, with the possibility of medium financial losses. However, the key risk in this context lies not in financial losses but in the danger that the Group may not be able to meet its obligations, or may not be able to meet them in a timely manner. Especially since banks reduced their market making activities as a response to the stricter regulatory capital requirements, the risk of declining liquidity in the capital markets occurs. Any uncertainty in the market as a result of a possible counterparty default would increase the liquidity risk of Deutsche Börse Group even more.

In addition, regular stress tests are performed on the liquidity risk to which Clearstream and Eurex Clearing AG are exposed. Clearstream and Eurex Clearing AG had sufficient liquidity at all times in the stress tests performed in 2015.

Business risk

Business risk reflects the fact that the Group depends on macroeconomic developments and is influenced by other external events, such as changes in the competitive environment or regulatory initiatives. It therefore expresses the risks associated with the Group's business environment and sector. It also includes business strategy risk, i.e. the impact of risks on the business strategy and possible adjustments to it. These business risks are represented as variance analyses of planned and actual EBIT, and are monitored constantly by the divisions. Their weighting for the Group accounts for about 13 per cent of the total risk. Business risk may result in revenues lagging budget projections or in costs being higher.

Business risk includes the risk that competitors, such as the CurveGlobal, Chicago Mercantile Exchange (CME) and Intercontinental Exchange (ICE) derivatives exchanges or the Nasdaq OMX stock exchange, might increase their market shares on the European trading markets (both on- and off-exchange). Deutsche Börse Group estimates the probability of a minor loss in market share as medium but the resulting impact to be relatively low.

If a peripheral state were to leave the euro zone or if a state were to become insolvent, this could mean that government bonds would not be redeemed or only would be redeemed in part. This might have a negative influence on Deutsche Börse Group's customers and reduce their trading volume in the future. Currently, the Group still views the probability of this risk occurring as low, and the possible consequences as medium.

Additional business risks may arise from regulatory requirements or from the economic environment. For example, increased transparency requirements and new rules on licensing indices used as benchmarks in MiFID II and MiFIR could negatively impact the revenue of the Market Data + Services segment as well as the Eurex trading venue. The introduction of a financial transaction tax, which continues to be supported by ten European states, could significantly reduce trading activity on both Eurex and Xetra. This would go hand in hand with lower revenue not only for the marketplaces but also for all post-trading businesses, and hence for the entire Group. A sustained period of weak trading activity on the market also represents a risk for Deutsche Börse Group simulates different scenarios in stress tests. These simulate the simultaneous occurrence of different business risks, such as the negative effects of stronger competition plus a reduction in business due to new regulations.

Project risk

Project risk could result from the implementation of ongoing projects (such as the launch of new products, processes or systems) and could have a material impact on one or more of the three other risk categories (operational, financial and business risk). Project risk is not broken down further. Such risks are evaluated by the project owner and GRM and are already taken into account in the initial phase of substantial projects. For example, the implementation of the TARGET2-Securities settlement system is an important project for Clearstream at present. C7eAR – which aims to develop an even more powerful platform for Eurex Clearing AG's clearing system – is another key Deutsche Börse Group project. Ultimately, project risk has an operational, financial or business impact, which is why it is quantified as part of these risk types. Ongoing monitoring and controls ensure that project delivery risks are continually analysed and evaluated.

Overall assessment of the risk situation by the Executive Board

Deutsche Börse AG's Executive Board is responsible for risk management throughout the Group and regularly reviews the entire Group's risk situation. Its summary of the situation in 2015 is given here, and is followed by a brief look at the coming financial year.

Summary

Additional external risk factors emerged for Deutsche Börse Group's business in the past financial year. A slight increase in Deutsche Börse Group's operational risk was identified; this was mainly due to the Group's higher business availability risk, resulting partially from the increased threat of cyber crime. In addition, business risk has increased year-on-year. This was primarily due to the possibility of additional regulatory risks as well as increased competition. The Group identified these factors early on and took appropriate countermeasures. As a result, Deutsche Börse Group's risk profile remained broadly stable. Deutsche Börse Group's risks were covered by sufficient risk-bearing capacity at all times during the reporting period, i.e. the allocated risk appetite limits were complied with.

Key figures for the liquidation principle as at 31 December 2015

		Deutsche Börse Group	Eurex	Xetra	Clearstream	Market Data + Services
Required economic capital	€m	2,159	898	94	976	191
Risk-bearing capacity	€m	2,999	1,371	214	1,184	230
Utilisation	%	72	65	44	82	83
Early warning limit	%	85	85	85	85	85

As at 31 December 2015, the Group's EC amounted to €2,159 million, an 11 per cent increase year-on-year (31 December 2014: €1,939 million). The available risk bearing capacity increased by 16 per cent to €2,999 million year-on-year (31 December 2014: €2,591 million). Earnings at risk as at 31 December 2015 were €646 million, while risk appetite was €1,012 million, based on the adjusted EBIT in 2015.

Deutsche Börse AG's Executive Board is convinced that the risk management system is effective. The Board continues to strengthen the system and the control function responsible for it. The Group-wide strategy to capture and manage risk, which focuses on risk appetite, forms the basis for internal risk management. It is codified in the three principles described in this report.

Outlook

The Group continually assesses its risk situation. Based on stress tests, on the EC calculated and on the risk management system, Deutsche Börse AG's Executive Board concludes that the available risk cover amount is sufficient. Furthermore, it cannot identify any risk that could endanger the Group's existence as a going concern.

In 2016, the aim is to further strengthen Group-wide risk management. For instance, the Group plans to analyse its risks in a more detailed manner on a single-client and on a business segment level. By identifiying client-specific and business segment-specific risk drivers, the EC will also be monitored on these levels. This will enable Deutsche Börse Group to manage risks on these levels. Moreover, it plans to extend its business continuity measures in the event of emergencies (or crises), to include additional functions over and above business-critical units.

Report on opportunities

Organisation of opportunities management

Deutsche Börse Group's opportunities management aims to identify, evaluate and assess opportunities as early as possible and to take appropriate measures in order to transform opportunities into business success.

Deutsche Börse Group evaluates organic growth opportunities both on an ongoing basis throughout the year in the individual business areas and systematically at Group level as part of its annual budget planning process. Suggestions from the Group's business areas for new products, services or technologies serve as the starting point. The process begins with a careful analysis of the market environment: this considers both customer wishes and factors such as market developments, competitors and regulatory changes.

Ideas for growth initiatives are developed further using uniform, Group-wide templates and subjected to a profitability analysis. Qualitative aspects are documented in a business plan, and expenses and revenues are projected in detail for multiple years.

Once a business plan and profitability analysis have been prepared for a specific growth initiative, the Executive Board of Deutsche Börse AG decides on its implementation. This decision is taken as part of the annual budget planning process. The initiatives that, after taking into consideration the associated risks, add the most value and that can be financed from the budget allocated to the business area are selected by the Executive Board and included in the budget.

Budgeting for growth initiatives involves reserving a full-year budget comprising expenditures and expenses for each selected growth initiative included in the investment portfolio. The budget is then approved by the Executive Board of Deutsche Börse AG over the course of the year, in line with the

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