Deka Group
Annual Report

Finanzgruppe

Deka Group at a glance

BUSINESS DEVELOPMENT INDICATORS		31 Dec 2019	31 Dec 2018	Change (%)
Total asset	€m	97,282	100,444	–3.1
Total customer assets	€m	313,412	275,878	13.6
thereof retail customers	€m	158,749	137,169	15.7
thereof institutional customers	€m	154,662	138,709	11.5
Number of securities accounts	thousand	4,787	4,654	2.9
		2019	**2018**	
Net sales	€m	18,040	11,773	53.2
thereof retail customers	€m	11,117	11,296	–1.6
thereof institutional customers	€m	6,923	477	(>300)
PERFORMANCE INDICATORS				
Total income	€m	1,560.6	1,509.0	3.4
Total expenses	€m	1,126.7	1,057.2	6.6
Economic result	€m	434.0	451.8	–3.9
Total of profit or loss before tax	€m	410.7	516.9	–20.5
Return on equity (before tax)	%	9.0	9.6	–0.6%-Points
Cost/income ratio	%	69.1	69.9	–0.8%-Points
RISK INDICATORS – NORMATIVE PERSPECTIVE		**31 Dec 2019**	**31 Dec 2018**	
Own funds (fully loaded)	€m	5,828	5,741	1.5
Risk-weighted assets	€m	32,229	29,021	11.1
Total capital ratio (fully loaded)	%	18.1	19.8	–1.7%-Points
Common Equity Tier 1 capital ratio (fully loaded)	%	14.2	15.4	–1.2%-Points
Leverage Ratio (fully loaded)	%	4.9	4.6	0.3%-Points
MREL Ratio (balance sheet based)	%	22.0	N/A	N/A
Liquidity Coverage Ratio (LCR)	%	170.6	149.8	20.8%-Points
RISK INDICATORS – ECONOMIC PERSPECTIVE				
Risk appetite	€m	3,750	3,700	1.4
Total risk	€m	2,395	2,492	–3.9
Utilisation of risk appetite	%	63.9	67.4	–3.5%-Points
RATING LONG-TERM (SHORT-TERM)				
Moody's		Aa2 (P-1)	Aa2 (P-1)	
Standard & Poor's		A+ (A-1)	A+ (A-1)	
SUSTAINABILITY RATING				
MSCI		AA	AA	
ISS-ESG		C+(Prime)	C+ (Prime)	
imug rating		positive BB	positive B	
Sustainalytics		Leader (83 Points)	Leader (83 Points)	
KEY EMPLOYEE FIGURES				
Number of employees		4,723	4,716	0.1
Number of active employees		4,108	4,179	–1.7

Due to rounding, numbers and percentages presented in this report may not add up precisely to the totals provided.

Contents

Dear Shareholders and Investors,

In 2019, the Dax gained more than 25% to achieve its best annual performance since 2013. More recently, however, the Coronavirus crisis has put a sudden stop to this positive trend. In the first two weeks of March 2020 alone, Germany's stock market index – the Dax – fell by some 3,000 points or 25%: its steepest ever decline.

The stock market falls have also hit private investors and small savers, many of whom are savings bank customers. As we have seen in recent years, however, these customers take a long-term perspective when it comes to investment and have therefore fully embraced regular securities saving. This investment strategy is paying off in the current crisis and will mitigate the short-term effects of the market losses. Institutional and private investors have remained calm, and we have seen neither buying nor selling on a large scale since the crisis emerged. The number of investment savings plans, in particular, has remained stable at a high level since the start of the year.

In 2019, savings bank customers signed up to around 620,000 (net figure) new Deka investment savings plans, meaning that Deka managed a total of more than five million contracts at year-end 2019. Net sales continued to grow, reaching around €18bn, while the Deka Group's total customer assets surpassed the €300bn mark for the first time in 2019. The Deka Group is in a robust financial position, as our key figures show: at €434m, the economic result in 2019 was only moderately down on the previous year's figure of around €452m, and the Common Equity Tier 1 capital ratio (fully loaded) stood at 14.2% at year-end.

Strong financial ratios and a sound business model form the foundations for sustainable growth. This stability also enables us to tackle the current crisis from a position of strength. Our mission now, acting together with the savings banks and as an integral part of the *Sparkassen-Finanzgruppe*, is to be a dependable partner – for our customers, but also for German businesses and wider society, to help them manage the consequences of this emergency.

In so doing, we will orient ourselves on traditional values of the *Sparkassen-Finanzgruppe*: solidarity and responsibility. These values foster stability and trust even in times of crisis and bring us closer to our customers. They are at the heart of a comprehensive approach to sustainability, which includes sustainable corporate governance, a sustainable product range, financial sustainability for our investors and a conscious commitment to the environment and society.

This long-term focus applies to both our banking activities and our internal organisation. To preserve continuity, we reorganised responsibilities in the Deka Group Board of Management from the end of the year, and have clearly communicated the new roles this has resulted in. This puts us in a good position internally to proactively address the current challenges. With these changes, too, our aim is to reinforce the durable foundations on which our work as the *Wertpapierhaus* for the savings banks is based – thereby sending an important signal and building trust among our shareholders and customers. These unpredictable times make this a particularly important task. Even in light of the current global uncertainty, we look ahead to the new investment decade with a sense of optimism: the Deka Group is well positioned and ready for the 2020s.

Sincerely,

Dr. Georg Stocker Manuela Better Dr. Matthias Danne

Daniel Kapffer Martin K. Müller

Please note that these remarks refer to the situation at the time of writing (20 March 2020).

Report of the Administrative Board for the 2019 financial year

During the reporting year, the Administrative Board and its committees carried out the duties assigned to them by law, the Bank's statutes and its rules of procedure. The members of the Administrative Board and its committees regularly advised the Board of Management on management issues and oversaw proper conduct of the Bank's affairs by the management. They were involved in all fundamentally significant decisions regarding the company.

Key issues of Administrative Board meetings

A total of four meetings took place in 2019, during which the Board of Management informed the Administrative Board about the Bank's current business trends and profit performance, its risk position and the Deka Group's strategic direction. The Board of Management reported on and discussed business and risk strategies with the Administrative Board in accordance with the minimum requirements for risk management of German credit institutions (MaRisk). The Administrative Board approved the mediumterm plan for the years 2020 to 2022 that was prepared on this basis and submitted by the Board of Management. The reports on the activities of Audit and Compliance, along with the remuneration report for the 2018 financial year, were also submitted to the Administrative Board.

Between meetings, the Board of Management informed the Administrative Board of any significant events in writing. Important topics and pending decisions were discussed regularly between the Chairman of the Administrative Board and the Chairman of the Board of Management.

The Administrative Board was provided with regular reports about the implications of developments in the international capital markets for the Bank's earnings, liquidity and risk position, as well as management measures taken by the Board of Management. The Administrative Board was also updated on the status of ongoing projects, particularly the further implementation of the DekaPro strategic programme and the integration of DekaBank Deutsche Girozentrale Luxembourg S.A. into DekaBank's Luxembourg branch. The Administrative Board also discussed matters concerning equity investments (including capitalisation measures for a company in the equity investment portfolio and the merger of Deka Immobilien GmbH into Deka Immobilien Investment GmbH) and regulatory issues (such as the risk culture framework and implementation of the EBA Guidelines on internal governance). Another key issue was the passing of resolutions on matters relating to the Board of Management, particularly the appointment of a new Chairman of the Board of Management and two new Board of Management members.

In the context of an initiative to create a central savings bank institution, the Administrative Board also confirmed a feasibility study on deeper cooperation between DekaBank and Landesbank Hessen-Thüringen and asked the Board of Management to enter discussions on this. Regular reports on the findings will be provided to the Administrative Board.

The Administrative Board also held a training event in 2019 on the topic of "real estate funds".

Administrative Board Committees

The Administrative Board has a General and Nomination Committee, a Remuneration Supervision Committee, an Audit Committee and a Risk and Credit Committee. The committees are made up of the members of the Administrative Board. They support the work of the Administrative Board and carry out preparatory work on the issues and resolutions to be discussed in the main Board meetings. The committees' duties are specified in the Administrative Board's rules of procedure.

The General and Nomination Committee met seven times during the past year, focusing primarily on the business model and the strategic development of the Deka Group. Board of Management matters were a key aspect of its work in 2019, especially the selection of suitable candidates and the submission of proposals for filling vacant positions in the DekaBank Board of Management. The General and Nomination Committee also decided on the allocation of work in the Board of Management and on contractual and remuneration arrangements. It also issued a recommendation for the election of a new Administrative Board member.

The Remuneration Supervision Committee met three times in 2019. It discussed the remuneration report and the remuneration supervision report for 2018, gave consideration to whether the remuneration systems for the Board of Management and employees were set up appropriately and prepared resolutions covering Board of Management members' remuneration and targets.

The Audit Committee met four times in 2019. It conducted a detailed review of the financial statements and consolidated financial statements. It also monitored the requisite independence of the auditors, discussed and approved the additional services they performed, engaged the auditors to perform their audit based on the key audit priorities established and concluded a fee agreement.

The Audit Committee extensively reviewed the Deka Group's financial accounting. It obtained reports on the audit activities of supervisory authorities, external auditors, Internal Audit and Compliance, as well as on the resulting action to be taken. The committee also discussed the report on the internal control system (ICS), the data protection report and the Sustainability Report, which constitutes the separate non-financial report pursuant to section 289b (3) of the German Commercial Code (*Handelsgesetzbuch* – HGB). It also received regular reports at its meetings on the status of national and international regulatory projects of relevance to Deka-Bank.

The members of the Risk and Credit Committee met four times during the reporting year. At its meetings, the committee conducted a detailed examination of DekaBank's risk position. This examination included credit, market price, liquidity and operational risks, as well as other types of risk, such as business and shareholding risks, legal and reputational risks or risks arising from guarantee commitments in relation to pension products. Other key issues addressed by the Risk and Credit Committee included discussing the business and risk strategies, updating the recovery plan and carrying out preparatory work for the resolution plan to be prepared by the competent resolution authorities.

In its capacity as a loan approval body, the Committee passed relevant resolutions and familiarised itself with the risk position in lending business. It also received reports on the development of loan portfolios and on the estimated risks for selected counterparties in the capital markets business and the industries relevant for DekaBank. The Risk and Credit Committee also held discussions with the Board of Management covering the business policy for lending business.

The Chairmen or the Deputy Chairmen of the respective committees reported to the Administrative Board on a regular basis concerning the results of consultations held by the respective committees.

Audit and approval of 2019 financial statements and consolidated financial statements

At DekaBank's Shareholders' Meeting, KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG) was appointed as auditor for the 2019 financial year. KPMG audited DekaBank's 2019 financial statements and management report, as well as the consolidated financial statements, notes and Group management report, and issued an unqualified audit opinion on them.

These financial statements and associated documents were forwarded to the members of the Administrative Board, along with KPMG's reports. The auditors attended both the corresponding meetings of the Audit Committee and the accounts meeting of the Administrative Board held today. The auditors reported on the findings of their audit and provided additional information where required. The Administrative Board took note of the auditors' findings and, following its own examination, raised no objections.

The Administrative Board approved the 2019 financial statements. In light of the ECB's recent recommendation that all institutions subject to its supervision refrain from distributing dividends until 1 October 2020 at the earliest in light of the Coronavirus pandemic, the passing of a resolution on the proposal to be made to the Shareholders' Meeting regarding the appropriation of accumulated profit for the 2019 financial year was postponed. The Administrative Board will look into making a proposal on the appropriation of profit at a later date, based on how things develop.

The Administrative Board also discussed the Group's separate non-financial report for the 2019 financial year, which forms part of the Deka Group's Sustainability

Report. AGIMUS GmbH, which was appointed to audit the Group's separate non-financial report, found that the Group's separate non-financial report met the legal requirements. Following its own examination, the Administrative Board also raised no objections.

Changes to the Board of Management and Administrative Board
Michael Rüdiger, the long-standing CEO of DekaBank, left the Bank at his own request on 31 December 2019. Another member of the Board of Management, Manuela Better, has announced that she will step down from her position at DekaBank at the end of her contract as a Board member on 31 May 2020.

The Administrative Board would like to thank Mr Rüdiger and Ms Better for their commitment and successful work on the DekaBank Board of Management.

At its meeting on 4 April 2019, the Administrative Board appointed the deputy CEO, Dr Georg Stocker, as the new CEO with effect from 1 January 2020. At the same meeting, the Administrative Board also appointed the executive manager Daniel Kapffer as a member of the Board of Management effective 1 May 2019. At its meeting on 5 December 2019, the Administrative Board appointed Birgit Dietl-Benzin as a member of the Board of Management. Ms Dietl-Benzin is due to take up her post on 1 July 2020.

DekaBank also appointed Torsten Knapmeyer as an executive manager with effect from 1 January 2020.

Dr Johannes Evers left the Administrative Board with effect from 31 December 2019. He is succeeded by Tanja Müller-Ziegler, a member of the Management Board of Berliner Sparkasse, with effect from 1 January 2020.

Supervision of DekaBank is exercised by the Federal Minister of Finance.

DekaBank performed well in the 2019 financial year, in a persistently difficult market environment. This reflects the valuable work performed by DekaBank's Board of Management and employees. The Administrative Board would like to thank them for their achievements and considerable personal commitment.

Frankfurt am Main, 2 April 2020

The Administrative Board

Helmut Schleweis
Chairman of the Administrative Board

Group management report 2019

The Deka Group ended the year with an economic result of €434.0m. As the *Wertpapierhaus* for the savings banks, the Deka Group is a key part of the *Sparkassen-Finanzgruppe* (Savings Banks Association). Net sales increased by a total of €6.3bn year-on-year to total €18.0bn. At €313.4bn, the Deka Group's total customer assets were some 14% up on the figure for year-end 2018 (€275.9bn). Thanks to its robust financial position, the Deka Group is able to fully lock on to its strategic path and lay the foundations to create lasting high value added in the years to come.

Group management report

At a glance

The Deka Group ended the year with an economic result of €434.0m. This was moderately down on the previous year's figure of €451.8m. Net interest income, net financial income and, in particular, net commission income exceeded the prior-year figures. Risk provisions in the lending and securities business led to a slightly negative risk provisioning result that remained below the expectations for 2019.

Due to persistent low interest rates, other operating profit was hit by a one-off effect of €–140.0m from measures to strengthen the capital for a company in the equity investment portfolio. The low interest rates also led to actuarial losses on pension provisions (€–38.6m).

Despite the one-off effect, income increased slightly to reach €1,560.6m. There was a moderate rise in expenses to €1,126.7m, particularly as a result of the higher bank levy and deposit protection reserve as well as restructuring expenses in connection with a strategic cost initiative.

As the *Wertpapierhaus* for the savings banks, the Deka Group is a key part of the *Sparkassen-Finanzgruppe* (Savings Banks Association). It continued to put its successful *Wertpapierhaus* strategy consistently into practice in the reporting year with its strategy implementation programme DekaPro. The Deka Group's net sales rose by a total of €6.3bn year-on-year to reach €18.0bn. At €11.1bn, net sales in the retail customer segment were well into positive territory again and came close to the previous year's level (€11.3bn). Equity funds, real estate funds and certificates made up a particularly significant proportion of sales. Net sales in the institutional customer segment were significantly positive again at €6.9bn. The previous year's figure of €0.5bn was affected by the termination of an individual mandate (as planned) as part of the integration of Deka Vermögensmanagement GmbH (formerly LBB INVEST GmbH).

At €313.4bn, the Deka Group's total customer assets were some 14% up on the figure for year-end 2018 (€275.9bn). In addition to sales, this was primarily attributable to the positive investment performance as against the end of the previous year. This trend was offset by distributions to investors and maturing certificates.

Deka once again proved the high quality of its products and solutions at the 2019 €uro FundAwards by Finanzen Verlag. It has a broad range of attractive and successful funds: 16 of the Deka Group's funds and four of its ETFs won a total of 40 awards. In addition, at the "Finanzennacht" (Finance Night) event in early February 2019, Deka took second place in the vote for "Fund Manager of the Year". Deka's maximum five-star rating in the Capital-Fonds-Kompass awards was confirmed again in 2019.

Thanks to its robust financial position, the Deka Group is able to fully lock on to its strategic path and lay the foundations to create lasting high value added in the years to come.

At the end of 2019, the Common Equity Tier 1 capital ratio (fully loaded) stood at 14.2%. The leverage ratio (LR, fully loaded) was 4.9%. The minimum requirement for own funds and eligible liabilities (MREL) ratio as at the reporting date stood at approximately 22%. Utilisation of risk appetite and risk capacity remained at non-critical levels at 63.9% and 50.7% respectively. The liquidity coverage ratio (LCR) was 170.6%.

Information about the Deka Group

Deka Group profile and strategy

The Deka Group is the *Wertpapierhaus* for the savings banks. Through its asset management and banking activities, it acts as a service provider for the investment, administration and management of assets, supporting savings banks, their customers and institutional investors at every stage in the investment process within the securities business. It also offers comprehensive advice and solutions both to the savings banks and to institutional customers outside the *Sparkassen-Finanzgruppe* on investing, liquidity and risk management, and refinancing.

Legal structure

DekaBank Deutsche Girozentrale (DekaBank) is a German federal institution incorporated under public law with registered offices in Frankfurt/Main and Berlin. DekaBank and its subsidiaries in Germany and other countries make up the Deka Group, which is wholly owned by the German savings banks. 50% of the shares are held via Deka Erwerbsgesellschaft mbH & Co. KG. The savings banks hold their interests via this company, which is owned by their regional savings bank and giro associations. The other 50% of the shares are held by the German Savings Bank and Giro Association (*Deutsche Sparkassen- und Giroverband* – DSGV).

DekaBank is a member of the deposit protection reserve of the *Landesbanken* and *Girozentralen*.

Organisational structure

The Deka Group's activities are divided into five business divisions. Asset management activities are handled by the Asset Management Securities and Asset Management Real Estate divisions. The Group's banking business is covered by the Capital Markets and Financing business divisions. The fifth business division – Asset Management Services – provides banking services for asset management. The sales units Savings Banks Sales and Institutional Customer Sales serve as the interface with sales partners and customers. The corporate centres support the business divisions and sales departments throughout the value chain.

Major companies and locations

The Deka Group's business is managed from the head office in Frankfurt/Main. The major investment management companies are also located there, such as Deka Investment GmbH, Deka Vermögensmanagement GmbH, Deka Immobilien Investment GmbH and the digital development platform bevestor. A further investment management company – WestInvest GmbH – is based in Düsseldorf. S Broker AG & Co KG has its registered office in Wiesbaden, while S-PensionsMangement GmbH (in which DekaBank has a 50% shareholding) is headquartered in Cologne.

In mid-September 2019, Deka Immobilien GmbH was merged with Deka Immobilien Investment GmbH. All activities performed by Deka Immobilien GmbH were moved to Deka Immobilien Investment GmbH. The aim of the merger was to further streamline divisional structures.

The Deka Group's most important international office is in Luxembourg. As part of the Deka Group's reorganisation in Luxembourg, the depositary that was previously part of DekaBank Deutsche Girozentrale Luxembourg S.A. (DekaBank Lux) was transferred to the existing DekaBank branch DekaBank Deutsche Girozentrale Niederlassung Luxemburg (DekaBank NL Lux) in early May 2019. The investment funds belonging to the Luxembourg-based company International Fund Management S.A. (IFM) were transferred in 2019 to Deka International S.A., Luxembourg and the Luxembourg branch of Deka Vermögensmanagement GmbH as part of the consolidation of the asset management companies. The next step will be the liquidation of IFM in 2020. The remaining business activities of DekaBank Lux were transferred to DekaBank NL Lux in early 2020, with the employees moving companies at the same time.

Corporate governance

The environment in which the Deka Group operates is seeing growing requirements in the interests of good and responsible corporate management and oversight. As an institution incorporated under public law, Deka is not subject to the German Corporate Governance Code. Nevertheless, the Deka Group strictly adheres to the principles of good and responsible corporate governance.

The corporate governance concept for the management and supervision of the Group ensures that boards' and committees' responsibilities are clearly defined and enables efficient decision-making processes. As a member of the *Sparkassen-Finanzgruppe*, the Deka Group is committed to the principles of subsidiarity and a focus on the greater good. This commitment forms the starting point for both the Code of Ethics and the risk culture framework. The Code of Ethics guides the actions of the boards, committees and employees. It is the basis for a corporate culture within the Deka Group that complies with the law, is open and transparent, and seeks to add value. The risk culture framework lays down binding guidelines for the responsible handling of risks in the Deka Group and for compliance among employees, managers and Board members in relation to this.

DekaBank is managed collectively by the Board of Management, which comprised six members as at the 2019 reporting date. The responsibilities of the individual members at the reporting date were as follows:

- CEO & Asset Management Securities: Michael Rüdiger
- Deputy CEO, Sales: Dr. Georg Stocker
- Risk (CRO): Manuela Better
- Finance (CFO), Treasury and Asset Management Real Estate: Dr. Matthias Danne
- Operations (COO): Daniel Kapffer
- Banking business: Martin K. Müller

Michael Rüdiger stepped down from his post at the end of 2019 at his own request and has left the Bank. At the beginning of April 2019, the Administrative Board appointed the then deputy CEO, Dr. Georg Stocker, as the new CEO. He began this role on 1 January 2020.

Birgit Dietl-Benzin was appointed as the Chief Risk Officer in early December. She is expected to take over the role from Manuela Better in mid-2020. Ms Better has not extended her contract as a member of the Board of Management and will leave Deka when her contract expires at the end of May.

The Administrative Board also agreed a resolution on new responsibilities in the Board of Management at its meeting in early December 2019.

Since the beginning of 2020, retail and institutional sales have been brought together within the remit of the CEO, Dr. Georg Stocker. Head of sales is Torsten Knapmeyer as executive manager, who previously headed the Asset Management Real Estate business division.

Asset Management Securities and Asset Management Real Estate were brought together under the remit of Dr. Matthias Danne at the start of 2020. Daniel Kapffer will take on the role of Chief Financial Officer, in addition to his responsibilities as COO, as of 1 May 2020 following the audit and approval of the 2019 annual financial statements and consolidated financial statements.

The members of the Board of Management are supported by in-house management committees in an advisory capacity. In addition, DekaBank actively incorporates representatives of the *Sparkassen-Finanzgruppe* into its decision-making process via three specialist advisory boards, which advise the Board of Management, and six regional sales committees (securities committees of the regional savings banks). The Board of Management benefits from their market proximity and expertise to develop business further.

The Administrative Board oversees the Board of Management and thus performs a supervisory role. It comprises representatives of the shareholders and employees as well as representatives from the *Bundesvereinigung der kommunalen Spitzenverbände* (German Federal Association of Central Municipal Organisations), who act in an advisory capacity. The Administrative Board's work is performed in part by the full Board and in part by various committees. To this end, the Administrative Board has established a General and Nomination Committee, an Audit Committee, a Risk and Credit Committee and a Remuneration Supervision Committee. The members of the Administrative Board are appointed by the Shareholders' Meeting. The German Federal Minister of Finance is responsible for general governmental supervision.

Sustainable governance and non-financial statement

Climate change is at the centre of current public debate, in Germany and beyond. The "Hamburg Declaration" at the 26th German Savings Banks Day and the discussions at that event reflected this changed environment.

DekaBank's sustainable corporate governance reflects the developments in this area since 2013 in the form of a sustainability strategy, which is part and parcel of the business strategy and is being actively implemented in the interests of customers, shareholders and employees. Deka is not only responding to the regulatory environment, but is itself committed to reinforcing its activities in this area wherever economically viable. It is ensuring that its comprehensive approach to sustainability is put into practice with sustainable banking products, sustainable HR management, sustainable banking operations and social engagement. The focus in 2019 was on further developing the range of sustainable products that Deka has been gradually introducing for savings banks and their customers since autumn 2019.

The sustainability report, which is published annually and audited by AGIMUS GmbH Umweltgutachterorganisation & Beratungsgesellschaft, contains detailed information on sustainable corporate governance at the Deka Group. It includes the Deka Group's non-financial statement pursuant to the German CSR Directive Implementation Act (*CSR-Richtlinie-Umsetzungsgesetz*). The declaration sets out, in particular, targets, measures and due diligence processes in the areas that are significant to the Group's business model. These include environmental, social and employee concerns as well as the upholding of human rights and the combating of bribery and corruption.

See also:
www.deka.de/
deka-group/
sustainability

The annual sustainability report including the non-financial statement does not form part of the Group management report. In accordance with the statutory publication deadlines, it is published by the end of April each year on the Deka Group website (https://www.deka.de/deka-group/sustainability), where it will remain accessible for at least ten years.

The Deka Group continues to be rated as "very good" by sustainability rating agencies. In the reporting year, it received another excellent "AA" rating from MSCI ESG, for example. The ISS-ESG rating agency confirmed Deka's "C+ (Prime)" rating in 2019. Deka improved the rating from imug rating to "positive BB". Sustainalytics continues to rate Deka as a "Leader" (with 83 points).

Business model as the *Wertpapierhaus* for the savings banks

The integrated business model ensures stability and competitiveness. It is tailored to Deka's role as a *Wertpapierhaus*, which incorporates both asset management and the banking business. The solutions offered are fundamentally aligned with the needs of the savings banks and their customers.

The Deka Group puts its primary customers – German savings banks and their customers – at the heart of its activities. To ensure that its products and solutions meets the needs of these customers, it is in regular institutional dialogue with the savings banks. The products in demand from primary customers are also sold to institutional customers. These particularly include pension funds, insurance companies, corporates, public bodies, non-profit organisations, family offices and international investors. Given the Deka Group's close involvement in the savings banks sector and its focus on German institutional customers, its business activities are concentrated on the domestic market.

The core business of the *Wertpapierhaus* is to provide suitable investments in securities and real estate for private and institutional investors as well as transactions which support and complement this along the entire asset management value chain. In this regard, the Deka Group acts as finance provider, issuer, structurer, trustee and depositary (custodian bank).

In addition to investment products and services such as mutual securities funds, special funds, ETFs, real estate funds and certificates, the Deka Group also provides execution of securities trading, custody accounts, asset servicing and depositary services as part of its asset management activities. Deka's services for savings banks also include its role as a liquidity platform, its securities lending services and its support services relating to the procurement and settlement of securities and financial derivatives. All advice, support and service processes – e.g. the provision of market analyses, infrastructure services and the performance of regulatory requirements such as market conformity tests – also form part of its business model. The Deka Group thus works as a solution provider to create further value added for customers and shareholders.

In securities funds and real estate funds, the Deka Group primarily earns commission income in the form of management and transaction fees. Subject to regulatory requirements, some of this income is passed on as an "association payment" to the savings banks in their capacity as sales partners. Additional commission income is generated from banking transactions, including capital market activities. Interest income is obtained primarily from specialised financing and real estate finance, as well as from the Capital Markets business division and Treasury operations.

Positioning and role within the *Sparkassen-Finanzgruppe*

DekaBank is a key part of the *Sparkassen-Finanzgruppe*. The combination of asset management and banking business, along with a clear focus on the needs of customers, brings major qualitative and quantitative benefits for the *Sparkassen-Finanzgruppe* and its customers.

The strategy implementation programme DekaPro is designed to continue putting the *Wertpapierhaus* strategy into practice in a customer-centric way. DekaPro's programme structure was aligned even more consistently with the goals of "growth" and "efficiency" in the second half of 2019.

The challenge is to ensure the efficient and thus sustainably competitive provision of services in line with growing business volume and simultaneously increasing requirements of regulatory requirements.

"DekaPro growth" combines the savings banks sales, institutional customer sales, products & services, digitalisation, and shareholdings & strategic partnerships initiatives.

A strategic cost initiative has been launched as part of "DekaPro efficiency". This focuses on optimisation and consolidation initiatives to achieve a lasting reduction in personnel and operating expenses, and is supported by reinforcing the customer-centric approach in process management. The activities involved in the cost initiative have been closely interlinked with the internal cost management processes and especially the budget planning process. Continual growth and innovation, long-term cost awareness and the ongoing evolution and reorientation of processes in line with customers' needs all require the organisation to continue developing in a substantial way.

At its meeting in early December, the Administrative Board tasked the Board of Management with examining closer cooperation with Landesbank Hessen-Thüringen (Helaba) and beginning structured talks with Helaba in early 2020.

Digitalisation strategy at the Deka Group

The digitalisation strategy is based on Deka's positioning as the *Wertpapierhaus* for the savings banks. It ensures a customer-centric evolution of the business model and constant improvements to business processes and infrastructure.

Potential solutions arising from digitalisation all along the value chain are reflected at every level of the Deka Group.

- Digitalisation of the customer interface encompasses everything that enables or facilitates digital access to securities products by savings banks and their customers, thereby benefiting the securities business across the *Sparkassen-Finanzgruppe*. Seamless, multichannel integration of branch and online sales is at the heart of this. Enhancements to the direct customer interface are implemented primarily in the "internet branch" and savings banks app in line with the savings banks' multichannel strategy. The DekaNet sales portal, which is used as an interface with advisers, is being further expanded. In addition, Deka is focusing on implementing the three-platform strategy ("internet branch" including savings banks apps (S App and S Invest), bevestor and S Broker). Deka is responsible for the bank-specific conception of the securities business in the "internet branch" of the savings banks and in the savings banks apps in terms of content. The "bevestor" digital development platform provides ideas and produces innovative digital products for securities business. bevestor is also Deka's robo-adviser solution for savings banks and their retail customers. S Broker is an online dealing service for execution-only customers of the savings banks.

- The digitalisation of products is focusing on the use of relevant technologies to improve and expand the product range. This includes completely new forms of data storage and analysis, for example. One trend for the future is the use of machine learning to analyse large volumes of data and trigger adjustments to asset allocation. Digitalisation is also shortening core value chains and leading to the emergence of new platforms and technologies for the exchange of money and assets. It is conceivable that blockchain and distributed ledger technology could considerably streamline processes for our products. We can also expect assets to become completely digitalised in future. Given its positioning as a *Wertpapierhaus*, the Deka Group will play a leading role in redesigning products, processes and IT platforms within the *Sparkassen-Finanzgruppe* and introducing blockchain technology through corresponding projects.

- Digitalising processes and infrastructure will play a major role in raising the efficiency of existing banking and business processes. RPA (Robotic Process Automation), for example, can increase the level of automation and reduce process throughput time. In addition, processes from the field of artificial intelligence are increasingly finding their way into standard business processes. Having introduced RPA, the Deka Group already works with over 60 software robots in order to improve the efficiency of quantitative processes.

New digital technologies and solutions are being tested in the Open Digital Factory (ODF), home to interdisciplinary, agile teams from IT and other departments. In this way, the ODF is helping to implement the challenges associated with the digital transformation.

Business divisions, sales units and corporate centres

See also: Segment reporting: page 104, ff.

There is a clear separation in the Deka Group at Board of Management level between asset management and banking. Nevertheless, the divisions, sales units and corporate centres work closely together in operational terms. They form the basis for the Deka Group's segment reporting under IFRS (International Financial Reporting Standards) 8.

Asset Management Securities business division

The Asset Management Securities business division offers high-quality asset management solutions for every market environment. Customers can choose from a wide range of products.

The product range comprises:

- actively managed mutual securities funds following fundamental and quantitative strategies in all major asset classes, along with fund savings plans based on these,
- passively managed index funds (exchange-traded funds – ETFs),
- asset management solutions such as asset management funds, fund-based asset management, wealth management, online asset management and robo-advisory investing, ETF-based asset management and sustainable asset management concepts,
- pension products (e.g. fund-based private and company pension products),
- special funds, advisory/management mandates and asset servicing solutions with an emphasis on master KVGs for institutional customers.

The product range also features bespoke and standardised securities services such as macro research for individual stocks and funds, support with designing investment strategies and processes, order desk and fund reporting services. These are also offered to external customers in some cases. The division is currently expanding its sustainability-related products and services.

The division's strategic objectives remain to expand its market position in the relevant product segments for savings bank customers and to achieve profitable growth in institutional business. Alongside product quality and competitiveness, the focus is on digitalising processes all along the value chain to further improve quality, efficiency and service.

Asset Management Real Estate business division

The Asset Management Real Estate business division provides fund products relating to real estate or real estate financing for the savings banks' customer and proprietary business. The division focuses on the office, retail, hotel and logistics segments in Europe as well as selected locations in North and South America and the Asia-Pacific region.

Its services comprise the purchase, sale and management of real estate and all other real estate services, as well as the growth-oriented development of marketable commercial properties in liquid markets, and active portfolio and risk management.

Products offered by the division include open-ended real estate mutual funds as well as special (i.e. private) funds with either an open-ended or closed-ended structure, real estate funds of funds and credit funds that invest in real estate, infrastructure or transport financing. Fund products are systematically provided with appropriate cash flow management for the purpose of lasting risk avoidance.

As part of the *Deka Immobilien-Kompass* initiative, the division offers savings banks and other institutional investors an extensive modular service package aimed at real estate fund investment. Together with in the real estate segment experienced external partners, the division offers investors the opportunity to invest in residential property funds. This enables it to tap added market potential.

The division's mission is to provide the savings banks with lasting, high-quality real estate- and real estate financing-based investment products for their customer business and proprietary investments. The aim is to maintain or expand the market position in the retail and institutional business without compromising the proven quality or stability.

Asset Management Services business division

The Asset Management Services business division provides banking and other services that complement the offerings of the asset management divisions. These range from supporting the sales departments with digital multichannel management to managing custody accounts for customers and providing custodial services for investment funds.

The Digital Multichannel Management subdivision develops and implements digital solutions for securities business in the "internet branch" of the savings banks. The savings banks are provided with a multi-platform online securities offering, including stock exchange and securities information tools. DekaNet acts as the central information and sales platform, offering automation solutions that enable processes to work more efficiently. In the retail segment, it also takes legal responsibility for the management of DekaBank custody accounts, in which Deka funds, investment solutions and certificates can be held. Its services are supplemented with those provided by S Broker, which likewise provides solutions for multichannel sales by savings banks. *S ComfortDepot* is a particularly popular solution for savings banks that want S Broker to take legal charge of their retail customer custody accounts (*Depot B*). With *DepotPlus* and *DirektDepot*, S Broker also provides the savings banks with an offering for online-oriented execution-only customers and trading-oriented clients. The digital development platform bevestor is another module of the multichannel approach and produces innovative solutions for the online securities business.

The Depositary subdivision provides a full range of depositary services to Deka Group funds and to investment management firms outside the Group. These include the regulatory control function under the German Investment Code (*Kapitalanlagesetzbuch* – KAGB), securities settlement and reporting. Depositary functions are also offered to institutional end investors. Asset Management Services and the Capital Markets division work closely together on services such as commission business, collateral management and securities lending.

The division has set itself the objective of continuing to develop the digital customer interface by offering a convincing range of services. Seamless, multichannel integration of branch and online sales for the securities business is at the heart of this. The Depositary subdivision is also aiming to improve its competitive position even further and to continue to grow its business involving mutual and special funds, third-party mandates and investment managers.

Capital Markets business division

The Capital Markets business division is the central product, solution and infrastructure provider while also acting as a service provider and driving forward innovation in the Deka Group's customer-focused capital markets business. As such, the business division provides the link between customers and the capital markets. It offers investment solutions to both retail and institutional customers and helps them to put their asset and risk management decisions into practice.

With its tailored range of services relating to securities repurchase transactions, securities lending and foreign exchange trading, the business division provides the central securities and collateral platform for the savings bank association. In addition to its function as a commission agent for all relevant asset classes, it serves as a centre of competence for trading and structuring capital market products as well as for DekaBank's issuance business. Institutional customers are provided with clearing services and support with the efficient fulfilment of regulatory requirements. The division is also responsible for the Deka Group's strategic investments. Strategic investments comprise the securities in the Deka Group's proprietary portfolio that are not held for liquidity management purposes.

Together with other market participants, the division launched the finledger platform in 2019 for processing digital promissory note loans with the help of distributed ledger technology. finledger is a blockchain-based platform for processing promissory note loans. The main product is the Deka Easy Access (DEA) platform, which helps savings banks to manage their proprietary portfolios effectively. By the end of 2019, 240 savings banks already had access to the information, management and trading dashboard.

The activities of the Capital Markets division are divided into three subdivisions as follows:

- The Collateral Trading & Currency subdivision brings together securities lending products, securities repurchase transactions and customer-oriented currency trading.
- The Trading & Structuring subdivision is the Deka Group's centre of competence for trading and structuring capital market products (cash instruments, bonds and shares), for derivatives in all asset classes and for the issuing business (debt securities and certificates). The subdivision also looks after strategic investments.
- The Commission Business subdivision executes trades in securities and exchange-traded derivatives in its own name on behalf of third parties.

As a product, solution and infrastructure provider, the Capital Markets division provides savings banks and institutional customers with access to capital markets and (central) counterparties. Customers benefit from synergy effects and economies of scale. The business division is responding to regulatory requirements by optimising the business portfolio on an ongoing basis and by efficiently managing regulatory capital requirements.

Financing business division

The Financing business division focuses on specialised and real estate financing – segments in which it has the relevant market knowledge and long-standing expertise.

Lending is taken onto our own statement of financial position via the banking book, as well as being packaged as an investment product for other savings banks and banks or institutional investors via club deals or syndications. Priority is given to placements within the *Sparkassen-Finanzgruppe*.

The Specialised Financing subdivision concentrates on financing energy, grid, utilities and public infrastructure projects (infrastructure financing), on aircraft and ship financing (transport financing), on financing covered by export credit agencies (ECAs), and on financing of the public sector. It also has a leading position in the funding of German savings banks across all maturity ranges. Loans that were made before the credit risk strategy was revised in 2010 are combined in a legacy portfolio that does not conform to the current strategy. These continue to be wound down while safeguarding assets.

The Real Estate Financing subdivision provides lending for commercial real estate. It focuses on marketable properties in the office, retail, hotel and logistics segments in liquid markets in Europe and North America.

In accordance with the sustainability strategy, the Financing business division is supporting the Deka Group's aim of attracting more financing business that focuses on sustainability aspects. This type of financing and investment contributes to fulfilling the United Nations Sustainable Development Goals and is part and parcel of the sustainable corporate governance of the Deka Group.

The division aims to generate sufficient new business in the defined core segments and to broaden the product offering in existing asset classes as well as to achieve a regional expansion of Deka's financing business. It also aims to expand Deka's position as a quality leader in liquid markets and as a sought-after financing partner for the most important international real estate investors. In addition, DekaBank acts as a dependable refinancing partner for the savings banks.

Sales

Savings Banks Sales & Marketing

Savings Banks Sales and Marketing focuses on comprehensive sales support for the savings banks for business with retail and commercial customers across all sales channels.

There is a clear division of tasks in market cultivation: The savings banks have sole responsibility for directly contacting, advising and serving retail customers. The Deka Group provides them with the products and services they need to do so. Deka therefore also aims its marketing activities directly at end customers so as to nurture their active demand for savings banks' services. Sales Management, Marketing & Private Banking systematically analyses the needs of customers and savings banks as well as competitor and market developments. Based on its findings, it develops forward-looking measures to support sales and marketing at the savings banks. Private Banking, Product Management & Product Sales look after all matters throughout the product life cycle in relation to the funds, certificates, asset management solutions, private and occupational pension plans, and private banking services on offer. Among other things, Private Banking offers solutions and services for asset optimisation, generation management, protection against life's risks, pensions and sustainable investment. The *Sparkassen-Finanzmanager* from Deka Private Banking can draw upon support on any topic when advising private banking customers, entrepreneurs (private and business assets) and institutions.

To ensure nationwide support, Sales in Germany is divided into six sales regions. Sales directors maintain regular dialogue on markets and customers with the savings banks and associations. Deka also provides the savings banks with sales associates and other specialists as the topic or occasion requires to assist at local level with marketing and sales activities and offer training and coaching. In the private banking and corporate customer segment, heads of private banking and corporate customers at the savings banks can call directly upon the specialist Deka sales managers Private Banking.

In early 2019, Deka added the Deka-*Wertpapierbaukasten*, its modular securities concept, to the support services it provides. The *Wertpapierbaukasten* is a web-based application that helps sales directors to better support the savings banks, allowing the banks to efficiently expand their securities business in a way that makes full use of their potential. Deka has also been working with S Finanz Informatik to continuously enhance securities reporting for the savings banks. Additional reports and sales analyses are also being provided.

Products and solutions for retail customers are marketed under the Deka Investments and Deka Private Banking sales brands.

Institutional Customer Sales

The Institutional Customer Sales unit supports the savings banks with proprietary business and serves institutional investors in Germany and other countries. Customer advisers adopt a comprehensive approach that covers all products and services offered by the Deka Group across all business divisions. In addition, Deka provides institutional customers with important functions such as reporting and order placement through online channels.

The Institutional Customer Sales team is available to savings banks and other banks as a management partner and adviser. It develops immediately viable solutions for proprietary business (*Depot A*) and overall bank management. This includes methods and applications for interest rate book management and asset allocation. The solutions are built on comprehensive analyses of the earnings and risk situation.

Other important customer groups include pension funds, insurance companies, corporates, public bodies, non-profit organisations, family offices and international investors.

The Deka Group brings together all its solution expertise for institutional customers under the Deka Institutionell brand.

Corporate Centres

The corporate centres provide support to our sales teams and business divisions. As at the reporting date, these comprised the Corporate Office & Communications, Internal Audit, Legal, Compliance, Corporate Development, Human Resources, Organisational Development, Risk Control Capital Market Funds, Risk Control, Finance, IT, Business Services, Credit Risk Office, and Treasury corporate centres.

Influencing factors and market position

In securities-related asset management, the economy, money market and capital market environment, the sales environment for the *Sparkassen-Finanzgruppe*, customer-driven trends and product quality all influence business development and profit performance. These factors have an impact on the sale of products to retail and institutional investors as well as on the performance of portfolios. In addition to this, real estate asset management is largely influenced by the situation and developments in commercial property, investment and letting markets.

With fund assets (according to the BVI, the German Investment Funds Association, as at 31 December 2019) of €134.4bn and a market share of 13.4%, Deka is the fourth largest provider of mutual securities funds in Germany. It is Germany's second-placed provider of mutual property funds with fund assets (according to the BVI, as at 31 December 2019) of €33.7bn and a market share of 30.9%.

At the 2019 €uro FundAwards by Finanzen Verlag, Deka once again demonstrated that it has a broad range of attractive and successful funds: 16 of the Deka Group's funds and four of its ETFs won a total of 40 awards. At the "Finanzennacht" (Finance Night) event in early February 2019, Deka took second place in the vote for "Fund Manager of the Year". After the top spot in the previous year, this placement was another major success for Deka.

In the Capital-Fonds-Kompass 2019 awards organised by the business magazine Capital, the fund analysis firm Scope and the service experts at Tetralog Systems Analysis, Deka Investment GmbH secured a five-star rating again.

At the 2019 Scope Alternative Investment Awards in late November, Deka Immobilien Investment GmbH was honoured as Best Asset Manager in the Retail Real Estate Europe category.

Developments in the money and capital markets are also highly relevant to the Capital Markets and Financing business divisions. For example, customer demand for liquidity partly depends on the volume of liquidity made available by the European Central Bank (ECB). In addition, the situation in the market for fixed-interest securities impacts on the issuing activities of the Capital Markets business division. Lending business is affected to some extent by economic trends in the sectors financed and by market interest rate developments.

Real estate financing focuses on properties in Europe and selected locations in North America. The specialist financing business has an international orientation and is rounded off by its services for German savings banks. Having worked for decades in every segment, DekaBank has extensive market knowledge and experience at its disposal. In the savings bank sector, DekaBank is market leader in the segment for the financing of German federal states.

The Deka Group's certificates are sold through the German savings banks. With the issue volume rising slightly during the reporting year, the Deka Group achieved a 21.4% share of the overall market for derivative securities in Germany at the end of the third quarter of 2019, making it the market leader. Deka is also the market leader in investment certificates, reverse convertible bonds and structured bonds. It has established itself as the second-biggest provider of express certificates.

The Scope Zertifikate Awards 2020 were presented in Frankfurt in late November 2019. DekaBank was nominated in the "Primary Market" category and impressed the expert jury, who named it best issuer.

Deka also achieved the top score of AAA (ZMR) in the Scope Zertifikate Management Ratings for the third time in a row. This reaffirmed its quality and expertise as an issuer of investment certificates in the primary market.

DekaBank was also voted best certificates issuer of 2019/2020 by the magazine "Der ZertifikateBerater" together with n-tv, Börse Frankfurt Zertifikate and the Stuttgart Stock Exchange. Among the 26 competing issuers, it took second place in the primary market products, capital protection certificates and "Certificate Issuer of the Year" categories.

Changes to regulatory requirements are of key significance for all business divisions and corporate centres. An overview of current economic conditions is provided in the economic report.

See also: Economic report: page 24, ff.

Risk and profit management at the Deka Group

The Deka Group has a consistent system of targets. Success is measured against three outcomes: sustainably increasing enterprise value, generating value added for the *Sparkassen-Finanzgruppe* and corporate growth.

Financial and non-financial performance indicators are used in the Bank's management. These can be divided into key management indicators and other relevant indicators. The Board of Management and management committees that support the Board in its management role are informed through comprehensive reporting whether the strategic and operational measures used to manage the Deka Group are successful and whether the Deka Group risk/reward ratio is within the target range.

Financial performance indicators

The Deka Group's earnings, equity and risk management are essentially illustrated by three key financial performance indicators.

The economic result is the key in-house management indicator within the meaning of the requirements of IFRS 8 (Operating Segments) and is based on the figures according to IFRS accounting standards. The economic result includes the total of profit or loss before tax, plus or minus changes in the revaluation reserve (before tax) and the interest rate and currency-related valuation result from financial instruments recognised at amortised cost, which are not recognised in the income statement under IFRS but are relevant for assessing financial performance. The interest expense on AT1 bonds (Additional Tier 1 capital), which is recognised directly in equity, is also included in the economic result. Furthermore, the economic result takes into account contingent future charges where the likelihood of occurrence is considered to be "possible" but for which a provision cannot be recorded under IFRS due to the lack of sufficient concrete evidence. The economic result is therefore a control variable on an accrual basis with a high level of transparency that enables recipients of the external financial reporting to consider the company from the management perspective.

The economic result has been used in external reporting at Group and business division level since 2007. For a reconciliation of the economic result to profit before tax under IFRS, please refer to the segment reporting in note [3], which shows the measurement and reporting differences in the "reconciliation" column. This ensures that it is possible to reconcile the figures presented with profit before tax under IFRS.

See also: Segment reporting: page 104, ff.

See also: Capital adequacy: page 70, ff.

The Internal Capital Adequacy Assessment Process (ICAAP) is based on two perspectives. In the normative perspective, the Common Equity Tier 1 capital ratio is the key management indicator. The Common Equity Tier 1 capital ratio is defined as the ratio of Common Equity Tier 1 capital to risk-weighted assets (RWAs) for all relevant credit, market and operational risk positions plus the credit valuation adjustment (CVA) risk. Other relevant indicators comprise own funds, risk-weighted assets and the leverage ratio exposure, along with the corresponding capital ratios, the MREL ratio and utilisation of the large exposure limit. Risk-weighted assets are managed in line with the Deka Group's strategy, the targeted balance sheet structure and the capital market environment.

As the key management indicator in the economic perspective, risk appetite is defined as the overall aggregate risk for individual risk types that the Deka Group is willing to accept in order to achieve its strategic objectives and business plan. It forms the basis for allocating risk capital. The monthly risk-bearing capacity analysis involves comparing the Deka Group's risk appetite and allocated risk capital with total risk determined across all risk types that have an impact on profit or loss. This makes it possible to establish whether risk limits have been adhered to at Group and divisional level.

See also: Liquidity adequacy: page 74, ff.

The Internal Liquidity Adequacy Assessment Process (ILAAP) is also based on two perspectives. From the normative perspective, the liquidity coverage ratio (LCR) serves as the relevant indicator. It will be joined from June 2021 by the net stable funding ratio (NSFR). The funding matrix (FM) has been defined by the Board of Management as the risk measure to be used as an indicator in the quantification, management and monitoring of liquidity risk in the economic perspective.

Non-financial performance indicators

Non-financial performance indicators relate to various aspects of the bank's operations and are an indication of the success of the products and services of the business divisions in the market.

Net sales is the key management indicator of sales performance in the fund and certificates business. This figure essentially consists of the total direct sales volume of mutual and special funds, fund-based asset management, funds of partner organisations, master funds and advisory/management mandates, ETFs and certificates. Net sales in investment fund business corresponds to gross sales less redemptions and maturities. Sales generated through proprietary investment activities are not counted. Redemptions and maturities are not taken into account for certificates, since in the certificates business the impact on earnings primarily occurs at the time of issue.

The key management indicator total customer assets comprises the income-relevant volume of mutual and special fund products (including ETFs), direct investments in the funds of partner organisations, the portion of fund-based asset management activities attributable to partner organisations, third-party funds and liquidity, advisory/management mandates, master funds under third-party management and certificates. Total customer assets have a significant impact on the level of net commission income.

See also: Business development and profit performance in the Deka Group: page 29, ff.

The performance indicators are reported by customer segment and product category at Deka Group level and for the Asset Management Securities and Asset Management Real Estate business divisions.

Economic report

Economic environment

Macroeconomic conditions

The growth rate of the world economy fell by 0.9 percentage points in 2019 to 2.9%. The sluggishness was attributable to the industrial sector: industrial production is stagnating worldwide, and countries with a strong industrial base, such as Germany, have entered an industrial recession.

Geopolitical risks weighed on the economy in 2019. The ongoing trade dispute between the world's two largest economies (the US and China, which together account for some 34% of global GDP) resulted in damaging tariffs and above all in uncertainty about the future world economic order. This had a negative impact on global production chains and sales markets. Industrial companies with global operations responded with a significant cut in investment. Another reason for the investment restraint could be found in China, where high levels of indebtedness in relation to infrastructure projects led the state to take a more cautious approach. Meanwhile, the Brexit process resulted in lower orders from UK companies.

There was no majority in the British parliament to pass an EU withdrawal agreement by 31 March 2019 under Prime Minister Theresa May or by 31 October 2019 under Prime Minister Boris Johnson. This meant that companies were repeatedly hit by the risk of a no-deal ("hard") Brexit. The uncertainty also hit economic growth. A decisive breakthrough did not come until late in the year. New elections on 12 December 2019 resulted in an absolute majority for the party of the British premier, Boris Johnson. This cleared the way for Johnson to take the country out of the EU on 31 January 2020.

In terms of monetary policy, market participants expected an initial interest rate hike by the ECB in 2019. However, the higher inflation rates anticipated by the ECB were not forthcoming, and the growth outlook for the eurozone deteriorated. From mid-year onwards, market expectations then shifted towards a further loosening of ECB monetary policy. In connection with the introduction of a tiered deposit rate, market participants also saw a possibility of an extreme cut in key rates. In the end, the ECB decided at its September meeting on a package of measures involving a reduction in the deposit rate to –0.50% and net asset purchases of €20bn per month as well as further long-term refinancing operations. The heart of the package of measures, however, was stricter forward guidance in respect of future key interest rates. This persuaded investors that a very gradual normalisation of monetary policy can be expected over the next few years. The handover of the ECB presidency from Mario Draghi to Christine Lagarde on 1 November had no impact on market expectations that monetary policy will remain unchanged for a long time to come.

Economic environment for asset management

Private household wealth in Germany increased in 2019. Households increased their financial assets to €6,302bn (30 September 2019), up €298bn from the end of 2018, due to high new inflows and growth in value. The high level of geopolitical uncertainty continued to drive households towards liquid assets such as cash and demand deposits. Gains in the value of equities and investment funds also contributed to increased wealth and lifted the share of these investments in the total financial assets of private households to 21% (up two percentage points year-on-year).

The cautious attitude of investors was reflected in the investment statistics of the German Investment Funds Association BVI. Net assets in open-ended mutual funds rose to €1,115.7bn by year-end 2019 (previous year: €973.5bn). At €17.5bn, net inflows fell short of the prior-year figure again (€22.5bn). Relatively low-risk mixed funds were in particular demand, attracting net inflows of €10.5bn in financial year 2019. However, this was a significant reduction on the previous year's net inflows of €21.7bn. Real estate funds experienced an equally significant increase. At €10.7bn (previous year: €6.4bn), net inflows hit a five-year high. Bond funds had to accept significant net outflows (€–3.7bn) again as in the previous year. Net assets in open-ended special funds rose significantly to €1,874.9bn by year-end 2019 (previous year: €1,619.5bn), while net inflows of €102.7bn slightly exceeded the prior-year figure of €95.5bn.

Expansionary monetary policy all around the world and negative money market rates in the eurozone led to increased demand for those securities still offering the prospect of positive returns. Concerns about global growth and confusing news about the global trade dispute resulted in no more than temporary setbacks in equities and corporate bonds. Investors' risk appetite increased further towards the end of the year. This was due to the first tangible results in the trade negotiations between the US and China and the substantial election victory for Boris Johnson in the UK, which reduced the likelihood of a no-deal Brexit. Many share indices subsequently reached new historic highs. Conversely, yields on long-dated German government bonds and US Treasuries saw little upward movement. Corporate bond prices also developed very positively, benefiting especially strongly from the ECB's new asset purchase programme announced in September 2019.

Real estate funds continued to offer an attractive risk/reward ratio in the low interest rate environment. Given high real estate prices and limited availability of suitable properties, however, the investment opportunities open to real estate funds remained limited. This restricted their ability to attract new investor funds, particularly given that it was not possible to generate positive margins from liquidity investments. Demand for office space remained high despite the economic slowdown in some countries. At the same time, supply in most locations was limited due to the lack of sufficient properties. Vacancy rates declined further in 2019, leading to continued rental growth. Yields saw further declines and fell sharply in some European locations. The global transaction volume in 2019 exceeded the prior-year figure. The North America and Asia/Pacific regions recorded higher volumes, while Europe's investment turnover fell.

Economic environment for the banking business

The pivot by the two major central banks – the Federal Reserve (Fed) and ECB – to an even looser monetary policy led to rising share and bond prices. Yields on short- and medium-term German government bonds fell well into negative territory, and even 30-year bunds traded with negative yields for a time. Investors therefore increasingly sought out riskier forms of investment, while real estate prices also rose significantly due to the historically low cost of financing. For banks and savings banks, the adverse side-effects of the low interest rates became ever more apparent. Institutions increasingly contemplated passing negative deposit rates on to their customers.

High market liquidity and the ECB's new asset purchase programme in the final quarter influenced the short-term money market business. The ECB's newly introduced tiering and the expansion of its securities lending programmes also made their mark on the capital market. As expected, market conditions put the margins achievable in the Commission Business unit under pressure. Sales of structured issues were encouraging again with another increase in market share. In the OTC derivatives market, the temporary uncertainty about the recognition of LCH as the central clearer at the end of the year did not have any impact, as DekaBank proactively moved a large part of its derivatives book to Eurex. A stable market infrastructure for derivatives trading and the related infrastructure services of the savings banks was ensured at all times.

There were no significant year-on-year changes in the market environment for the financing business. The overall conditions for aircraft and infrastructure financing were stable on the whole. A slight reduction in structural excess capacity is emerging on the shipping markets. Potential in terms of margins remained limited, however, as strong competition from banks and institutional investors for attractive credit assets meant that borrowers could continue to negotiate favourable terms. With a large number of competitors from the banking and non-banking sectors alike, the market for real estate financing remained extremely competitive in 2019. With the exception of the markets for retail properties, the real estate markets in the relevant regions for DekaBank, such as Europe, the US and Canada, developed positively and offered attractive financing opportunities.

Regulatory environment

Changes to regulations, both those already initiated and those in the pipeline, once again influenced the business model and profitability of the Deka Group during the 2019 financial year. Higher capital requirements for banks could emerge from the results of the annual Supervisory Review and Evaluation Process (SREP), for example in the context of the supervisory review of the internal models under Pillar 1 of the Basel capital framework. Implementing the regulations described, which comprise the key regulatory issues for the Deka Group, makes considerable demands on costs and resources.

Regulatory topics

In the EU, the reform of Capital Requirements Regulation II (CRR II) and Capital Requirements Directive V (CRD V) was completed in the first half of 2019. The final legislative texts were published in June 2019. The reform of the CRR primarily implements the proposals put forward by the Basel Committee on Banking Supervision (BCBS) on the leverage ratio (LR), the net stable funding ratio (NSFR), the standardised approach for counterparty credit risk exposure (SA-CCR), the revised requirements that apply to large exposures, the trading book and the treatment of credit risks resulting from guarantee funds and Riester products. These regulations will generally be applied for the first time in June 2021.

The Fundamental Review of the Trading Book (FRTB) contains amended rules on market risk, which are likely to lead to an increase in risk-weighted assets (RWAs) when exclusively using the standardised approach in future. On 14 January 2019, the Basel Committee published the final standard with slightly reduced risk weightings in the standardised approach compared with under the 2016 Basel standard. This will reduce the increase in risk-weighted assets overall. The European Commission adopted the final Delegated Regulation in mid-December 2019 and integrated the changes to the standardised approach under the 2019 Basel standard into CRR II. The reporting requirements for the FRTB standardised approach are expected to apply from March 2021. The new capital requirements will only apply from a later date.

The European capital and liquidity requirements were revised to tighten up the rules on large exposures, forcing more restrictive handling of large exposure risks. The large exposure limit will no longer be set according to the level of total own funds but instead according to the level of Tier 1 capital. The calculation of the exposure values and the provisions governing the application of credit risk mitigation techniques have also been revised. In applying credit risk mitigation techniques, the collateral provider or issuer of the financial collateral is required to take the collateralised exposure into account in their large exposure limit when collateral is accepted. This could have an impact on repo lending business activities. First-time application is scheduled for the end of June 2021.

The provisions of the Basel III regulations finalised in December 2017 (also known as Basel IV), which contain, among other things, rules on the output floor and Credit Risk Standardised Approach (CRSA), are not included in CRR II. The Basel Committee intends these rules to be introduced as from 1 January 2022. More specifically, the gradual introduction of an output floor is planned. This will stand at 50% upon introduction at the beginning of 2022 and increase to its final level of 72.5% in 2027. The output floor will limit the benefit of internal models as compared to the standardised approach. Deka currently uses the IRB approach for the majority of its lending. For the general components of interest rate and share price risk, it uses an up-to-date internal model for market price risk. It will therefore be particularly affected by the new output floor rules, which may lead to a significant rise in RWAs going forward. In addition, new rules have been agreed on calculating RWAs for CVA risk and operational risk, which are also to be applied starting in 2022. These may also increase RWAs. Initial draft legislation for implementation at EU level is planned for 2020.

Alongside CRR II, the European Council reached an agreement on changes to the EU's Bank Recovery and Resolution Directive (BRRD II) and Single Resolution Mechanism Regulation (SRMR II). These primarily concern the translation of international standards on total loss-absorbing capacity (TLAC) into European law and their harmonisation with the minimum requirements for own funds and eligible liabilities for loss absorption and recapitalisation in the event of resolution (MREL). Within this context, the trilogue negotiation partners reached an agreement on the treatment of MREL-eligible liabilities issued prior to the change in legislation until maturity. As the Single Supervisory Mechanism (SSM) applies to the Deka Group, DekaBank again supported the work on a resolution plan for the Deka Group during 2019, which will ultimately be the basis for determining MREL.

Between February and October 2019, the ECB conducted a sensitivity analysis on liquidity risk as part of a stress test on major institutions, including DekaBank. The results demonstrate DekaBank's overall sufficient liquidity position overall.

A further stress test by the European Banking Authority (EBA) is planned for 2020, which, as in 2018, will cover all risk types. Publication of the results is scheduled for July 2020. DekaBank is not among the banks taking part in the EBA stress test. As a bank subject to ECB supervision, however, it will be subjected to a stress test by the ECB in 2020 which will be carried out in accordance with EBA methodology. The results of the ECB stress test feed into the calculation of the Supervisory Review and Evaluation Process (SREP) ratios.

In March 2018, the ECB published an addendum to the ECB Guidance to banks on non-performing loans. This detailed its expectations regarding the level of prudential provisioning for all loans classified as non-performing exposures (NPEs) for the first time after 1 April 2018. The expectations set out in the document form the basis for an annual supervisory dialogue. Specifically, the addendum provides for full risk coverage for unsecured (secured) NPEs after two (seven) years from the time of NPE classification. In the event of a shortfall in cover, the banks are required either to make a deduction from their Common Equity Tier 1 capital on their own initiative or to provide the supervisory authorities with adequate justification of their divergence from the prudential provisioning expectations. If the ECB does not accept the justification, this could result in higher capital requirements. The amendment to the CRR concerning the minimum loss cover for non-performing exposures was published in the EU Official Journal on 25 April 2019, thereby entering into force. This provides for a mandatory deduction from the Common Equity Tier 1 capital if the actual risk provisions set up by the institutions fall short of the regulatory minimum requirements for the level of risk provisioning. In August 2019, the ECB then amended the addendum to the ECB Guidance to banks on non-performing loans in relation to the minimum loss coverage ratios and clearly defined the interplay between the ECB Guidance and the CRR when it comes to application. The amendments do not affect the timetable or the ability to justify deviation of actual risk provisioning from the minimum loss cover for non-performing exposures.

In October 2017, the Basel Committee published guidelines on identification and measurement of step-in risk. Step-in risk is the risk that institutions will provide financial support in excess of contractual obligations to non-consolidated companies facing financial difficulties. The guidelines set out general expectations on how these risks should be handled. The Basel Committee expects the requirements set out in the guidelines to be implemented in 2020. However, they have not yet been codified into European law. DekaBank began in 2019 to identify relevant applications and design suitable processes for identifying and quantifying risks. The design and initial implementation of a systematic process to identify, measure and report on step-in risks in the Deka Group is planned for 2020.

In March 2018, the European Commission published its sustainability expectations in a ten-point action plan: Financing Sustainable Growth. The document calls for sustainable investment as a prerequisite for sustainable and inclusive growth and aims to overcome companies' financial risks stemming from climate change, resource scarcity, environmental degradation and social issues. In addition, BaFin published a Guidance Notice on Dealing with Sustainability Risks in December 2019. In this context, DekaBank has laid the basis in its business strategy for the appropriate ongoing development of sustainability-related activities in the Deka Group. One initiative aims, in the second half of 2020, to provide the savings banks with a package of products and services relating to sales of securities. This will serve to implement the integration of sustainability aspects on the basis of MiFID II. In autumn 2019, DekaBank presented the savings banks with its sustainability 2020 product map. This provided them with sustainable securities products for their customers, starting in the reporting year. Another initiative aims to anticipate the sustainability-related requirements of national and international supervisory bodies that will apply to the risk management systems of financial intermediaries. In particular, this will involve assessing physical and transitory risks as a component of existing risk types and evaluating their reputational impact. For 2020, the Deka Group aims to establish systematic management of sustainability risks in its own rule book.

Product- and service-related regulatory proposals
The EU Directive on deposit guarantee schemes (Deposit Guarantee Scheme Directive) was adopted at the end of 2018 as a component of the European Banking Union. It is planned to establish a common European Deposit Insurance Scheme (EDIS), harmonising the requirements concerning national deposit guarantee schemes at European level. The European institutions are working and coordinating with each other on the exact shape of this and the future timetable.

Tax policy developments
At its meeting on 13 March 2018, the EU's Economic and Financial Affairs Council (ECOFIN) reached a political agreement on the planned disclosure regime for cross-border tax arrangements. The related EU administrative cooperation directive 2011/16/EU (DAC 6 Directive) entered into force on 25 June 2018. This obligates intermediaries and taxpayers (including banks and investment management companies) to report information on certain cross-border arrangements to the tax authorities. The first reports are due from 1 July 2020. Tax arrangements for the period after 24 June 2018 and prior to 1 July 2020 must be reported by no later than 31 August 2020. DekaBank conducted an impact analysis in the second and third quarter of 2019 using the DAC 6 Directive and the draft German legislation based on it. Implementation began in parallel with this in the fourth quarter of 2019 and is due to be completed by no later than 30 June 2020. A particular challenge is that few member states had yet transposed the DAC 6 Directive into national law as of 2019. The Directive also contains many undefined legal concepts that require interpretation. In Germany, the relevant legislation – the *Gesetz zur Einführung einer Pflicht zur Mitteilung grenzüberschreitender Steuergestaltungen* – was agreed in mid-December 2019 and approved by the upper house of the German parliament. Publication of an explanatory document from the Federal Ministry of Finance (BMF), which is expected to include a white list of products and services judged to be unproblematic, is not anticipated before June 2020.

Business development and profit performance in the Deka Group

Overall statement on the business trend and the Group's position

The Deka Group ended the year with an economic result of €434.0m. This was moderately below the previous year's figure of €451.8m.

Net interest income, net financial income and, in particular, net commission income exceeded the prior-year figures. Risk provisions in the lending and securities business led to a slightly negative risk provisioning result that remained below the expectations for 2019. Due to persistent low interest rates, other operating profit was hit by a one-off effect of €–140.0m from measures to strengthen the capital for a company in the equity investment portfolio. The low interest rates also led to actuarial losses on pension provisions (€–38.6m). Restructuring expenses (€41.0m) were primarily incurred as part of the strategic cost initiative.

The Deka Group increased net sales by a total of €6.3bn to €18.0bn year-on-year in the reporting period.

At €11.1bn, net sales in the retail customer segment were well into positive territory again and came close to the previous year's level (€11.3bn). In the fund business (€5.9bn), equity funds (€3.2bn) and real estate funds (€2.1bn) made up a particularly significant proportion of sales. Sales of certificates to retail customers totalled €5.3bn.

Net sales in the institutional customer segment were significantly positive again at €6.9bn. The previous year's figure of €0.5bn was affected by the termination of an individual mandate (as planned) as part of the integration of Deka Vermögensmanagement GmbH (formerly LBB-INVEST GmbH). The institutional investment fund business accounted for a large portion (€5.6bn) of sales. Certificate sales to institutional customers came to €1.3bn.

In 2019, investors signed up to around 620,000 (net figure) new Deka investment savings plans, meaning that Deka now manages over 5 million contracts.

Deka Group net sales *in €m (Fig. 1)*

	2019	2018
Net sales	**18,040**	**11,773**
by customer segment		
Retail customers	11,117	11,296
Institutional customers	6,923	477
by product category		
Mutual funds and fund-based asset management	4,084	4,547
Special funds and mandates	8,637	–1,418
Certificates	6,567	8,043
ETFs	–1,248	601

At €313.4bn, the Deka Group's total customer assets were some 14% up on the figure for year-end 2018 (€275.9bn). In addition to sales, this was primarily attributable to the positive investment performance as against the end of the previous year. This trend was offset by distributions to investors and maturing certificates.

Deka Group total customer assets *in €m (Fig. 2)*

	31 Dec 2019	31 Dec 2018	Change	
Total customer assets	**313,412**	**275,878**	37,534	13.6%
by customer segment				
Retail customers	158,749	137,169	21,580	15.7%
Institutional customers	154,662	138,709	15,953	11.5%
by product category				
Mutual funds and fund-based asset management	154,347	137,249	17,098	12.5%
Special funds and mandates	127,360	109,585	17,775	16.2%
Certificates	22,670	20,443	2,227	10.9%
ETFs	9,035	8,602	433	5.0%

See also: Capital adequacy: page 70, ff.

The Common Equity Tier 1 capital ratio (fully loaded) stood at 14.2% at the end of 2019 and fell as expected compared to the previous year (15.4%). While Common Equity Tier 1 capital increased to €4,579m (previous year: €4,460m) due to retention of parts of the annual profit from 2018 and other effects from the 2018 annual financial statements, risk weighted assets (RWAs) increased by 11.1% to €32,229m (previous year: €29,021m).

At 4.9% (previous year: 4.6%), the leverage ratio (fully loaded) at year-end 2019 was above the minimum ratio of 3.0% to be observed from June 2021.

European banks must hold a minimum volume of own funds and MREL-eligible liabilities in order to provide sufficient loss coverage and recapitalisation in the event of resolution. The balance sheet-based approach calculates the ratio of own funds and MREL-eligible liabilities to total liabilities and own funds (TLOF). At the reporting date, the MREL ratio stood at approximately 22%.

See also: Liquidity adequacy: page 74, ff.

The liquidity coverage ratio (LCR) was 170.6% at year-end 2019 (previous year: 149.8%), considerably above the minimum requirement of 100%.

Risk appetite utilisation (63.9%) fell compared to the previous year (67.4%), primarily due to the development of counterparty and market price risk. At 50.7%, utilisation of risk capacity was also, as expected, noticeably above the level seen at the end of 2018 (42.1%). Economic risk-bearing capacity was at a non-critical level overall as at the 2019 balance sheet date.

Comparison of forecast and actual growth

Expectations regarding the Deka Group's key performance indicators in 2019, as set out in the forecast report of the 2018 Group management report and updated in the 2019 interim financial report, were largely met. Due to persistent low interest rates, other operating profit was hit by a one-off effect of €–140.0m from measures to strengthen the capital for a company in the equity investment portfolio. At €434.0m, the economic result fell moderately short of expectations.

Development of key performance indicators in the Deka Group *(Fig. 3)*

		31 Dec 2018	Forecast 2019 in the Annual Report 2018	Forecast 2019 in the Interim Report 2019	31 Dec 2019	Change	
Economic result	€m	451.8	Stable to the previous year	Stable to the previous year	434.0	–17.8	–3.9%
Total customer assets	€bn	275.9	Noticeable over the previous year	Noticeable over the previous year	313.4	37.5	13.6%
Net sales	€bn	11.8	Noticeable over the previous year	Noticeable over the previous year	18.0	6.2	52.5%
Common Equity Tier 1 capital ratio	%	15.4	Over 13%	Over 13%	14.2	–1.2%-points	
Utilisation of risk capacity	%	42.1	Noticeable over the previous year	Noticeable over the previous year	50.7	8.6%-points	

Profit performance of the Deka Group

The economic result stood at €434.0m, thereby falling moderately short of the previous year's figure (€451.8m). Income increased despite the one-off effect by €51.6m to € 1,560.6m (previous year: €1,509.0m). Expenses increased by €69.5m, particularly as a result of the higher bank levy and deposit protection reserve as well as the restructuring expenses in connection with the strategic cost initiative, and stood at €1,126.7m (previous year: €1,057.2m).

At €202.5m, net interest income was up €21.0m on the previous year's figure (€181.5m). Key components of net interest income were earnings from specialised and real estate financing in the Financing business division, as well as earnings from the strategic investments unit in the Capital Markets business division. These earnings were higher than in the previous year.

Risk provisions in the lending and securities business amounted to €–10.6m (previous year: €22.4m). Lending business accounted for €–8.7m (previous year: €14.5m) and securities for €–1.9m (previous year: €7.9m).

Net commission income stood at €1,343.7m (previous year: €1,218.0m) and made up 86% of total income. Commission from investment fund business rose primarily due to an increase in portfolio-based commission and performance fees. A positive impact came from the increase in total customer assets (averaged over the year) in the Asset Management Securities and Asset Management Real Estate business divisions. Commission income from custody account business remained stable at the previous year's level. Meanwhile, commission income from banking fell slightly.

Net financial income came to €197.5m, an increase on the previous year's figure (€130.8m). This figure includes all income and expense items from the trading book as well as the valuation and sale results from the banking book portfolios.

At €182.9m, net financial income from the trading book was lower than in the previous year (€271.5m). The Trading & Structuring unit benefited from sustained high demand for certificates, but fell short of the comparative figure for the previous year. High market liquidity and continuing expansionary monetary policy from the ECB meant that Collateral Trading & Currency made a smaller contribution to earnings than in the previous year.

Net financial income from the banking book was €14.6m (previous year: €–140.7m). This was chiefly due to positive valuation effects on securities in the wake of spread movements during 2019. In 2018, spread developments still had a negative impact on earnings. The figure for the previous year reflected the fact that an amount of €35.0m was released from the general provision for potential risks. Additions to or releases from the general provision are reflected in the economic result, but do not form part of the IFRS profit or loss and are not allocated to specific business divisions.

Other operating profit of €–172.5m was sharply down on the previous year's figure (€–43.7m). As a result of the persistently low interest rates, a one-off effect amounting to €–140.0m (reported in the segment Other) from measures to strengthen the capital for a company in the equity investment portfolio had a negative effect on profit. The interest rate level continued to influence the actuarial loss on pension provisions in the amount of €–38.6m. These resulted from the market-induced fall in the actuarial interest rate to 1.10% (year-end 2018: 1.90%). This effect was only partially offset by the increase in plan assets. Actuarial losses of €–30.7m were recorded in the previous year. Actuarial effects are not included in the IFRS profit or loss as they are posted directly to equity (revaluation reserve). However, they are reported in the economic result as part of the profit or loss for the period.

There was only a minor increase in personnel expenses, from €531.0m in the previous year to €535.4m. This rise was particularly attributable to wage and salary increases as a result of the collective bargaining rounds.

Other administrative expenses including depreciation and amortisation rose moderately year-on-year as expected from €467.1m in the previous year to €492.6m. The increase resulted particularly from higher project expenses for DekaPro initiatives and higher expenditure in the custody account business due to the greater business volume and the provision of quarterly reports under MiFID II. At €54.0m, depreciation and amortisation charges were up on the previous year's figure (€18.0m) as expected. This increase was due to depreciation reported in this item from 2019 onwards due to the recognition of leases in accordance with IFRS 16 (mainly for buildings).

The annual contribution to the deposit protection reserve of the *Landesbanken* and *Girozentralen* amounted to €17.3m (previous year: €10.8m). At €40.4m, the bank levy was €10.8m higher than in the previous year (€29.6m).

Restructuring expenses of €41.0m were incurred in 2019. They resulted primarily from the strategic cost initiative, which is focusing on a lasting reduction in personnel and operating expenses through initiatives to improve and consolidate operations. The prior-year figure (€18.7m) primarily comprised restructuring expenses from the strategic reorganisation of DekaBank Deutsche Girozentrale Luxembourg S.A.

The cost/income ratio, i.e. the ratio of total expenses (excluding restructuring expenses) to total income (before risk provisions in the lending and securities business), was 69.1% (previous year: 69.9 %). Excluding the one-off effect of €–140.0m in other operating profit, the cost/income ratio stood at 63.4%. Return on equity (before tax) was 9.0% (previous year: 9.6%).

Deka Group performance *in €m (Fig. 4)*

	2019	2018	Change	
Net interest income	202.5	181.5	21.0	11.6%
Risk provisions in the lending and securities business	–10.6	22.4	–33.0	–147.3%
Net commission income	1,343.7	1,218.0	125.7	10.3%
Net financial income	197.5	130.8	66.7	51.0%
Other operating profit	–172.5	–43.7	–128.8	–294.7%
Total income	**1,560.6**	**1,509.0**	51.6	3.4%
Administrative expenses (including depreciation and amortisation)	1,085.7	1,038.5	47.2	4.5%
Restructuring expenses	41.0	18.7	22.3	119.3%
Total expenses	**1,126.7**	**1,057.2**	69.5	6.6%
Economic result	**434.0**	**451.8**	–17.8	–3.9%

Business development and profit performance by business division

Business development and profit performance in the Asset Management Securities business division

At €416.7m, the economic result for the Asset Management Securities division was up on the previous year's figure of €230.5m due to positive market developments. Net sales rose sharply year-on-year, with institutional customer business in particular gaining ground. Thanks in part to a positive investment performance, total customer assets increased to €248.5bn (previous year: €217.3bn).

Net sales and total customer assets

At €8.5bn, net sales were considerably up on the figure for 2018 (€1.1bn). Net sales of mutual securities funds reached €4.2bn (previous year: €2.0bn). Sales of equity funds were especially positive, while bond funds were in less demand, as in the previous year. Investor caution was also evident in fund-based asset management. Here, sales were substantially down on the prior-year figure at €–2.3bn. With net sales of €4.8bn, institutional customer business outperformed the previous year (€–2.8bn). In 2018, there was a negative one-off effect from the departure of a major master funds customer. Net sales of special funds and mandates stood at €8.0bn (previous year: €–2.1bn). Net inflows were recorded for master funds, securities special funds and advisory/management mandates. Net ETF sales fell to €–1.2bn (previous year: €0.6bn), with both ETF equity and ETF bond funds losing ground.

Net sales performance in the Asset Management Securities business division *in €m (Fig. 5)*

	2019	2018
Net sales	**8,545**	**1,107**
by customer segment		
Retail customers	3,734	3,912
Institutional customers	4,811	–2,806
by product category		
Mutual funds and fund-based asset management	1,821	2,555
ETFs	–1,248	601
Special funds and mandates	7,972	–2,050

The division's total customer assets increased by €31.2bn to €248.5bn as at year-end 2019. In addition to net sales, this was largely attributable to a highly positive investment performance over the course of the year.

Total customer assets in the Asset Management Securities business division *in €m (Fig. 6)*

	31 Dec 2019	31 Dec 2018	Change	
Total customer assets	**248,520**	**217,337**	31,183	14.3%
by customer segment				
Retail customers	113,336	97,384	15,952	16.4%
Institutional customers	135,184	119,952	15,232	12.7%
by product category				
Mutual funds and fund-based asset management	120,561	106,315	14,246	13.4%
thereof: equity funds	38,204	28,443	9,761	34.3%
thereof: bond funds	30,031	31,426	–1,395	–4.4%
thereof: mixed funds	17,580	15,467	2,113	13.7%
ETFs	9,035	8,602	433	5.0%
Special funds and mandates	118,924	102,420	16,504	16.1%

Profit performance in the Asset Management Securities division

At €416.7m, the division's economic result was higher than the previous year's figure (€230.5m). This was primarily attributable to the increase in net commission income amid a positive market trend. Portfolio-based commission and performance fees both increased. At €366.6m, expenses were down on the previous year's figure of €393.8m). There was a year-on-year fall in personnel and operating expenses (including project expenses).

Profit performance in the Asset Management Securities business division *in €m (Fig. 7)*

	2019	2018	Change	
Net commission income	787.2	649.4	137.8	21.2%
Other income	7.3	–8.1	15.4	190.1%
Total income	**794.5**	**641.3**	153.2	23.9%
Administrative expenses (including depreciation and amortisation)	362.9	389.9	–27.0	–6.9%
Restructuring expenses	3.7	3.9	–0.2	–5.1%
Total expenses	**366.6**	**393.8**	–27.2	–6.9%
Economic result without Treasury function	**427.9**	**247.5**	180.4	72.9%
Treasury function	–11.2	–17.1	5.9	34.5%
Economic result	**416.7**	**230.5**	186.2	80.8%

Business development and profit performance in the Asset Management Real Estate business division

The economic result in the Asset Management Real Estate business division exceeded expectations but was down on the prior-year figure at €146.4m (previous year: €162.7m). Net sales saw a further year-on-year increase. As a result, and thanks to the solid investment performance, total customer assets reached more than €42bn.

Net sales and total customer assets

The division's net sales increased to €2.9bn (previous year: €2.6bn). As in previous years, the tried-and-tested quota system for sales to retail customers was maintained. This allows the inflow of funds into the products to be managed effectively, even in the face of high demand. What is more, the funds' liquidity resources can be limited in the current low interest rate environment. This also helps to prevent excessive investment pressure arising in view of the high real estate prices. The sales quotas that had been set were largely met by the end of the year. Mutual funds accounted for 77% of the division's net sales. There was particularly high demand for products focused on Europe, such as *Deka-ImmobilienEuropa* and *WestInvest InterSelect*.

At €0.8bn, net sales in open-ended mutual property funds for institutional customers, special funds, individual property funds, credit funds and mandates did not quite meet the previous year's figure of €0.9bn. Special funds accounted for a particularly significant proportion of sales.

Net sales performance in the Asset Management Real Estate business division *in €m (Fig. 8)*

	2019	2018
Net sales	**2,928**	**2,624**
by customer segment		
Retail customers	2,133	1,717
Institutional customers	795	907
by product category		
Mutual property funds	2,262	1,992
Special funds, individual property funds and mandates	666	632

The Asset Management Real Estate business division's total customer assets rose by 10.8% in the reporting year to €42.2bn. Of this increase, €33.8bn was attributable to mutual property funds. A yield-focused cash management policy and the introduction of new products, such as those involving the cooperation partner fund Swiss Life REF (DE) European Living, once again contributed to the increase in total customer assets. Euro-denominated mutual property funds achieved an average volume-weighted return of 3.3% (previous year: 3.4%).

Total customer assets in the Asset Management Real Estate business division *in €m (Fig. 9)*

	31 Dec 2019	31 Dec 2018	Change	
Total customer assets	**42,222**	**38,099**	4,123	10.8%
by customer segment				
Retail customers	31,078	28,477	2,601	9.1%
Institutional customers	11,143	9,622	1,521	15.8%
by product category				
Mutual property funds	33,786	30,934	2,852	9.2%
Special funds, individual property funds and mandates	8,436	7,166	1,270	17.7%

Transaction volume, i.e. purchases and sales of property, declined to €3.7bn (previous year: €4.5bn). Around 83% of the overall transaction volume concerned a total of 36 contractually secured property purchases. There were 21 disposals (around 17% of the transaction volume). Business activities continue to centre on properties in the office, retail, hotel and logistics asset classes. With this transaction volume, the Deka Group remains one of the world's biggest property investors.

Profit performance in the Asset Management Real Estate business division

The economic result of the Asset Management Real Estate business division stood at €146.4m at the end of 2019 compared with €162.7m in the prior-year period. The decline was mainly the result of lower net commission income. Although higher management fees were received, these were unable to offset a fall in commission income from acquisition and construction fees. At €137.2m, expenses were on a level with the previous year.

Profit performance in the Asset Management Real Estate business division *in €m (Fig. 10)*

	2019	2018	Change	
Net interest income	0.8	3.7	–2.9	–78.4%
Net commission income	286.0	303.1	–17.1	–5.6%
Net financial income	–0.6	–4.5	3.9	86.7%
Other operating profit	0.9	1.6	–0.7	–43.8%
Total income	**287.1**	**303.8**	–16.7	–5.5%
Administrative expenses (including depreciation and amortisation)	137.2	137.3	–0.1	–0.1%
Total expenses	**137.2**	**137.3**	–0.1	–0.1%
Economic result without Treasury function	**149.9**	**166.5**	–16.6	–10.0%
Treasury function	–3.5	–3.8	0.3	7.9%
Economic result	**146.4**	**162.7**	–16.3	–10.0%

Business development and profit performance in the Asset Management Services business division

The Asset Management Services business division achieved an economic result of €10.3m (previous year: €4.1m. There were increases in the number of securities accounts and assets under custody (assets held by the Deka Group in its capacity as custodian bank) in Digital Multichannel Management. Assets under custody in the Depositary subdivision also saw a positive trend.

Business development in the Asset Management Services business division

Aided by the positive market trend, assets under custody in the Digital Multichannel Management subdivision rose to €136.3bn (previous year: €118.6bn). At 70.4 million, the number of securities transactions fell short of the previous year's figure of 76.8 million. The 2018 figure was influenced by a one-off effect relating to the introduction of the Investment Tax Reform Act (*Investmentsteuerreformgesetz*). The number of custody accounts for which the division is the legal provider rose increased by 133 thousand to 4.8 million in the reporting year. Regular savings products were one of the key drivers behind the increase. By the end of 2019, around 290 savings banks (previous year: 140) had used the broker model to integrate the digital asset management system developed by bevestor into the product offering of their "internet branches".

In the Depositary subdivision, assets under custody rose significantly in line with the development in Asset Management to €220.3bn (previous year: €194.6bn).

Profit performance in the Asset Management Services business division

The economic result for the Asset Management Services business division was €10.3m. This outstripped the previous year's figure of €4.1m. Commission in the banking and custody account business, and thus net commission income as a major income component, was stable. At €181.8m, expenses were up €5.7m on the previous year (€176.1m). This was due, in particular, to higher operating expenses.

Profit performance in the Asset Management Services business division *in €m (Fig. 11)*

	2019	2018	Change	
Net interest income	5.2	5.3	−0.1	−1.9%
Risk provisions in the lending and securities business	0.0	−0.1	0.1	100.0%
Net commission income	183.3	181.8	1.5	0.8%
Net financial income	2.5	−4.5	7.0	155.6%
Other operating profit	3.0	−0.4	3.4	(> 300%)
Total income	**193.9**	**182.1**	11.8	6.5%
Administrative expenses (including depreciation and amortisation)	181.8	170.0	11.8	6.9%
Restructuring expenses	–	6.0	−6.0	−100.0%
Total expenses	**181.8**	**176.1**	5.7	3.2%
Economic result without Treasury function	**12.1**	**6.0**	6.1	101.7%
Treasury function	−1.7	−1.9	0.2	10.5%
Economic result	**10.3**	**4.1**	6.2	151.2%

Business development and profit performance in the Capital Markets business division

At €107.1m, the economic result in the Capital Markets business division was significantly higher than the previous year’s figure, which was hit by valuation effects and stood at €85.0m. As the Deka Group’s product, solutions and infrastructure provider, the division plays an important role in the customer-centric approach of the *Wertpapierhaus*. Digitalisation initiatives such as the DEA and finledger platforms are being consistently pursued to increase the benefit to customers and achieve efficiency gains.

Business development in the Capital Markets business division

With its positioning in securities lending and collateral management, the Collateral Trading & Currency subdivision achieved a satisfactory performance despite high market liquidity and continuing expansionary monetary policy from the ECB, but fell short of the previous year’s level.

The Commission Business subdivision maintained a stable level of business with shares, bonds, exchange-traded derivatives and supplementary services in 2019.

The Trading & Structuring subdivision benefited from sustained high demand in the third-party issues and certificates business as well as from market phase-oriented profitable risk management. At €6.6bn, net sales of certificates at year-end 2019 remained, as expected, below the previous year’s figure of €8.0bn. At €5.3bn, retail customers accounted for the lion's share of demand (previous year: €5.7bn). Net sales of certificates to institutional customers totalled €1.3bn (previous year: €2.4bn).

Profit performance in the Capital Markets business division

The division achieved an economic result of €107.1m in financial year 2019 (previous year: €85.0m). This was mainly due to high customer activity in the Trading & Structuring subdivision at the beginning of the year and positive valuation effects on securities in the banking book. There was also a smaller negative contribution from the Treasury function due to valuation effects. Expenses of €165.5m were slightly below the previous year’s level.

Profit performance in the Capital Markets business division *in €m (Fig. 12)*

	2019	2018	Change	
Net interest income	56.4	45.3	11.1	24.5%
Risk provisions in the lending and securities business	–1.7	8.3	–10.0	–120.5%
Net commission income	55.7	56.3	–0.6	–1.1%
Net financial income	197.4	215.2	–17.8	–8.3%
Other operating profit	3.5	5.0	–1.5	–29.9%
Total income	**311.4**	**330.1**	–18.7	–5.7%
Administrative expenses (including depreciation and amortisation)	165.5	172.1	–6.6	–3.8%
Total expenses	**165.5**	**172.1**	–6.6	–3.8%
Economic result without Treasury function	**145.9**	**158.1**	–12.2	–7.7%
Treasury function	–38.8	–73.1	34.3	46.9%
Economic result	**107.1**	**85.0**	22.1	26.0%

Business development and profit performance in the Financing business division

The economic result in the Financing business division outperformed expectations at €90.3m (previous year: €67.4m). The division's gross loan volume increased by 13.7% from the end of 2018 to €27.3bn. The specialised and real estate financing portfolios both expanded significantly year-on-year. This was especially due to good new business combined with lower than expected repayments.

Business development in the Financing business division

Gross loan volume in the Specialised Financing subdivision rose substantially to €16.1bn (year-end 2018: €14.2bn). This was attributable partly to significant acquisitions in the infrastructure (primarily wind farms) and transport financing segments. Of the year-end portfolio, €4.0bn related to infrastructure financing (year-end 2018: €3.1bn, €2.3bn to public sector financing (year-end 2018: €1.2bn), €1.6bn to export financing (year-end 2018: €1.5bn and €4.7bn to transport financing (year-end 2018: €4.5bn). Transport financing comprised ship financing of €1.3bn and aircraft financing of €3.5bn. Gross loan volume for savings bank financing fell as expected by €0.4bn compared to the end of 2018 to €3.3bn.

The legacy portfolio, which primarily contains ship financing loans that were made before the lending risk strategy was changed in 2010, was reduced further to €0.2bn as planned in 2019 (year-end 2018: €0.3bn).

Gross loan volume in the Real Estate Financing subdivision also rose substantially over the course of the year to €11.2bn (year-end 2018: €9.8bn). The volume of commercial property loans rose to €8.9bn (year-end 2018: €7.8 bn). Financing volume in open-ended real estate funds also increased, reaching €2.3bn (year-end 2018: €1.9bn).

Compared to year-end 2018, the average rating for the loan portfolio according to the DSGV master scale improved by one notch to 5. This corresponds to a rating of BBB– on S&P's external rating scale. The average rating for Specialised Financing improved from 7 to 5 over the same period (S&P: BB to BBB–). The rating for Real Estate Financing remained unchanged on year-end 2018 at 4 (S&P: BBB–). Taking account of collateralised assets, the average rating for Real Estate Financing deteriorated from AAA on the DSGV master scale (S&P: AAA) to AA (S&P: A+).

By year-end 2019, new business volume in the Financing business division reached €8.3bn and significantly exceeded the previous year's €6.7bn. New business was split more or less equally between the two subdivisions. Specialised Financing accounted for €4.2bn (year-end 2018: €3.8bn) and Real Estate Financing for €4.0bn (year-end 2018: €2.9bn). Loans to savings banks accounted for some 4% of total new business in the division (year-end 2018: 7%).

At €1.1bn, the total volume of placements was above the previous year's figure of €1.0bn. Around half of this total was successfully placed within the *Sparkassen-Finanzgruppe*.

Profit performance in the Financing business division
The Financing business division ended 2019 with a positive economic result of €90.3m (previous year: €67.4m. Both net interest income and net commission income exceeded the prior-year figures. Risk provisions amounted to €–8.8m, thereby falling short of expected levels for 2019 in both subdivisions. Total risk provisioning requirements, comprising risk provisions in the lending and securities business, the valuation result from loans measured at full fair value in net financial income and proceeds from the disposal of two ship exposures from the legacy portfolio recognised in other operating profit, were up on the previous year. Expenses totalled €56.7m and were therefore slightly higher than in the previous year.

Profit performance in the Financing business division *in €m (Fig. 13)*

	2019	2018	Change	
Net interest income	135.1	126.4	8.7	6.9%
Risk provisions in the lending and securities business	–8.8	14.7	–23.5	–159.9%
Net commission income	33.7	29.6	4.1	13.9%
Net financial income	–2.4	–15.2	12.8	84.2%
Other operating profit	9.7	1.7	8.0	(> 300%)
Total income	**167.3**	**157.1**	10.2	6.5%
Administrative expenses (including depreciation and amortisation)	56.7	54.7	2.0	3.7%
Total expenses	**56.7**	**54.7**	2.0	3.7%
Economic result without Treasury function	**110.6**	**102.4**	8.2	8.0%
Treasury function	–20.4	–35.0	14.6	41.7%
Economic result	**90.3**	**67.4**	22.9	34.0%

Financial position of the Deka Group

Financial management principles and objectives

Via its Treasury corporate centre, DekaBank pursues an integrated approach aimed at the active management of group-wide liquidity, thus ensuring that flexibility and investor trust are retained even in difficult market situations.

The Treasury corporate centre acts as a resource manager for the Deka Group. As such, Treasury manages group-wide liquidity reserves and the Deka Group's entire funding and own funds. It continues to assist the Board of Management with the management of existing guarantee risks for the Bank from fund products and also manages market price and counterparty risks in its own banking book. By setting transfer prices for the whole Group, Treasury ensures that the structure of the balance sheet is balanced and in line with strategy, and that individual transactions are calculated on a source-specific basis.

DekaBank supports cash pooling for the savings banks and other units of the *Sparkassen-Finanzgruppe*. It has high volumes of central bank-eligible highly liquid assets, which can be used to generate liquidity via various market access routes at any time.

Liquidity investing remains focused on investments in bonds issued by German federal states, German development banks, German run-off institutions, German *Pfandbriefe*, supranational institutions, investment-grade corporate bonds and, where appropriate, credit balances held with central banks.

Refinancing is carried out in a diversified manner using domestic and international money market and capital market instruments. This includes issues of *Pfandbriefe*, short-term bearer bonds based on the commercial paper (CP) programme, and medium to long-term unsecured bearer bonds based on the debt issuance programme ,as well as the programmes for structured issues and certificates. These activities are supplemented by placements of registered debt securities and promissory note loans. DekaBank also uses the repo and lending markets, call money and time deposits to raise liquidity.

See also: Consolidated financial statements: page 94, ff.

Derivative financial instruments are used for trading purposes and to hedge interest rate risks, currency risks and other price risks in the banking book and trading book. DekaBank does not have extensive open interest or currency positions. Details of derivative transactions can be found in the consolidated financial statements.

Changes in the Deka Group balance sheet

The Deka Group's total assets fell by 3.1% year-on-year to €97.3bn as at 31 December 2019 (year-end 2018: €100.4bn). This was due in particular to the lower volume of repo business and a decline in cash reserves with central banks. The amount due from banks and customers rose during the reporting period by a total of €2.6bn to €50.9bn and equated to around half of total assets (52.4%). This rise resulted primarily from increased lending. Financial assets at fair value also grew by €5.4bn to €30.4bn. This was due to an increase in the volume of interest rate derivatives, the development of interest rates and the volume-related increase in bonds in the context of synthetic lending transactions. Financial investments were almost unchanged year-on-year at €10.7bn.

Amounts due to banks and customers fell collectively by €7.4bn to €41.2bn, and thus accounted for around 42% of total assets. This movement resulted predominantly from the decline in reverse repo transactions as well as from the lower deposits by savings banks. In contrast, securitised liabilities increased by €3.0bn year-on-year to €17.8bn in the reporting year. The increase was attributable both to the issue of commercial papers to manage the Deka Group's liquidity and the issue of bonds with longer maturities. Financial liabilities at fair value remained stable at €29.9bn (previous year: €29.3bn).

Changes in the Deka Group balance sheet *in €m (Fig. 14)*

	31 Dec 2019	31 Dec 2018	Change	
Total assets	**97,282**	**100,444**	−3,162	−3.1%
Selected asset items				
Due from banks and customers	50,950	48,393	2,557	5.3%
Financial assets at fair value	30,442	25,045	5,397	21.5%
Financial investments	10,748	10,795	−47	−0.4%
Selected liability items				
Due to banks and customers	41,248	48,673	−7,425	−15.3%
Securitised liabilities	17,752	14,791	2,961	20.0%
Financial liabilities at fair value	29,903	29,307	596	2.0%

Capital and liquidity adequacy

Full details of capital and liquidity adequacy in the 2019 financial year are provided in the risk report section of this Group management report.

See also:
Risk report:
page 49, ff.

Ratings

At year-end 2019, DekaBank's ratings remained among the best in its peer group of German commercial banks. This enables access to the money and capital markets on stable and competitive terms.

The rating assessments from S&P and Moody's reflect the high strategic importance of the Deka Group to the savings bank sector as well as the adequate capital and liquidity base for its business model.

In mid-September 2019, as part of an industry-wide ratings reassessment, Standard & Poor's (S&P) adjusted the outlook for DekaBank's A+ issuer rating from stable to negative. This followed S&P's verification of the Banking Industry and Country Risk Assessment (BICRA), in which the outlook for the BICRA components for Germany was changed from stable to negative. This change fed through to the outlook for DekaBank.

Ratings overview *(Fig. 15)*

	Standard & Poor's	Moody's
Bank Ratings		
Issuer Rating	A+ (negative) Issuer Credit Rating	Aa2 (stable) Issuer Rating
Counterparty Rating	A+ Counterparty Credit Rating	Aa2 Couterparty Risk Rating
Deposit Rating	N/A	Aa2 Bank Deposits
Own financial strength	bbb Stand-alone Credit Profile	baa2 Baseline Credit Assessment
Short-term rating	A-1 Short-term Rating	P-1 Short-term Rating
Issuance Ratings		
Preferred Senior Unsecured Debt	A+ Senior Unsecured Debt	Aa2 (stable) Senior Unsecured Debt
Non-Preferred Senior Unsecured Debt	A Senior Subordinated Debt	A1 Junior Senior Unsecured Debt
Covered Bonds	N/A	AAA Covered Bonds

Human resources report

The total number of employees at the end of 2019 stood at 4,723 and was roughly level year-on-year (year-end 2018: 4,716). The number of employees is determined by counting the number of employment contracts (temporary and permanent) in existence at the reporting date, including inactive employees, trainees and interns.

See also: www.deka.de/deka-group/sustainability

At 4,108, there was no significant change in the number of earnings-relevant full-time equivalents compared with year-end 2018 (4,179). The number includes part-time employees actively involved in work processes in the Deka Group, who are counted *pro rata* on the basis of their working hours. At the year-end, approximately 79% of the workforce were employed in full-time posts. The average age of active employees (excluding apprentices and inactive staff members) was 44.8 years (previous year: 44.3 years). Further key indicators regarding sustainable HR management can be found in the sustainability report.

Implementation of the components of DekaPro, such as the digitalisation strategy, also has an impact on HR structures, processes, roles and tasks. Greater digitalisation in the world of work also places new demands on managers, employees and the ways in which they work together. In 2019, Deka therefore continued to steadily expand its central training provision relating to New Work and agile working methods. The focus in 2020 will include rolling out new e-learning courses on these topics. Alongside awareness raising for employees and managers, the focus of training in the years to come will be on empowering people to try out and organise new methods of cooperation on their own initiative and integrate them into everyday work. The aim is to combine the advantages of various approaches in hybrid working arrangements.

An understanding of the new management approaches this requires will be fostered among managerial staff. To this end, it is planned to strengthen the leadership approach. This makes managers more reflective leadership figures and helps them lead, in the interests of both the company and individual employees, in a way that creates a motivating corporate culture. Managers will be offered training that enhances their specialist, methodological and personal skills ready for the future.

The Deka Group also specifically promotes the career development of high-performing and high-potential staff through tailor-made formats. As a signatory to the UN Women's Empowerment Principles, it pays particular attention to women's career development. This is also reflected in the Equality Plan, which sets binding rules for gender equality and is endeavouring to provide better conditions for staff members with family obligations.

The Deka Group has already received awards from the "career and family audit" *Audit berufundfamilie* on five occasions for its family-friendly HR policy. It is actively working towards the next certification. At the same time, Deka is actively pursuing its Equality Plan and is on course to fulfil this by the end of 2020.

Forecast and opportunities report

Forecast report

Forward-looking statements

The Deka Group's planning is based on the assumptions about future economic development that appear the most probable from a current standpoint. However, plans and statements about expected developments and the course of business during 2020 are subject to uncertainty. Actual trends in the international money, capital and property markets or in the Deka Group's business divisions may diverge significantly from our assumptions, which are partly based on expert estimates.

The coronavirus that emerged in January has brought tourism and industrial production largely to a standstill in China with strict travel restrictions and mandatory factory shutdowns over the Chinese New Year and beyond. At the time this report was completed, it was not yet possible to reach a conclusive estimate as to the global impact on the economy. The economy could, for example, come under pressure as a result of potential production stoppages, sales problems and deteriorating corporate and consumer sentiment.

See also:
Risk report:
page 49, ff.
Opportunities report:
page 48

The Deka Group's risk position is explained in full in the risk report. If the risk scenarios referred to in the risk report should materialise, for example as a result of stress situations or counterparty default, this may result in negative differences from the forecast during the remaining months of the 2020 financial year. Conversely, opportunities may result in expectations being exceeded. The opportunities for the Deka Group are set out in the opportunities report.

Expected macroeconomic trends

DekaBank expects global economic growth of 3.0% in 2020. This reflects the stabilisation of the world economy, but also indicates that growth is unlikely to matchthe momentum seen in the years prior to the 2008 financial crisis. As in the previous year, and with Latin America having found its way out of recession in 2019, national economies will grow relatively in sync with one another in 2020. Cyclical factors, such as inventory replenishment at many companies, point to economic stabilisation in 2020, and DekaBank does not expect the trade dispute between the US and China to escalate. The US government is likely to be 48preoccupied with domestic issues in the presidential election year.

For the German economy, Deka predicts economic growth of 1.1%, with 0.4 percentage points of this effect attributable to additional working days. The remaining growth will be driven by the strength of the country's domestic economy. Consumer spending, government expenditure and construction will continue to grow, as in the previous year, but at a declining pace. The long upturn has had a positive impact on the labour market, with unemployment at its lowest level since reunification. DekaBank expects collectively agreed wages to rise by 2.4% in 2020, accompanied by reduced tax burdens and increasing transfers to private households, which should lift consumer spending.

The clear election victory by the Conservative Party in the UK enabled Brexit to take place on 31 January 2020. The UK and EU will conduct negotiations on a new free trade agreement in a transition period lasting until the end of 2020. However, the possibility of a no-deal Brexit still remains at the end of 2020, as it is uncertain whether such a free trade agreement can be concluded with the EU in just a year.

Expected environment for asset management

Capital market participants are braced for a long period of low interest rates. ECB monetary policy will continue to contribute to negative interest rates at the short and medium end of the curve under the new ECB president Christine Lagarde. DekaBank expects the Fed to leave interest rate policy unchanged in 2020. This monetary policy will support stock markets, as the prospect of persistent low yields on the bond market is likely to cause investors to divert funds into riskier forms of investment. The US economy proved robust in the face of global economic uncertainty in 2019, and sentiment indicators for the eurozone economy are also stabilising. This points to corporate sales and profits remaining high, which, combined with expansionary monetary policy, means we can expect stock markets to perform positively in 2020.

Real estate remains an attractive asset class. However, investment opportunities for real estate funds remain limited, meaning that restraint is still called for when attracting new inflows. Following sharp rent increases in some areas in recent years and given the weaker economic outlook, DekaBank expects a slowdown in rental growth in Europe in the years ahead. More newly built office space is also coming onto the market. With persistent low interest rates, property yields will remain low for the foreseeable future, presenting challenges for fund management.

Expected environment for the banking business

The longer-term prospects of low money market rates in the eurozone are likely to continue pushing investors into greater acceptance of credit and duration risks. This will keep corporate bond spreads low and counteract a steepening of the Bund curve. The ECB's net asset purchases are generating downward pressure on risk and maturity premiums. The easing of economic downside risks and rising long-term inflation expectations could, however, result in higher yields in the longer maturity ranges in the course of 2020. In view of the continuing expansionary monetary policy stance, however, any impact on corporate bond spreads and share prices should be limited.

In the individual market segments of its capital markets business, the Deka Group expects only moderate changes compared to 2019. The Commission Business unit will remain under pressure in terms of competition levels and margins. DekaBank continues to expect rising or constant margins in bond and derivatives business. In the financing business, the continuing high level of market liquidity and investment pressure among institutional investors will also put heavy pressure on margins, which may be reflected in the terms and conditions offered and the new business that can be achieved.

Overall assessment of the expected economic trends

All in all, DekaBank expects a largely positive economic environment for asset management in financial year 2020 given stable economic growth and continued expansionary monetary policy. The higher equity and real estate prices resulting from this may have a positive influence on total customer assets. Moreover, the high financial assets of private households in general and savings bank customers in particular hold enormous potential for fund sales. Returns on assets in the banking business will remain under pressure.

Expected business development and profit performance

The Deka Group will continue systematically implementing its *Wertpapierhaus* strategy in the years ahead. For 2020, it has set itself the goal of achieving further progress in the "growth" and "efficiency" dimensions. A customer-centric corporate organisation and focus is essential to making the Deka Group fit for the future. The potential solutions that digitalisation offers all along the value chain are a key lever in the development of the business model.

The challenge is to balance the efficient and thus sustainably competitive provision of services in line with growing business volume and simultaneously increasing requirements of regulatory requirements with an appropriate level of expenditure. Investment measures will also be implemented side by side with the efficiency drive. The necessary efficiency improvements and investments have already been included in planning.

Increased expenditure on efficiency and investment measures mean that the Deka Group's economic result in 2020 will be moderately below of the figure achieved in 2019. The forecast economic result will ensure that DekaBank remains able to distribute profits and to allow the retention of parts of the annual profit necessary for the purposes of capital management.

Expected returns for 2020 are based on ambitious sales plans combined with concentration on an investment fund business that maintains lasting value. This also includes regular securities saving. Total net sales are expected to exceed the previous year's level. The forecast for net sales to retail customers is slightly up on the 2019 figure, which was well into positive territory. A stronger year-on-year rise is planned for the institutional customer business. Further moderate growth in total customer assets is expected in 2020 compared to the figure as of year-end 2019.

The Asset Management Securities business division will work on continuing to develop its high-quality range of products and services in 2020 in close coordination with the sales departments. An increase in net sales is expected in the retail business. Equity funds, multi-asset funds, individual asset management products, new asset management funds, ETF-based asset management solutions and ETFs will be at the heart of this. In the institutional customer business, sales of special funds and, in particular, positive developments in institutional mutual funds and ETFs will boost sales performance.

Risks will come from the political arena (US foreign and trade policy), increasing nationalist currents in Europe, the escalation of latent armed conflicts and the impact of Brexit. These developments could put pressure on the stock markets and dampen investors' risk appetite, which could trigger fund outflows. In addition, a pronounced stock market correction could negatively affect total customer assets.

The Asset Management Real Estate business division aims to be the first-choice partner for savings banks and their customers when investing in commercial property. In open-ended mutual property funds for retail customers, the aim is to become the market leader without compromising on quality or stability. Deka-ImmobilienMetropolen and another new open-ended mutual property fund for the retail business are due to go on sale in 2020. This is the division's response to the ongoing high demand for its real estate products from private investors. It means that, for the first time, private investors can invest in a Deka open-ended real estate fund for property in the Asia-Pacific region. By further tapping market potential and introducing new products, the division also aims to significantly improve its market position in institutional business. This will include expanding the product range to include regulated special AIFs (alternative investment funds) in the form of an investment limited partnership. Consistently taking sustainability criteria into account in property purchases and portfolio management will also continue to ensure that Deka remains attractive to sustainability-oriented investors. In this way, the division hopes to improve net sales again in the retail business – with sales quotas increased only through the launch of new funds – and in institutional business. The aim is to achieve an overall increase in total customer assets.

Risks to the performance of the real estate business division arise from fierce competition in the transaction markets, which makes transaction planning difficult. While the interest-driven boom is improving sale prospects, it is also putting increased requirements on the structuring of property purchases. There is also the risk of cyclical changes in value in the event of a downturn on property markets. Risks also result from continued strong regulatory pressure and the impact of the EU Action Plan on Financing Sustainable Growth, which cannot yet be fully predicted.

For 2020, the Asset Management Services business division aims to increase assets under custody again in line with the targeted asset management growth. The Digital Multichannel Management subdivision plans to reaffirm its strategic direction with a focus on expanding and integrating the sales processes of physical branches and other channels that offer securities products from the savings banks. Combined with contemporary, innovative services such as digital asset management, this will ensure access to the customer interface in the *Sparkassen-Finanzgruppe*. The Depositary subdivision will strive to expand through growth in the Deka Group investment companies' mutual funds and in third-party mandates. It will continue to pursue its vision of establishing itself as the national champion.

There are risks to Digital Multichannel Management from a stagnation of sales, from product development in the custody account business and from delays in the enhancement of the multichannel sales offering. Rising expenses due, among other things, to changes in the regulatory environment could exacerbate these risks. Risks to future performance in the Depositary subdivision include rising pressure on margins for depositaries as well as market-induced outflows of funds.

The Capital Markets business division will continue its existing strategic direction as a customer-centric product and solution provider focused on DekaBank's structured products and the derivatives, issuance and trading business. This is the division's response to both regulatory requirements and current market developments. In the certificates business, retail products will be the focus again in 2020. It will also be important to maintain the Deka Group's position as an infrastructure provider with global capital market access. Systematically digitalising the existing platform solution will help to achieve this.

Risks for the development of the Capital Markets business division arise particularly from a drop in customer activity prompted by political or market/economic events, regulatory intervention in the design of products and definition of terms and conditions, further increased market pressure on fees and greater competition among brokers.

In terms of new business, the Financing business division plans in 2020 to expand its range in its defined core segments in specialised and real estate financing. Being a quality leader and sought-after financing partner for the savings banks remains its central approach. In a competitive market environment, the division is remaining true to its stability-oriented and low-risk strategy.

Risks for the Financing business division include political crises, which could adversely affect the economic outlook for lending segments in which we operate. This could lead to a need for higher loan loss provisions, or to increased capital adequacy requirements as a result of a downgrading of our credit ratings. The long acquisition periods and intense competitive pressure for credit assets may also mean that the intended new business volume and expected returns cannot be achieved.

Expected financial and risk position

In 2020 the Deka Group is anticipating a continued sound financial position and a slight increase in total assets. The Deka Group expects to maintain an adequate capital and liquidity base in both the normative and economic perspective. The Common Equity Tier 1 capital ratio (fully loaded) is expected to remain above the strategic target of 13%. Balance sheet management will be geared towards ensuring compliance with an appropriate leverage ratio significantly above the 3% mark and with the MREL requirement.

Risk appetite utilisation is expected to remain at a non-critical level in future, despite a noticeable increase. The planned new business in the Financing business division will be especially pivotal to this increase, and is expected to result in a significantly higher level of counterparty risk than at the end of 2019.

The Group's liquidity position is expected to remain at a sufficient level. The Deka Group will thus be able to fulfil its role as the liquidity and collateral platform for the savings banks and other institutional customers without restriction.

Development of key performance indicators in the Deka Group *(Fig. 16)*

		31 Dec 2019	Forecast 2020 in the Annual Report 2019
Economic result	€m	434.0	Moderate below the previous year
Total customer assets	€bn	313.4	Moderate above the previous year
Net sales	€bn	18.0	Above the previous year
Common Equity Tier 1 capital ratio (fully loaded)	%	14.2	Over 13%
Utilisation of risk appetite	%	63.9	Noticeable over the previous year

Supplement regarding the development of the impact of the coronavirus in the period leading up to 24 March 2020

Since the beginning of March, the coronavirus has led to further restrictions and has also significantly increased the likelihood of further pressure on the economy, as well as negative implications in the future resulting from the period of economic restrictions, for example in the form of job losses or company insolvencies. As a result, a gloomier sentiment among the corporate sector and consumers alike has also been exacerbated further.

The capital markets have seen periods of plummeting share prices with higher volatility, and the financial sector has been hit by a tense liquidity situation in some cases. At the time this supplement to the forecast report was completed, it was still not possible to reach a conclusive estimate as to the global impact on the economy.

If, however, the economic impact of the coronavirus translates into sustained pressure on the economy and the capital market, and if the current situation persists or deteriorates further, the economic result for 2020 could also be much lower than the 2019 figure. This could result, in particular, from lower than expected net commission and net financial income, or from risk provisions in the lending and securities business that are higher than predicted. In this case, it is possible that the other key management indicators, namely total customer assets, net sales, the Common Equity Tier 1 capital ratio and the utilisation of risk appetite, would also show less favourable development than that presented in the forecast report and the table above (Fig. 16).

Opportunities report

Opportunity management

Opportunity management is built into the Deka Group's overall management concept. Opportunities are continually identified and evaluated as part of the strategic process. Decisions on resources to be made available to exploit additional potential in different areas of opportunity are taken on the basis of the expected impact on risks and earnings and probability of occurrence. Continuous and intensive market observation and the feedback processes established with the savings banks ensure that the assessment of the opportunities portfolio is regularly updated This allows the Deka Group to actively manage its opportunities and react to new developments swiftly.

Opportunities are defined as positive deviations from the assumptions made for planning purposes over a one-year horizon. These essentially fall into three categories:

- Opportunities arising from changes in circumstances result from market developments that are more favourable than expected. These include regulatory changes or changing investment trends on the part of customers.
- Corporate strategy opportunities are mainly linked to the strategy implementation programme, which is designed to put the *Wertpapierhaus* strategy into practice. Positive effects linked to the growth initiatives may be more extensive or occur sooner than assumed in the forecast report.
- Other opportunities lie in greater than anticipated process improvements or positive earnings effects from efficiency initiatives.

Current opportunities

The assumptions on economic trends made in the forecast report represent the most likely scenario from the point of view of the Deka Group. Nevertheless, economic trends may turn out to be better than the baseline scenario assumes. Low interest rates, increased confidence and significant productivity gains could lead to surprisingly high growth without a significant rise in inflation, despite high capacity utilisation. Thanks to the reduction of debt, the recovery of financial systems would continue apace. In this scenario, it is possible that, contrary to expectations, a substantial rise in index levels could lead to strong growth in total customer assets and have a positive impact on net commission income. The resulting somewhat stronger increase in yields at the long end, associated with a steepening yield curve, could improve the conditions for investing own funds and managing liquidity. A favourable macroeconomic scenario such as this would improve general conditions most notably for securities- and property-related asset management and capital market activities. This scenario is seen as rather unlikely, however.

Opportunities from market developments could also be generated by an even stronger shift towards funds, ETFs and certificates for financial savings. However, the Deka Group anticipates that this process will continue to take place only gradually. Nonetheless, if the popularity of funds, ETFs and certificates should increase by more than forecast in planning, this would have a beneficial impact on net sales and total customer assets.

There are strategic and other opportunities associated with the strategy implementation programme. The resultant effects have already been incorporated into the planning for 2020, meaning that any further positive impacts on the Deka Group's business and results are unlikely.

Risk report

Risk policy and strategy

The basic principles underlying the Deka Group's risk policy remain largely unchanged from the previous year. The risk strategy, including the guidance and tools described therein, has been amended and expanded in the context of the ECB guidelines on banks' internal processes for ensuring capital (ICAAP) and liquidity (ILAAP) adequacy.

In order to achieve its commercial objectives, the Deka Group accepts certain risks in line with strategic requirements. These risks are limited by a comprehensive risk management system that covers all types of risk and all business divisions, sales and corporate centres in order to ensure the success of the Deka Group as a business. The framework for business and risk management is provided by the general concept of risk appetite (Risk Appetite Framework – RAF), which forms the main basis for the ICAAP and ILAAP and is an integral part of the Deka Group's strategy system. The aim of the ICAAP and ILAAP is to help ensure the Deka Group's continued existence by maintaining adequate capital and liquidity and to contribute to effective risk management. To this end, there is a distinction within the ICAAP and ILAAP between the economic and normative perspective.

A strong risk culture for the Deka Group is key to the lasting achievement of the business policy objectives set out in the business strategy. Without risk-appropriate behaviour and a sensible approach to risks, it would be impossible to limit them through overall risk management and ensure the Deka Group's lasting business success. The concept of risk appetite and the procedures for monitoring compliance with it form one of the three fundamental pillars of the Deka Group's risk culture. It is complemented by sound governance and a remuneration system that encourages appropriate risk behaviour. Processes are in place to ensure that these three pillars are continuously adjusted to changing circumstances. Staff and leadership behaviour – risk culture in the narrower sense – are shaped by the rules set down in the Code of Ethics and by the Deka Principles of Leadership, in addition to the aforementioned formal components. The Deka Group has adopted a risk culture framework laying down binding guidelines for the responsible handling of risks in the Deka Group and for compliance among employees, managers and Board members in relation to this. The framework also sets out the guiding principles that detailed rules on processes and tools have to adhere to. Regular audit procedures and a survey on the risk culture initiated in the fourth quarter of 2019 have not indicated any shortcomings in this risk culture.

See also: Opportunities report: page 48

The risk position of the Deka Group presented in the risk report corresponds to the definition used as the basis for presentation of the Deka Group's business development and profit performance in the economic report. The report focuses on risks that are relevant from the point of view of the Group. Opportunities that might be used to counteract an increase in risk are presented separately in the opportunities report.

Strategy process

In accordance with the German Minimum Requirements for Risk Management (*Mindestanforderungen an das Risikomanagement*, MaRisk), the Group uses a systematic strategic process to ensure that its Group-wide business strategy, management and structure, as well as the corresponding divisional and sales strategies and the risk strategy, are reviewed on a regular basis. The reviews consider whether these items are consistent, complete, sustainable and up-to-date. The process covers the planning, implementation and evaluation of the strategies and any necessary adjustments to them. Division-specific targets for risk and profit are used in order to ensure that the business and risk strategy is implemented appropriately in the business divisions.

Sub-risk strategies are formulated for significant types of risk identified during the risk inventory: counterparty risk, market price risk, operational risk, business risk and liquidity risk. These risk strategies are derived from the Deka Group's risk strategy as well as the strategies of the business divisions and provide specific details regarding risk monitoring and management. They are also reviewed at least once a year, revised if necessary, approved by the Board of Management and discussed with the Administrative Board.

The risk data aggregation strategy adopted for the first time in the reporting year fleshes out the risk strategy in terms of the general requirements and specifications for effectively aggregating risk data and for risk reporting. As part of the risk strategy, it is an integral part of the strategic architecture and systematic strategic process.

Further developments in risk management

In November 2018, the European Central Bank (ECB) published two guides setting out its expectations on how to ensure capital adequacy (through the ICAAP) and liquidity adequacy (through the ILAAP). In particular, the requirements for the normative perspective within the ICAAP and ILAAP have led to a corresponding change to the concept of risk appetite, with the addition of the normative perspective in the first quarter of 2019. In this context, methodological changes were also made to the risk-bearing capacity concept for the economic perspective of the ICAAP. Given the requirement to apply a going concern approach on the capital side, the definition of internal capital and, in connection with this, the management concept were adjusted. Subordinated capital components are generally no longer included in internal capital, resulting in increased utilisation of risk capacity. To ensure risk-bearing capacity in the current situation, the Deka Group monitors risk capacity, as a formal total risk limit, risk appetite, which is relevant primarily for risk management purposes, and capital allocation; the previous control parameter of maximum risk appetite is no longer used. As a result of the adjustments made to the management concept for macroeconomic stress testing, the Deka Group now takes an even closer look at the impact of the (stress) scenarios, their probability of occurrence and lead time, as well as examining the possible mitigation measures available if necessary. The capital requirement depends on the results of this assessment. Alongside the integration of the normative perspective into the ILAAP, the ILAAP guidelines also saw changes to the monitoring processes for liquidity risks in foreign currency and to the liquidity emergency concept. For liquidity risks in foreign currency, materiality thresholds and alarm thresholds have been defined in the economic perspective and are consistent with the funding matrix. Further early warning indicators and emergency triggers have been added to the liquidity emergency plan.

Aside from the changes relating to the ICAAP and ILAAP, the Deka Group refined parts of its risk management and control in the reporting year in terms of both its organisation and risk management concepts, taking due account of regulatory requirements.

For example, the Deka Group continued to implement the extended requirements set out in the Minimum Requirements for Risk Management (MaRisk), which provide the regulatory basis for risk management at German level. This particularly involved the requirements governing architecture and the quality management of risk data, as well as the reporting system based on this data. The establishment of a central data management unit for risk data marked another important milestone in line implementation during the reporting period. This unit is supported by a network of local data managers, who have now been appointed in all major core areas and work together with central data management towards ensuring the ongoing review and thus continuous improvement of the quality of risk data.

In compliance with the EBA Guidelines (EBA/GL/2018/02), the Deka Group refined its monitoring of interest rate risk in the banking book using an earnings-based approach. In addition to the net interest income (NII) perspective, this now includes the valuation result arising from changes in interest rates. Risk drivers are analysed for a potential deviation relative to a reference scenario based on the earnings at risk (EaR) approach using specific scenarios and stress tests. Determining interest rate risk using the earnings-based approach provides an additional measure of interest rate risk in the banking book. This is monitored in addition to the net present value perspective, which is the primary management indicator.

With regard to the management of non-financial risks, further organisational changes took effect on 1 August 2019. The central functions for managing selected non-financial risks (NFR) are being consolidated in the independent Information Security Management department, which reports directly to the Board of Management, while the overarching control of operational risks is being transferred from the Compliance corporate centre back to the Risk Control corporate centre. Aside from the organisational changes, the taxonomy for non-financial risks was refined in the reporting year, and guidelines on methods and processes to continue integrating the various NFR functions were developed ready for implementation in subsequent years.

DekaBank followed through on various measures to implement the ECB's requirements concerning internal models ("ECB guide to internal models", EGIM, October 2019). In line with the general principles for internal validation, for example, it put in place the organisational separation of model development and model validation below senior management level with effect from 1 October 2019. This now affects the rating processes, other models with regulatory approval under the own funds requirements and the (valuation) models used as part of the ICAAP. A guide to model risk management also came into force in this context in the first half of 2019. This will hone the various roles in the model life cycle and the ways in which they work together.

To meet the requirements of the ECB guide on internal models published in November 2018, DekaBank has initiated appropriate measures in relation to the market risk model. These will be completed by mid-2020. The measures are in keeping with the findings of an on-site audit of the market risk model conducted in 2017 in the context of the supervisory review of internal models under Pillar 1 of the Basel capital regulations (targeted review of internal models – TRIM). The review aims to reduce the variability of model results and thereby increase confidence in internal models. It affects the internal rating models for credit risk (IRBA), internal market risk models (IMA) and internal models for estimating exposure to counterparty risk (IMM). In 2019, DekaBank underwent an on-site audit under the IRB approach. TRIM audits concerning counterparty risk do not affect DekaBank.

The potential economic impact of changes to the Credit Risk Standardised Approach (CRSA) and the Internal Ratings Based Approach (IRBA) that are currently planned as part of the finalisation of Basel III (Basel IV) continues to be monitored. The same applies with regard to the Fundamental Review of the Trading Book (FRTB) and the scheduled introduction of the new Standardised Measurement Approach (SMA) for calculating operational risk capital, both of which could also affect Pillar II of the Basel framework under certain circumstances.

With regard to the calculation of counterparty risk, the changes to the presentation of counterparty risk, the inclusion of liquidation risk for collateral from securities repurchase and lending transactions, and the methodological adjustment to bring the determination of loss ratios into line with the IFRS 9 approach had the overall effect of mitigating total risk. Methodological changes were also made to the calculation of business risk, although these slightly increased the risk at Group level. Overall, the extended deduction for risks resulting from pension obligations to include risks from unfunded pension obligations and similar obligations, as well as the related provisions, had only a minor impact on internal capital.

Concept of risk appetite

Overview

The key component of the concept of risk appetite is the risk appetite statement (RAS), which provides the framework for the ICAAP and ILAAP. Within the ICAAP and ILAAP, there is a distinction between the economic and normative perspective.

The first starting point for the RAS is a description of the desired risk profile that is implied by our customer-centred business model. A Group-wide risk inventory ensures that the Deka Group has an overview of its risk profile at all times. The risk inventory exercise is carried out on an annual basis, and at other times as required, in order to assess which risks could have a significant negative impact on its financial position (including in terms of capital adequacy, earnings or liquidity). Particular consideration is given here to risk concentrations to which the Deka Group consciously exposes itself in connection with its business model. The assessment has further implications for backing risks with capital, for the holding of liquidity, and for validation. Inclusion of the relevant companies is checked as part of the risk inventory.

The second starting point for the RAS, in addition to the risk profile, is risk capacity – the maximum amount of risk that the Deka Group can accept with respect to its available funds. Risk appetite is defined, within the scope of this risk capacity, as the overall aggregate risk for individual risk types that the Deka Group is willing to accept in order to achieve its strategic objectives and business plan. There are different measures of risk capacity and risk appetite depending on the perspective and the nature of the risks (affecting profit or liquidity).

The RAS also incorporates medium-term planning, which specifies and quantifies details of the business and risk strategy. Medium-term planning involves an integrated planning process for profits, balance sheets, funding, capital and risk for the next three budget years, with account being taken of potential adverse developments.

The concept of risk appetite also covers procedures for monitoring compliance with risk appetite. These include management instruments, regular reporting, rulebooks, controls and processes, as well as risk governance in the sense that roles and responsibilities are laid down for implementing and monitoring risk appetite. Taking risk concentrations into account, the Deka Group has thus established limits for all risks classified as significant during the risk inventory and has implemented rigorous risk management.

Risk definitions, concentrations and measurement

The individual risk types for the purposes of risk monitoring and risk management are derived from the annual risk inventory. Risk types considered to be significant, which are backed by capital in the context of the ICAAP, include counterparty risk, market price risk, operational risk and business risk. Liquidity risk is also classified as significant and is managed and monitored as part of the ILAAP. Liquidity is maintained to cover material liquidity risk (in the sense of insolvency risk).

A distinction is drawn between financial and non-financial risks, based on the context in which risks are incurred and/or arise. Financial risks are incurred consciously in direct connection with individual transactions in order to generate income. Non-financial risks, by contrast, are inherent in a particular business activity but are not incurred in order to achieve profit. Non-financial risks include, in particular, operational risk and business risk.

Counterparty risk
Counterparty risk is the risk of financial loss resulting from the deterioration in the creditworthiness of a borrower, issuer or other counterparty (migration risk) or when the counterparty is unable to fulfil its contractually-agreed obligations, or unable to fulfil them in a timely manner (default risk). Counterparty risk also includes the risk of changes in specific provisions: the risk that a specific provision will underestimate the loss. Country risk is also included in counterparty risk. There is a distinction between country risk in the narrow and broad senses. Country risk in the narrow sense equates to transfer risk, which results not from the business partner itself, but instead is due to that partner's location abroad. Country risk in the broad sense is the risk that countries or governments will be unable to (fully) meet their contractual obligations in respect of receivables.

In terms of volume limitation, the Deka Group makes a distinction in counterparty risk between position risk, advance performance risk and potential future exposure (PFE). Position risk comprises borrower and issuer risk, as well as replacement risk and open position risk. Borrower risk is the risk that outstanding loan payment obligations to the Deka Group will not be paid or will not be paid in a timely manner. Similarly, issuer risk is the risk of losses caused by default on the part of issuers of debt or equity securities, underlyings of derivative instruments, or fund units. Replacement risk is the risk that if a business partner were to default, a replacement transaction would have to be conducted at less favourable market conditions. Open position risk (performance disruption) results if a delay occurs in the performance of a contractually agreed obligation by a business partner. Advance performance risk represents the risk that a business partner will not pay the contractually agreed consideration after advance performance has been rendered by the Deka Group. Potential future exposure (PFE) risk comprises the risk arising from potential market price fluctuations in relation to repo loan transactions, synthetic lending transactions and other derivatives transactions.

Market price risk
Market price risk describes the potential financial loss from future market price fluctuations (and from relevant valuation parameters) over a fixed time horizon and hence includes interest rate risk (including credit spread risk), currency risk and share price risk. Option risks are included in the above risks.

General interest rate risks result from changes in currency- and tenor-specific swap curves, with different fixed-rate periods having an effect as well, and from changes in cross-currency spread curves. These risks also include volatility risk in interest rate derivatives and options (cap/floor and swaptions).

Credit spread risks depend on changes in the issuer-specific premiums on the reference curves. These premiums depend primarily on the market's assessment of the creditworthiness of individual issuers or sectors. Premiums for individual issues (residual risks) are also relevant.

Share price risks (including real estate fund risks) are identified as risk factors via the individual shares, indices or funds and are influenced by risks from share or index volatility. The associated option risks or volatility risks are also taken into account here. Currency risks reflect changes in exchange rates.

The process for identifying and quantifying these risks in the economic perspective does not differentiate between the trading book and banking book; the same procedures are applied for all Deka Group portfolios, irrespective of the portfolio type. Market price risks relating to guarantees that the Deka Group has provided for individual investment funds are part of market price risk and are backed by capital as part of the ICAAP.

Credit valuation adjustments (CVAs) are potential valuation adjustments on derivative contracts. CVA risk is the risk of a corresponding financial loss due to potential future changes in the risk factors determining the valuation adjustments. CVA risk, for which separate RWAs are calculated, is quantified within market price risk in the economic perspective.

Liquidity risk
In terms of liquidity risk, the Deka Group makes a distinction between insolvency risk (liquidity risk in the stricter sense), liquidity maturity transformation risk and market liquidity risk.

Insolvency risk describes the risk that the Deka Group will be unable to meet its current and future payment obligations in a timely manner because liabilities exceed the available liquid funds.

Liquidity maturity transformation risk describes the risk that arises from a change in DekaBank's own refinancing curve in the event of imbalances in the liquidity-related maturity structure.

Market liquidity risk is understood as the risk that transactions cannot be settled or closed out, or can only be settled or closed out at a loss, due to inadequate market depth or because of market disruptions.

Operational risk
Operational risk means the risk of loss caused by the inadequacy or failure of internal processes, people and systems or by external events, including legal risks.

Business risk
Business risk concerns potential unexpected adverse variances from plan that result from changes in the behaviour of customers or contractual partners, or from market conditions, legal requirements or competitive conditions and for which the causes are not already covered by other risk types.

Reputational risk
Reputational risk describes the danger that loss events and developments in connection with other types of risk may have a negative impact on the external image of the Deka Group, thereby diminishing the trust that customers, business and sales partners, rating agencies or the media have in the Bank's competence. This can lead to additional losses, declining revenue, lower liquidity levels or a lower enterprise value. In view of this, reputational risks are not seen as a separate type of risk, but rather as a component of, or as factors that increase, business and liquidity risk.

Given this definition, the identification and management of reputational risks depends on the link to another risk type. For instance, as part of the loss documentation and self-assessment for operational risks (OR), a systematic determination and qualitative assessment of reputational risks resulting from an OR loss event are also performed. Where counterparty risk is concerned, the Deka Group uses, among other things, appropriate counterparty risk principles, a blacklist and appropriate assessment as part of the credit approval process. A sustainability filter is also applied in the context of counterparty and market price risks (exclusion criteria for proprietary investments developed with the help of a sustainability rating agency). The Deka Group uses transparent product descriptions, for example, and a defensive product design to counter potential reputational risks in connection with market price risks from the certificates business. In the case of business risk, the Deka Group manages the risk of lower commission due to the materialisation of reputational risks using relevant standards and principles for the funds' investment decisions. In addition to using these risk type-specific tools, the Deka Group quantifies the impact of reputational damage across all risk types as part of the macroeconomic stress tests. In terms of liquidity risk, which is managed separately, the negative effects of potential reputational damage on the Deka Group's liquidity position are taken into account as part of the stress-tested funding matrix.

Model risk

Model risks are not regarded as a separate risk type at the Deka Group, but are viewed in conjunction with the individual risk and valuation models. Model risks arising from errors during the implementation, use or application of valuation or risk models, or from the incorrect choice of parameters for these models, are treated as a sub-category of operational risk. Model risks are incorporated directly into the Deka Group's ICAAP by developing and assessing corresponding scenarios as part of the self-assessment process.

Model risk arising from the deliberate selection, specification, calibration or use of models, or from the choice of parameters, is described as model uncertainty. Model uncertainty should generally be avoided or minimised through suitable precautions. Relevant tools and processes are used for this purpose. However, even these processes are unable to fully eliminate model uncertainty.

In the normative perspective, model uncertainty from valuation models is deductible from Common Equity Tier 1 capital as part of the additional valuation adjustments under Article 34 CRR.

By contrast, model uncertainties arising from the specifications of risk models are viewed in conjunction with the respective risk type and specifically examined using detailed validation exercises. If necessary, a buffer is created for model uncertainties as part of the annual risk capital planning process; this reserved internal capital will consequently no longer be available for allocation.

Further types of risk

The Deka Group defines investment risk as the risk of financial loss due to impairment of the portfolio of equity investments, insofar as they are not consolidated in the balance sheet and therefore already included under other types of risk. Internal capital is set aside for investment risk. Currently, however, this risk has only a minor influence on the Group's risk-bearing capacity.

Pension risk comprises potential losses from pension benefits payable or similar commitments due that are not already covered by the provisions recognised for pensions or similar commitments. If material, losses due to guarantee obligations from pension commitments are calculated using appropriate assumptions when determining market price risk or counterparty risk and taken into account as a deduction from internal capital.

Other non-financial risks identified during the risk inventory are covered by superordinate risk categories. These include, for instance, conduct risk and tax risk, which are dealt with especially within the scope of operational risk. In addition, qualitative risk tolerance rules also exist for each of the risks examined within the scope of operational risk.

Risk concentrations

Risk concentrations describe those risks arising primarily from an uneven distribution of business partner relationships or an uneven sensitivity of the portfolio in relation to major risk factors which could subsequently lead to significant economic losses for the Deka Group.

Risk concentrations can occur both within the major risk types (intra-risk concentrations) as well as between different significant types of risk (inter-risk concentrations). These are a focus of risk management and monitoring in terms of tools looking at specific types of risk as well as those that apply across risk types.

Risk profile of the Deka Group and its business divisions

To successfully implement its vision of the *Wertpapierhaus* while avoiding conflicts of interest, the Deka Group exploits the advantages arising from the interconnection of its business activities in fund management, lending and capital markets. The Deka Group's focus remains on added-value generating operations that are in demand from both the savings banks and their end customers where the risks are strictly limited and for which adequate expertise is available. As part of the long-term business strategy defined by the Board of Management and the risk strategy consistent with it, risk positions are entered into primarily in connection with customer transactions or when they can be hedged on the market. In addition, risks are incurred if they are conducive to liquidity management or if they are required to leverage synergies in investment fund business. Business activities in new products or new markets, and the establishment or acquisition of new business units, are undertaken only after a thorough risk evaluation has been performed.

These activities give rise principally to counterparty, market price, business and operational risks, as well as to liquidity risk (which does not directly affect the income statement). The Deka Group also consciously exposes itself to risk concentrations in the context of its business model. The main examples of this in the context of counterparty risk are the Group's focus on the domestic public sector, on German savings banks and their customers, and on selected capital market participants and central counterparties, which is partly due to its function as a securities and collateral platform. With respect to market price risk, the Deka Group's business model focuses primarily on credit spread risks. In addition, (general) interest rate risks from guarantee products make a significant contribution to the Deka Group's market price risk. To conduct its business, the Group mainly uses established products and markets with adequate market liquidity and market depth due to their international acceptance. No business is conducted involving physical delivery of precious metals and goods.

The Deka Group's business activities are organised into five divisions. Asset Management Securities, Asset Management Real Estate, Asset Management Services, Capital Markets and Financing. In addition to these, the Treasury corporate centre also exposes itself to risk in the course of its activities. In principle, this structure has a diversifying effect on business activities and the resulting risks for the overall portfolio. However, it is also associated in part with the pooling of certain business activities, resulting in different risk profiles in the individual divisions.

Asset Management Securities business division

Because of its focus on the active management of securities funds and investment solutions and services, this division principally generates operational and business risks for the Deka Group. These may be exacerbated by reputational risks in connection with the "Deka" brand. Counterparty and market price risks arise particularly in relation to the guarantee funds and pension products managed by the business division. These are fund-based guarantee products, where either the investment management companies themselves issue guarantees (with a letter of comfort from DekaBank for these liabilities) or DekaBank makes use of the investment management companies' funds for its own guarantee products (Riester products). The division also faces investment risks.

Asset Management Real Estate business division

As with Asset Management Securities, the principal operational and business risks in this business division arise from active fund management. To a small extent, market price and counterparty risks also arise for the division from real estate funds in the Group's own investment portfolio. The division also faces investment risks.

Asset Management Services business division

This business division, too, principally generates operational and business risks for the Deka Group. These result from the provision of banking services for asset management. Counterparty and market price risks also arise to a small degree from the operations of S Broker AG Co. KG, which is included in this division. The counterparty risks primarily result from S Broker's proprietary investments.

Capital Markets business division

Customer-led business activity in the Capital Markets business division gives rise in particular to counterparty and market price risks. These arise primarily from currency, securities lending, securities repurchase and derivatives transactions, from trading in financial instruments with financial institutions, savings banks, funds and companies, and in relation to DekaBank's strategic investments. Outside the strategic investments unit, proprietary trading not directly linked to customers takes place only for the purposes of managing risks from the customer business or for overall risk management purposes. In relation to the division's business activities, credit spread risks and, to a lesser extent, general interest rate risks, share price risks and currency risks, including associated option risks, arise in relation to the market price risk. Whenever economically justified, risks are covered using hedging instruments. The rules for recognising hedging relationships in the balance sheet do not always correspond with the methods used for internal bank management purposes. It is therefore possible that differences may arise between the economic and accounting hedging relationships. Operational and business risks also arise. As the central securities and collateral platform in the association, the Deka Group generates economies of scale and scope. This results especially in concentrations with increased gross risk in relation to individual major banks, market makers that act for the Deka Group and central counterparties. Risk concentrations also exist in relation to individual Landesbanks as association partners. The collateral in securities lending transactions can also give rise to risk concentrations in collateral, which are limited by the rules in the collateral policy.

Financing business division

The business activities of the Financing business division (essentially the financing of infrastructure, transport and real estate, ECA-backed financing, business with savings banks in Germany and financing of the public sector) create corresponding focal points, primarily in counterparty risk. In accordance with the business model, this also leads to regional risk concentrations in Germany, as well sector-based risk concentrations in relation to the financial sector. Real estate financing usually involves individual loans with a different regional focus. The division also faces investment risks.

Treasury

The Treasury corporate centre's various functions, especially management of the liquidity reserve, give rise to counterparty and market price risks. The investment focus of liquidity investments is currently on bonds issued by German federal states, German development banks, German run-off institutions, German *Pfandbriefe*, supranational institutions and investment-grade corporate bonds. Given the strategic focus, risk is concentrated on the public sector and domestic counterparties. Market price risk chiefly involves credit spread risks, which are closely monitored and reduced if required through disposals or credit derivatives. Interest rate risks, currency risks and share price risks arise to a limited extent. Operational risks also exist to a limited extent.

Organisation of risk management and control

Board of Management and Administrative Board

The Board of Management is responsible for the development, promotion and integration of an appropriate risk culture within the Deka Group and is clearly committed to risk-appropriate behaviour. It is also responsible for establishing, enhancing and monitoring the effectiveness of the risk management system. Within the risk management organisation, the Board of Management makes decisions on the Deka Group's strategy, including the nature and implementation of the risk appetite concept. It defines the amount of overall risk permitted at Group level and sets the capital allocations for the different types of risk and the business divisions, including the Treasury corporate centre. The Board also sets the thresholds used for internal management purposes for the Common Equity Tier 1 capital ratio, the total capital ratio, the leverage ratio (LR), the Minimum Requirement for Own Funds and Eligible Liabilities (MREL), the utilisation of the large exposure limit, and the liquidity coverage ratio (LCR). It thereby takes decisions, in particular, on the governance framework for the internal processes used to assess the adequacy of internal capital and liquidity (ICAAP and ILAAP) and is responsible for implementing these processes. This includes setting limits and early warning thresholds at Group level for the individual risk types.

The Administrative Board, together with the relevant committees it has established – the Risk and Credit Committee and the Audit Committee – is responsible for monitoring the Deka Group's risk management system. Prior to every meeting of the Administrative Board, the Risk and Credit Committee meets to discuss in detail matters impacting the Group's risk exposure and risk management. It also reviews the Group's strategic direction with the Board of Management. The Risk and Credit Committee also acts as a credit approval body within the scope of the applicable authorisation guideline. The Audit Committee is an oversight body that concerns itself with the results of internal and external audits. It thereby contributes to ensuring the appropriateness and effectiveness of the Deka Group's monitoring, control and risk management arrangements.

Management committees

The Board of Management is supported in its management role by various management committees.

The Risk Management Committee (*Managementkomitee Risiko* – MKR) meets once a month and advises the Board of Management on matters regarding significant risks at Group level and on addressing, analysing and assessing issues that could have a significant influence on the total risk profile or profitability of the Group.

It helps the Board of Management to set the framework for managing capital and liquidity adequacy. The committee thus makes an important contribution to promoting a Group-wide risk culture. The meetings of the MKR are generally divided into three parts. In part A, the risk round table on non-financial risks (NFR), the discussion centres on current NFR-related risk topics for each unit or business division. Part B on methods and models deals primarily with methodological issues concerning risk and valuation models and the results of model validation. In part C, the risk round table on financial risks and current risk reporting, geopolitical risks and the economic environment, along with the regular reports from sub-committees in the context of financial risks, are presented to the committee and discussed. The voting members of the MKR include the member of the Board of Management responsible for risk control and head of the Risk Control department and, depending on responsibilities and the part of the meeting concerned, the heads of the Credit Risk Office and the Finance and Risk Control Capital Market Funds departments, the COOs for the Asset Management Securities and Asset Management Real Estate divisions, the COO for the banking divisions & depositary, and the heads of Compliance, Legal, IT, Human Resources, Business Services, Treasury, Corporate Office & Communications, Corporate Development, Sales Management & Marketing, Digital Multichannel Management, Institutional Customer Sales, Organisational Development, Information Security Management, Capital Markets, Real Estate Financing, Specialised Financing and Macro Research. The MKR is supported in this function by sub-committees, which each have individual core duties.

The Management Committee for Assets and Liabilities (*Managementkomitee Aktiv-Passiv* – MKAP), which generally meets every two weeks, primarily drafts resolutions on matters relating to the management of interest rates, currency, liquidity and refinancing, to fund-based guarantee products and to the capital and balance sheet structure. It assists the Board of Management with the operational management of capital and liquidity adequacy. Measures to be taken in the event of a liquidity crisis are also confirmed in the course of the MKAP's regular review. The permanent voting members of the MKAP comprise the members of the Board of Management responsible for Treasury, Finance, Risk Control and Capital Markets and the heads of the Treasury, Finance, Risk Control and Capital Markets corporate centres.

Sub-committees of the Risk Management Committee

The Stress Testing Committee supports the Board of Management in relation to the overall appraisal of the regular macroeconomic stress tests (covering all risk types) and risk-type-specific stress tests. Stress tests form an integral part of the Deka Group's risk management. The duties of the Stress Testing Committee include in particular the assessment and appraisal of stress test results as well as general responsibility for setting stress test scenarios and processes.

The Models Committee is a Group-wide, cross-divisional body that pools together and assesses current trends and validation issues with regard to valuation and risk models, and prepares content accordingly for the MKR, the Board of Management and senior management of Deka Group companies. The committee thus makes an important contribution to ensuring overarching consistency in the models employed. Furthermore, the Models Committee represents the central operational body for assessing model risks, with the aim of ensuring appropriate treatment of model risk in the Deka Group.

See also: Counterparty risk: page 75 ff.

Additional committees that are relevant to counterparty risk management include the Country Risk Committee, which assesses and monitors country risk, the Monitoring Committee, which monitors and manages non-performing loans and loans on the watch list, the Risk Provisioning Committee, which performs regular analysis and examination of matters relating to the planning, monitoring and management of loan loss provisions as well as monitoring and managing restructuring and liquidation cases, and the Rating Committee, which analyses and monitors the internal rating procedures (see counterparty risk).

The duties of the Risk Talk are to regularly analyse, discuss and make decisions regarding matters in connection with the risk management and monitoring processes in the Capital Markets business division's operational processes. The emphasis is on the assessment, in relation to market price or counterparty risks, of matters that could significantly influence the risk profile and/or profitability of the Capital Markets business divison.

Business divisions and corporate centres

All business divisions and the Treasury corporate centre operate within the scope of the strategic requirements. In addition, they operate within the framework set by the Board of Management on the basis of recommendations from the MKR and MKAP. The Treasury corporate centre also manages market price risks in the banking book and the liquidity, refinancing and equity of the Deka Group within these limits.

The Risk Control and Finance corporate centres have particular responsibility for developing a standardised and self-contained system to quantify and monitor all significant risks associated with the Deka Group's business activities. The two corporate centres each concentrate on different tasks as part of this work. Risk measurement procedures evolve on an ongoing basis in line with economic and regulatory requirements.

The Risk Control corporate centre, which is independent of the business divisions, is primarily responsible for the economic perspective and, across both perspectives, for coordinating and choosing the parameters for macroeconomic stress testing. It also monitors compliance with the limits approved by authorised decision makers, and immediately reports any limit breaches to them.

The Finance corporate centre is responsible for the normative perspective and also monitors compliance with the thresholds set for the regulatory ratios.

The Credit Risk Office corporate centre is primarily responsible for providing a second opinion independent of front office operations, for creating and/or approving ratings and for verifying and approving specific collateral. The office also acts as the central statistical monitoring centre for early-stage risk identification. In addition – acting independently of front office operations – the Credit Risk Office is responsible for lending processes, including closely monitoring and managing non-performing and troubled loans as well as for dealing with restructuring and liquidation cases (work-out exposures).

On behalf of the Deka Group, the Compliance corporate centre covers the regulatory functions of the Compliance Officer as set out in the German Banking Act (*Kreditwesengesetz* – KWG), the German Securities Trading Act (*Wertpapierhandelsgesetz* – WpHG) and the German Investment Code (*Kapitalanlagegesetzbuch* – KAGB). It also covers those functions assigned to the Money Laundering Officer pursuant to the German Money Laundering Act (*Geldwäschegesetz* – GwG) and the KWG, and represents the "Central Office" for the Money Laundering Officer and in relation to the obligations to prevent criminal acts under section 25h (7) KWG. Furthermore, the Compliance corporate centre fulfils the roles of Group Money Laundering Officer, of the party responsible for processes (*Verfahrensverantwortlicher*) under section 24c KWG, of the independent body (*Unabhängige Stelle*) under sections 70 and 85 KAGB, of the "Responsible Officer" as required for Qualified Intermediaries (QIs) under the Foreign Account Tax Compliance Act (FATCA), and of the Single Officer. The Compliance corporate centre has been headed by Britta Schulzke since 1 July 2019.

The specialist functions for monitoring selected non-financial risks are consolidated in the Information Security Management department, which reports directly to the Board of Management, along with the functions of Information Security Officer and Data Protection Officer.

The Internal Audit corporate centre is an independent unit that supports the Board of Management and other management levels in their control and monitoring functions. It examines and assesses all activities and processes on the basis of an annual audit plan that is drawn up with a risk-based approach, using a scoring model, and then approved by the Board of Management. One of the unit's most important tasks is to evaluate the business organisation with a focus on whether the internal control system and, in particular, risk management and monitoring are suitable and appropriate. Internal Audit also audits compliance with legal, regulatory and internal banking requirements. The Administrative Board is responsible for monitoring the internal audit system. It delegates this task to the Audit Committee.

In addition, all corporate centres and business divisions are responsible on a decentralised basis for identifying, measuring and managing their respective operational risks.

Organisational structure of risk management in the Deka Group *(Fig. 17)*

		Counterparty risk	Market price risk	Operational risk	Business risk	Investment risk	Liquidity risk
Administrative Board							
Risk and Credit Committee	- Overview of current risk situation/risk management system - Discussion of strategic direction with Board of Management - Credit approval body	●	●	●	●	●	●
Audit Committee	- Reviews results of internal and external audits	●	●	●	●	●	●
Board of Management	- Determines strategic direction - Responsible for Group-wide risk management system - Defines risk appetite in the economic perspective and thresholds for regulatory ratios - Allocates risk capital to risk types and business divisions, incl. setting the limits for individual risk types at business division level	●	●	●	●	●	●
Management Committee for Risk (Management komitee Risiko – MKR)	- Assists the Board of Management in matters relating to significant existing and prospective risks and in defining a framework for management in the context of the ICAAP and ILAAP - Supports the Board of Management with the evaluation of issues that have a significant effect on the overall risk profile - Prepares draft resolutions for the Board of Management and makes decisions within the scope of the authority granted to it - Supplemented by various sub-committees	●	●	●	●	●	●
Stress Testing Committee	- Assesses and appraises stress test results - Specifies stress testing scenarios and processes - Reports and makes recommendations for action to the Board of Management	●	●	●	●	●	●
Models Committee	- Assesses current trends and validation issues with regard to valuation and risk models - Central operational body for assessing model risks	●	●	●	●	●	●
Country Risk Committee	- Assesses country risks - Assesses and further develops the methodology for limiting country risks - Approves/sets country limits	●					
Monitoring Committee	- Defines, assesses and further develops the early warning indicators and classification criteria - Monitors and manages troubled loans on the watch list	●					
Ratings Committee	- Enhances and maintains internal rating procedures and rating processes - Responsible for approving policies and regulations relating to the internal rating procedures	●					
Risk Provisioning Committee	- Plans, manages and monitors loan loss provisions - Monitors and manages restructuring and liquidation cases	●					
Risk Talk	- Supports the MKR/Board of Management in connection with risk management and monitoring processes in the Capital Markets business division's operational processes - Emphasis on market price and counterparty risk	●	●	●	●		●
Management Committee for Assets and Liabilities (Management komitee Aktiv-Passiv – MKAP)	- Supports the Board of Management in matters relating to interest rate and FX management, liquidity and funding management, capital and balance sheet structure management - Supports the Board of Management with operational ICAAP und ILAAP management - Evaluates the measures planned for liquidity crises - Prepares draft resolutions for the Board of Management	●	●	●	●	●	●
AM Securities business division	- Conducts transactions in line with strategic guidelines	●	●		●	●	●
AM Real Estate business division	- Conducts transactions in line with strategic guidelines	●	●		●	●	●

		Counterparty risk	Market price risk	Operational risk	Business risk	Investment risk	Liquidity risk
AM Services business division	Conducts transactions in line with strategic guidelines	●	●		●		●
Capital Markets business division	Conducts transactions in line with strategic guidelines	●	●		●		●
	Makes decisions within the framework proposed by the MKAP and defined by the Board of Management, and sets limits within the division		●				●
Financing business division	Conducts transactions in line with strategic guidelines	●			●	●	●
Treasury (Corporate Centre)	Conducts transactions in line with strategic guidelines	●	●				●
	Makes decisions within the guidelines proposed by the MKAP and established by the Board of Management and sets limits within the corporate centre Manages market price risks in the banking book, manages the liquidity and refinancing of the Deka Group		●				●
Risk Control (Corporate Centre)	Develops and updates system to quantify, analyse and monitor risks (economic perspective and both perspectives for the purposes of stress testing) Reports to Board of Management and Administrative Board Determines/monitors risk-bearing capacity Monitors approved limits Responsible for general controlling of operational risks	●	●	●	●	●	●
Finance (Corporate Centre)	Develops and updates system to quantify, analyse and monitor risks (normative perspective based on actual situation) Reports to Board of Management and Administrative Board Determines regulatory ratios Monitors thresholds in the normative perspective	●	●	●	●	●	●
Credit Risk Office (Corporate Centre)	Administrative office for early risk identification Market-independent second recommendation Reviews and/or approves ratings Checks certain collateral Management of troubled and non-performing loans (work out) Loan administration Responsible for lending-related processes	●					
Equity investments (Corporate Centre Corp. Development)	Manages equity investment portfolio					●	
Compliance (Corporate Centre)	Regulatory function of Compliance Officer pursuant to KWG, WpHG and KAGB and Money Laundering Officer pursuant to GWG and KWG, as well as "Central Office" pursuant to KWG Function of Responsible Officer for QI and FATCA^ Independent body under sections 70, 85 KAGB Single Officer under section 81 (5) WpHG Process owner under section 24c KWG			●			
Information Security Management (ISM) (reports directly to the Board of Management)	Monitors selected non-financial risks through specialist functions (information security management, BCM, data protection and central outsourcing management)			●			
Internal Audit (Corporate Centre)	Audits and evaluates all activities/processes (especially risk management system)	●	●	●	●	●	●
All business divisions and Corporate Centres	Identify, measure and manage operational risks on a decentralised basis			●			

Three Lines of Defence model

Risk management involves active management of the Deka Group's risk position. The distribution of risk-related activities and associated controls across several organisational units requires proper assignment and delineation of the respective responsibilities and functions. Ever greater significance is attributed to an effective and properly functioning risk management system across all organisational units, which has no control gaps, conflicts of interest or redundancy and takes into consideration the risk strategy of the Deka Group. This also promotes clear-cut governance.

The "Three Lines of Defence" model practised by the Deka Group is designed to ensure compliance with and verification of the risk framework stipulated by the risk strategy, including the regular review of ICAAP and ILAAP. The operational business units responsible for exposures are – as the first line of defence – responsible for identifying, assessing and managing the (financial) risks involved in any business conducted. This also includes transactions to minimise total risk at Group level in day-to-day operations. In terms of the (non-financial) risks that are inherent in the general business activities but not incurred in direct connection with individual transactions, each unit should be treated as part of the first line of defence. The controls forming the first line of defence are supplemented and enhanced by the independent downstream organisational units that carry out risk management functions as part of the second line of defence (e.g. the Risk Control, Credit Risk Office and Compliance corporate centres). These units monitor compliance with the requirements of corporate policy independently of front office and trading operations. For financial risks, the need for an independent monitoring function results from the conflict between responsibility for earnings and responsibility for risks. Translated to non-financial risks, it is therefore necessary to create a specialist function for at least those areas of risk in which the first line of defence can be assumed to have an incentive to accept higher risks with the goal of minimising costs. In addition, an overarching function defines methodological standards that ensure the risks are assessed in a comparable way, reported consistently and taken fully into account in the capital adequacy assessment. The third line of defence is the Deka Group's Internal Audit department, which also exercises its functions independently.

It is ensured that the requisite personnel resources are available to carry out the control functions, both in terms of the staff capacity needed to assess and monitor risks and in terms of the sufficient capability of the staff concerned. The systems and equipment provided for all control functions ensure that the ongoing processing, management and monitoring requirements arising from the nature and scope of the business carried out are met.

Accounting-related internal control and risk management system

The Board of Management of the Deka Group has overall responsibility for the internal control and risk management system. The system is based on a Group-wide organisational and control structure. The Finance corporate centre is responsible for preparing and coordinating monthly, quarterly and annual financial statements. The units involved in the accounting process are appropriately staffed, in terms of both the number of personnel and their qualifications. Furthermore, a regular and cross-divisional exchange of information between the units makes an important contribution to minimising the risks associated with the preparation of financial statements.

In principle, risks exist in the accounting process as a result, for example, of inconsistent application of reporting and accounting standards, incorrect recognition of business transactions, and due to malfunctions and errors in the IT systems used for accounting purposes.

The Deka Group's internal control system ensures proper accounting in accordance with applicable statutory and legal provisions. Its key features are the rigorous integration of control activities and procedures into processes, in particular by applying the dual control principle as well as risk-oriented segregation of duties in corporate centres. To this end, the Bank performs automated routine checks and, when required, manual control and reconciliation procedures. The implementation of these activities and the procedures to be followed are documented in specialist and implementation plans.

Additional checks - for example in order to substantiate balance sheet items - are carried out at an aggregated level by “sub-position managers”. These employees, who have in-depth product knowledge, are also responsible for regularly calculating results.

The accounting recognition of business transactions is governed centrally by a Group accounting policy. This policy describes key accounting requirements and documents the standard accounting processes that apply throughout the Group. This ensures, amongst other things, that the same business transaction is accounted for uniformly in different Deka Group units and companies in compliance with the applicable accounting standards.

Specific work instructions are used to implement Group policy at operational level in individual specialist departments. These instructions also describe the control mechanisms to be followed. Guidelines and authorisation procedures have been developed for the central systems that generate accounting information as part of the preparation of financial statements. Compliance with these guidelines and concepts is regularly monitored by Internal Audit.

The Deka Group mainly uses standard software for accounting. The systems are safeguarded against unauthorised access by external parties and are comprehensively backed-up to protect against data loss. The internal control system is regularly reviewed by Internal Audit.

Framework and tools for managing capital adequacy
The Deka Group has defined risk capacity and risk appetite as follows, depending on the perspective.

In the economic perspective, the risk capacity for profit-affecting risks is set in the course of the risk-bearing capacity analysis, while taking due account of risk concentration. It represents the upper limit of acceptable risk and corresponds to the Deka Group’s total internal capital. The risk appetite for profit-affecting risks is defined in the economic perspective as part of the risk-bearing capacity analysis as the allocated risk capital (allocation) for the total risk at Group level. The maximum permissible risk appetite is equal to risk capacity less a management buffer.

In the normative perspective, thresholds are set that take into account the regulatory requirements. It is important that the chosen thresholds provide sufficient notice to allow for the preparation and initiation of management measures. Escalation and information processes are triggered for governance purposes when individual thresholds are hit. The thresholds are also reviewed and adjusted as necessary as part of an annual revision process. The maximum level of risk corresponds to the red threshold for the Common Equity Tier 1 capital ratio used for internal management purposes. In the current situation, this is based on the overall capital requirements (OCR) and the Pillar 2 Guidance (P2G) as part of the SREP process. For internal management purposes, red thresholds have also been set for the total capital ratio, the leverage ratio, the MREL ratio and utilisation of the large exposure limit. In the normative perspective, the level of risk that the Deka Group is willing to accept in relation to profit-affecting risks is the amber threshold for the Common Equity Tier 1 capital ratio used for internal management purposes, which is comprised of the overall capital requirements (OCR), the Pillar 2 Guidance (P2G) and a management buffer. For internal management purposes, there are also amber thresholds for the total capital ratio, the leverage ratio, the MREL ratio and utilisation of the large exposure limit. The management buffer has been determined taking into account the ECB guide to the ICAAP and is essentially based on the results of the annual risk inventory and strategic considerations as to how to respond flexibly to potential business opportunities without jeopardising capital adequacy.

In order to appropriately reflect the particular features of non-financial risks, which, wherever possible, are quantified as sub-risk categories of operational risk, qualitative risk tolerance rules are also set for these risks in addition to the quantitative risk appetite relating to the overall risk position. Such risks include compliance risk and reputational risk, among others.

The Deka Group makes use of a variety of tools to manage the risks and risk concentrations resulting from its business activities and thereby ensure capital adequacy. In the course of the ICAAP, the Deka Group distinguishes here between tools that apply to all risk types at the level of strategic requirements and risk-specific tools for operational management, which are described for the economic perspective in the sections covering the individual risks. Alongside the risk inventory, the tools used by the Deka Group for overall management and monitoring of the risks mainly comprise risk and capital planning, the economic perspective in the current situation with the monthly risk-bearing capacity and capital allocation, the normative perspective in the current situation with adherence to regulatory ratios, and macroeconomic stress testing, which covers both the economic and normative perspectives. Key performance indicators are integrated into both the recovery plan and the remuneration system.

Risk and capital planning

Medium-term planning involves an integrated planning process for profits, balance sheets, funding, capital and risk for the next three years, with account being taken of potential adverse developments. For profit-affecting risks, risk and capital planning in the economic perspective calculates risk-bearing capacity for the next three years. Based on the planned business activities and the risks associated with them, and taking into account the available risk capacity in this perspective, the Board of Management sets the risk appetite for operational activities. In accordance with the planning assumptions, certain items are not taken into account. Based on the risk appetite, the Board of Management also allocates capital to the individual risk types and business divisions. This process also allows potential risk concentrations to be effectively addressed at an early stage. Any adjustments needed during the year are undertaken when recommended by the MKR and adopted by a resolution of the Board of Management.

The regulatory ratios (Common Equity Tier 1 capital ratio, total capital ratio, leverage ratio and MREL ratio) are determined for each year as part of the normative risk and capital planning. The Common Equity Tier 1 capital ratio should exceed the target ratio or at least show medium to long-term adherence to the strategic target ratio. The strategic target ratio is determined based on the supervisory requirements (OCR and P2G) plus a strategic premium and is set annually as part of the planning work by the Board of Management.

The lower limit is the amber threshold used for internal management purposes for the relevant year. This is calculated based on the OCR and P2G expected to apply in the relevant year plus a management buffer.

In addition to planning based on expected economic developments (base scenario), appropriate scenarios are used to assess whether the regulatory ratios can be adhered to even under adverse circumstances within the planning horizon. To this end, the Board of Management may set its own annual thresholds that deviate from the base scenario.

Economic perspective (current situation): Risk-bearing capacity and capital allocation

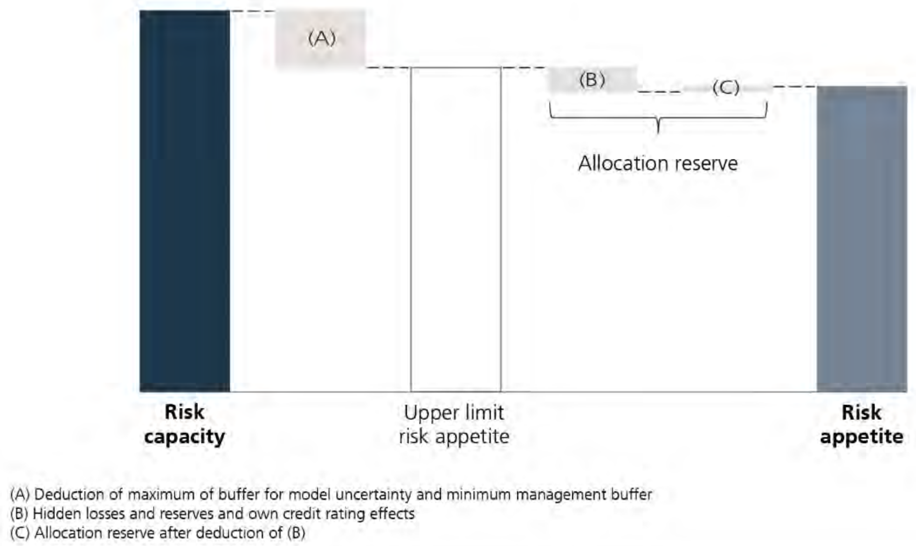
As a basic principle, internal capital is used to determine the maximum level of risk that can be incurred (impacting the income statement), taking into account risk concentrations. Risk capacity is analysed monthly. In the course of the risk-bearing capacity analysis, the risk capacity (in the form of internal capital) and the current risk level (current situation) are determined, and compliance with the guidelines and limits is monitored. The Deka Group’s total risk, as examined in the risk-bearing capacity analysis, includes as a minimum all material risk types with an impact on the income statement, and is determined by adding these together. Diversification effects between individual types of risk are not taken into account as part of this process. The total risk of the Deka Group is measured as an economic capital amount that is highly likely to be sufficient to cover the losses from all significant risk positions at any time within one year.

DekaBank uses the value-at-risk approach (VaR) in order to quantify individual risks on a uniform basis and to aggregate them as an indicator for overall risk. The calculation of VaR for a one-year holding period is made for internal management purposes with a confidence level of 99.9%. This level is derived from the business model with reference to an S&P rating at the level of a stand-alone credit profile of “a–”.

The total risk of the Deka Group that is derived from the individual types of risk is compared to the Group's internal capital available to offset losses. Internal capital, or risk capacity, consists mainly of equity capital in accordance with IFRS and earnings components, adjusted using amounts to correct for specific capital components, such as intangible assets or risks arising from pension obligations. This internal capital is available – in the sense of a formal total risk limit – to safeguard risk-bearing capacity.

Based on this, a management buffer is set whose amount must at least correspond to the buffer for model uncertainty (depending on the risk models used). Risk appetite is the primary control parameter. In addition to the Group-level analysis, risk is also limited, based on the risk appetite, by business division (including the Treasury corporate centre) and risk type (including investment risk) in the form of allocated risk capital.

Risk capacity and risk appetite *(Fig. 18)*



The utilisation ratios for risk capacity and the risk appetite may not exceed 100%. For the utilisation of the risk appetite, an early warning threshold of 90% has also been established.

The results of the risk-bearing capacity analysis and the utilisation levels for the specified allocations are determined monthly and reported to the Board of Management. The Risk and Credit Committee and the Administrative Board are informed on a quarterly basis.

Normative perspective (current situation): Compliance with regulatory ratios

The regulatory ratios are calculated monthly or quarterly. Adherence to the internal thresholds is ensured using an ongoing monitoring process, which additionally includes a monthly plan/actual comparison and a regular forecast process. The regulatory ratios are reported monthly to the Board of Management and quarterly to the Administrative Board. If the amber threshold is undercut in internal management, the Board of Management has to be informed using ad hoc reports as part of an agreed escalation process. The Board decides on measures to resolve this. Unless decided otherwise by the Board of Management, the Administrative Board is informed of the fact that the amber threshold has been undercut as part of the regular quarterly reporting process and is notified of the measures initiated. If the red threshold is undercut in internal management (i.e. if the alarm threshold for the corresponding recovery plan indicator is reached), this triggers governance measures under the integrated recovery plan.

In addition to adhering to these internal thresholds, the business divisions and Treasury corporate centre are required, within the framework of this overall plan, not to exceed the target RWAs specified in the medium-term planning as a general rule. In the event that individual business divisions or the Treasury corporate centre may conceivably exceed these targets, the affected business divisions and the Treasury and Finance corporate centres examine whether measures to reduce RWAs are required.

Macroeconomic stress tests (both perspectives)
Macroeconomic stress testing for all risk categories is used as an additional tool to manage capital adequacy along with the indicators for the current situation. Capital adequacy is regularly assessed by way of macroeconomic stress tests, which enable an estimate to be made of how it would be affected by extreme market developments. Macroeconomic stress tests enable action areas to be identified at an early stage as soon as crisis situations emerge.

The macroeconomic stress tests examine extraordinary but nonetheless plausible scenarios. These cover historical scenarios, such as the crisis on the financial markets, hypothetical stress situations, such as the default of important individual counterparties, and institution-specific stress situations. Reputational risks are also systematically included in the stress tests. When needed, the scenarios are supplemented with relevant ad hoc analyses. Furthermore, the Deka Group also performs reverse stress tests, examining specific manifestations of scenarios that would lead to the risk capacity being reached in the specific context of the Deka Group's business model, taking into account the associated risk concentrations.

The effects of the various macroeconomic stress scenarios are calculated for the economic perspective for all relevant risk and earnings figures and compared to the internal capital determined for each scenario. Similarly, in the normative perspective, the effects of the stress scenarios on regulatory own funds and RWAs, the resulting capital ratios and the leverage ratio and MREL ratio are calculated and compared to the regulatory requirements. Utilisation of the large exposure limit is also examined. The point in time for which the stress scenarios are calculated is always a year in the future.

The results of the macroeconomic stress tests are determined quarterly, assessed by the Stress Testing Committee and reported to the Board of Management, the Risk and Credit Committee, and the Administrative Board.

The regular annual reviews of the macroeconomic scenarios were carried out in the fourth quarter of 2019. In general, it was found that the scenarios examined continue to provide an appropriate reflection of all risks relevant to the Deka Group. In the light of current economic and regulatory developments, the stress scenarios were updated as necessary and the description and choice of parameters for the hypothetical and institution-specific stress scenarios adjusted accordingly.

Framework and tools for managing liquidity adequacy
Liquidity risk is managed and monitored as an independent risk category within the framework of the Deka Group's risk strategy. The liquidity risk strategy applies to all organisational units of the Deka Group and sets out the responsibilities for liquidity risk management and monitoring.

Liquidity risk in the narrower sense (insolvency risk) is not an immediate risk to the Group's profit that can be cushioned with equity capital. Liquidity risk management therefore forms an additional management level outside the ICAAP. Like the latter, it is based on the results of the risk inventory and integrated with the recovery plan and remuneration system. The central objective of liquidity risk management is to prevent liquidity shortfalls and thus ensure that the overall solvency of the Deka Group is guaranteed on a continuous basis. In the economic perspective, the key risk measure used in the integrated quantification, management and monitoring of liquidity risk is the relevant funding matrix (FM) defined by the Board of Management. In the normative perspective, the key risk measure is the liquidity coverage ratio (LCR) for regulatory purposes. The LCR is the ratio of the holdings of high-quality liquid assets (HQLA) to the total net outflows for the next 30 days, as calculated under a stress scenario.

For liquidity risk (insolvency risk), risk capacity is defined in the economic perspective as the amount of free liquidity that is in principle available. It thus corresponds to the positive liquidity balance of the FM for normal business operations. For liquidity risk, the Deka Group has defined its risk appetite in the economic perspective such that an indefinite survival horizon exists under an extreme hypothetical stress scenario of a simultaneous institution-specific and market-wide stress event. This hypothetical stress scenario is illustrated in the "combined stress scenario" funding matrix. Permanent solvency and an unlimited survival horizon are achieved by setting a limit of 0 on the liquidity balances of all maturity bands.

In the normative perspective, thresholds are set that take into account the regulatory requirements. It is important that the chosen thresholds provide sufficient notice to allow for the preparation and initiation of management measures. Escalation and information processes are triggered for governance purposes when the thresholds are hit. The thresholds are also reviewed and adjusted as necessary as part of an annual revision process. The maximum level of risk corresponds to the red threshold for the LCR used for internal management purposes. In the current situation, this is based on the applicable regulatory requirement (currently 100%) plus a management buffer. In the normative perspective, the liquidity risk that the Deka Group is prepared to accept is the amber threshold for the LCR used for internal management purposes. This is comprised of the red threshold used for internal management purposes plus a management buffer. The management buffer has been determined taking into account the ECB guide to the ILAAP and is essentially based on the results of the annual risk inventory and strategic considerations as to how to respond flexibly to potential business opportunities without jeopardising liquidity adequacy.

Risks impacting the income statement arising from refinancing gaps (liquidity maturity transformation risk) are currently not material because the limits placed on liquidity balances in the FM prohibit negative balances, meaning that maturity transformation is only possible to a very limited extent. In view of the ample levels of liquidity available to the Deka Group overall, market liquidity risk is also not regarded as significant at present.

Liquidity positions are managed by the Treasury corporate centre. Liquidity management involves managing and monitoring short-term and structural liquidity and offsetting liquidity costs and benefits. At the same time, the Treasury corporate centre ensures that an adequate liquidity reserve of central-bank-eligible collateral is available. In addition, it is in charge of managing the Deka Group's liquidity reserve as well as controlling the level of liquidity ratios. Operational liquidity management across all maturities is also handled centrally by the Treasury corporate centre.

The liquidity position and compliance with risk appetite is analysed, for the economic perspective, across the entire Group by the Risk Control corporate centre and monitored independently from the front office units in organisational and procedural terms. The Finance corporate centre is responsible for determining the LCR and monitoring compliance with the thresholds set.

In the event of a liquidity emergency, a crisis committee assembles. It may decide all measures judged necessary to ensure the short-term solvency of the Group and may instruct all units of the Deka Group to implement these measures. The Board of Management, as a permanent member with a voting right, is the core of this crisis committee. Continuous monitoring of market-wide and institution-specific early warning indicators and emergency triggers anticipate potential liquidity crises so that appropriate countermeasures can be quickly implemented in the event of adverse developments.

Economic perspective: Funding matrices

The purpose of the funding matrix is to show expected future cash flows across the portfolio as at the reporting date. The liquidity requirement (liquidity gap) or liquidity surplus is determined for each maturity based on these flows. In addition, freely available financial resources, such as realisable assets in the form of securities, over-coverage in cover registers and other sources of funding, are identified as potential liquidity on an aggregated basis. The liquidity balance for each maturity band is determined from the sum of the cumulative liquidity gap and the cumulative liquidity potential.

The basis for the model is cash flows as indicated by legal maturities. This approach is based on the sum of all legal net cash flows per maturity band. Reconciliation between the amount from a legal perspective and expected cash flows is performed using modelling assumptions. Securities used for liquidity potential are allocated either to the liquidity buffer or to operational securities portfolios.

The liquidity buffer is used to cover possible stress-induced liquidity outflows from the banking book as well as stochastic liquidity outflows that cannot be influenced by the Deka Group or can only be influenced to a limited extent (stochastic liquidity position). As a component of the liquidity reserve, the liquidity buffer falls under the remit of the Treasury corporate centre. The minimum level required and currency composition of the liquidity buffer are determined by Risk Control on a quarterly basis. The results are reported to the MKR and MKAP. Treasury can independently propose a higher liquidity buffer above this level. The Board of Management sets the level of the liquidity buffer based on the MKAP's recommendation.

The operational securities portfolios comprise all freely available securities. These can be divided into securities that fall within the remit of the Capital Markets business division and portfolios that are allocated to the Treasury corporate centre as part of the liquidity reserve and which do not form part of the liquidity buffer.

As well as being used for normal business operations (going concern), funding matrices are also analysed under different stress scenarios. This ensures that even under stressed market conditions, an adequate liquidity reserve is maintained to cover any potential liquidity need.

The Deka Group primarily examines the "combined stress scenario" FM, which simulates the simultaneous occurrence of both the institution's own and market-wide stress factors. This FM fully implements MaRisk requirements. A traffic light system in the "combined stress scenario" FM, consisting of early warning thresholds and limits, is used to manage compliance with risk appetite – i.e. to ensure that the Group is solvent at all times with an indefinite survival horizon in a stress scenario that is both institution-specific and market-wide – and is monitored daily. The use of limits means that the liquidity balance must be positive for all the maturity bands monitored. In addition, individual stress scenarios are examined separately in special FMs for which different modelling assumptions are used. Among other factors, market liquidity risks arising from a reduction in the market value of the securities in the liquidity potential are taken into account in the stress scenarios.

Liquidity risks in foreign currency are monitored daily based on the "combined stress scenario" FM in the relevant foreign currency using materiality and alarm thresholds.

Normative perspective: Regulatory liquidity ratio

The Finance corporate centre monitors the internal amber threshold as part of the daily calculation of the LCRs for DekaBank Deutsche Girozentrale and DekaBank Deutsche Girozentrale Luxembourg. This enables proactive management of the LCRs. A Group-wide LCR is calculated on a monthly basis.

Tools for both perspectives

DekaBank has established a liquidity transfer pricing system (funds transfer pricing) for the source-specific internal allocation of liquidity costs, benefits and risks. The transfer prices calculated are taken into account in the management of risks and returns. The liquidity transfer pricing system is used to allocate economic costs on a source-specific basis as well as the costs for maintaining the liquidity buffer and complying with regulatory requirements (e.g. LCR). The use of a liquidity transfer pricing system for source-specific allocation allows liquidity to be proactively managed and efficiently allocated.

Macroeconomic stress testing for all risk categories is used to manage both capital and liquidity adequacy. For the economic perspective, the impact of the stress scenarios on liquidity balances is calculated and compared to the relevant funding matrix. Similarly, in the normative perspective, the effects of the stress scenarios on the LCR are calculated and compared to the regulatory requirements.

The results of the macroeconomic stress tests in relation to liquidity adequacy, too, are determined quarterly, assessed by the Stress Testing Committee and reported to the Board of Management, the Risk and Credit Committee, and the Administrative Board.

Reporting

Appropriate and high-quality aggregation of risk data and reporting based on this provide the foundations for effectively monitoring and managing risk appetite within the framework of the risk strategy. Key instruments for risk reporting include the quarterly risk report in accordance with MaRisk to the Board of Management and the Risk and Credit Committee of the Administrative Board, as well as the monthly reporting on the economic risk situation and financial ratios to the Board of Management. The Board of Management also receives more extensive reports for individual risk types, which contain key information on the current risk situation. The Administrative Board receives a three-part quarterly report on the development of earnings, value drivers and risks at the Deka Group and in the individual business divisions.

Risk concentrations in relation to individual counterparties (cluster risks and analysis of shadow banking entities) are reported on a monthly basis to the Board of Management and the key risk committees as part of the report on the economic risk situation. In addition, a detailed analysis of all individual counterparties classified as clusters and the associated segment concentrations in comparison to the guidelines set by the credit risk strategy is conducted on a quarterly basis as part of the quarterly risk report. If necessary, adjustments are made to the number and volume of the relevant counterparties.

Further overall reports also include quarterly reporting on macroeconomic stress tests, which examine key indicators material to the risk appetite under alternative scenario conditions. In this respect, stress tests perform a crucial early warning function.

Besides these overall reports, there are also corresponding reports for every type of operational limit that is set. These reports are used to monitor compliance with the respective guidelines on a daily basis. Any breach is immediately brought to the attention of the authorised decision maker – and in the event of material breaches, also the Board of Management. If the liquidity balance exceeds the limit, the Board of Management is notified immediately. Moreover, the LCR is prepared daily in the reporting system of the Finance corporate centre and provided to monitoring units.

Capital adequacy in financial year 2019

In geopolitical terms, 2019 was marked by ongoing trade disputes, especially that between the US and China, which had a damaging effect on growth and, above all, created uncertainty about the future world economic order. In Europe, Brexit was a driver of uncertainty again in 2019.

Ongoing tensions and uncertainty led the two major central banks – the Fed and the ECB – to hold rates at their historic lows or cut them further. This resulted in rising bond prices, with yields on short- and medium-term German government bonds falling well into negative territory. For a time, the EONIA curve was also negative across all maturity ranges. Yields later rose slightly up to the end of the year but remained at a very low level.

Against the backdrop of geopolitical tensions and signals from central banks that the economic situation would remain difficult, the equity markets were repeatedly hit by short-term volatility, but nevertheless performed very positively overall over the course of the year.

At the same time, yield spreads in the bond markets continued to decline. The iTraxx and CDX – the two major indices for credit derivatives – fell to their lowest levels since the financial crisis.

The interest rate benchmark reform (reference rates) initiated by the Financial Stability Board continued to gather pace in the reporting year. Following the introduction of a new USD reference rate in April 2019 – the Secured Overnight Financing Rate (SOFR) – the ECB began publishing the Euro Short-Term Rate (€STR) as a successor to the EONIA in October 2019. This means that, in the key global interest rate markets, new interest rates are now in place that meet the requirements of the Benchmark Regulation and can therefore be used long-term as reference rates in financial instruments. Significant work is still required, however, to switch all contracts and products to the new rates. These efforts are taking place against the backdrop of the still-developing market in the new interest rates and a deadline of the end of 2021 for phasing out the old benchmarks such as the LIBOR family.

DekaBank has created a cross-divisional governance structure for this transition. This involves every step of the process chain, from front office units to the corporate centres. The necessary adjustments to internal systems, processes and methods are being managed through the new product process. The management committees such as the MKR and MKAP are regularly updated on the progress of these activities, as is the Board of Management.

Despite these enormous changes in the global market, the general effects so far, and especially those at DekaBank, have been very modest. Neither the launch of €STR, nor the resulting changes to the quotation of the EONIA rate, nor the first transactions with SOFR and €STR as the reference rates have caused any issues in day-to-day business along the process chain. During the transition period, in which the old and new interest rates will exist in parallel, there is, however, a possibility of increased risks from rising market volatility due to declining liquidity in the old interest rates. The Bank is combating these risks by thoroughly planning ahead for the transition of the bank portfolio.

In 2020, the Deka Group expects further changes relating to the use of the new interest rates. The definition of new term rates (term benchmarks beyond overnight rates) will be a key aspect of this further development. Various proposals from market participants are currently under discussion.

The agreement reached on the UK's exit from the European Union, which followed protracted negotiations, has so far had no significant impact on business developments at the Deka Group either. Due to the measures taken in 2018, no negative effects are anticipated looking ahead.

At DekaBank, the sometimes extreme market developments, particularly in interest rates, had only a minor impact on the total risk in the trading book and banking book portfolios. This was primarily because DekaBank's risk profile is largely neutral in equities and general interest rate risks. Risks from Riester products and pension obligations were an exception to this. Here, there were significant changes to risk levels over the course of the year, especially in the summer, when interest rates hit their lowest levels.

The Deka Group held adequate capital throughout the reporting period. In particular, the utilisation of risk capacity and of the risk appetite as well as the Common Equity Tier 1 capital ratio remained at non-critical levels throughout.

Economic perspective (current situation)

During the reporting year, the models employed by the Deka Group for economic risk management continued to reflect the corporate and market situation in an appropriate and timely manner. The Deka Group's total risk exposure (value-at-risk, confidence level 99.9%, holding period of one year) at the 2019 reporting date was €2,395m, a decline of €97m on the 2018 reporting date (€2,492m). There was a substantial reduction in market price risk and a noticeable fall in counterparty risk, but also a significant rise in business risk.

The lower overall risk was accompanied by a marked drop in risk capacity to €4,726m (year-end 2018: €5,920m), which was attributable primarily to the removal of subordinated capital components from the internal capital concept. Ignoring this methodological change, risk capacity rose slightly overall. There were positive effects from the correction item for hidden liabilities and reserves, from retained earnings, from the net income contribution for the following year and from the deduction item for risks on pension obligations. Negative effects arose from the development of the deduction for deferred tax assets and the revaluation reserve, from the full consideration of the potential profit impact of measures to strengthen the capital for a company in the equity investment portfolio, and from the decline in the correction item for the own credit quality effect. Particularly as a result of the methodological change described above, the utilisation of risk capacity was up considerably as against the end of 2018 (42.1%) to 50.7%, although it remains at a non-critical level.

Utilisation of allocated risk capital was non-critical both at Deka Group level and in all business divisions. The risk appetite of €3,750m (slight increase on the end of 2018) was 63.9% utilised as at the 2019 reporting date (year-end 2018: 67.4%).

Change in Deka Group risk over the course of the year *€m (Fig. 19)*

	31 Dec 2019	31 Dec 2018	Change	
Counterparty risk	1,354	1,416	−62	−4.4%
Investment risk	44	36	7	20.1%
Market price risk	363	520	−158	−30.3%
Operational risk	259	269	−10	−3.6%
Business risk	375	250	125	50.2%
Total risk	**2,395**	**2,492**	−97	−3.9%

Normative perspective (current situation)

Capital adequacy is determined in accordance with the CRR/CRD IV. Alongside credit risk, market risk and operational risk, the credit valuation adjustment (CVA) risk is also taken into account.

The Deka Group's regulatory own funds as of 31 December 2019 stood at €5,828m (31 December 2018: €5,741m). This represented a year-on-year increase in own funds of €87m, comprising a rise in Common Equity Tier 1 capital and a reduction in Tier 2 capital.

The slight increase in Common Equity Tier 1 capital by 2.7% to €4,579m was due to effects resulting from the 2018 annual financial statements, especially the retention of parts of the annual profit.

Tier 2 capital declined by €32m from €807m as of 31 December 2018 to €775m as of 31 December 2019. This change was due to the reduced eligibility of Tier 2 capital instruments under the CRR in the last five years before their maturity.

Risk-weighted assets rose by €3,208m from the previous year's figure of €29,021m to €32,229m as of 31 December 2019. For market risk, the increase of €2,921m to €9,269m was mainly attributable to an increase in general interest rate risk. In credit risk, the increase of €403m to €19,147m resulted mainly from the expansion of business in the Financing business division. Operational risk fell by €122m to €3,243m. CVA risk remained almost unchanged year-on-year at €570m.

As of 31 December 2019, the Common Equity Tier 1 capital ratio stood at 14.2% (31 December 2018: 15.4%). The Tier 1 capital ratio as of the reporting date was 15.7% (31 December 2018: 17.0%). The total capital ratio fell from 19.8% as of 31 December 2018 to 18.1% at the reporting date.

Taking account of the requirements of the SREP (Supervisory Review and Evaluation Process), DekaBank had to comply at Group level with a phase-in Common Equity Tier 1 capital ratio of at least 9.04% as at 31 December 2019. This capital requirement is made up of the Pillar 1 minimum requirement (4.5%) plus the Pillar 2 requirement (P2R) (1.25%), the capital conservation buffer (2.5%), the countercyclical capital buffer (approximately 0.29% as of year-end 2019) and the capital buffer for other systemically important banks (0.5%). The capital requirement for the total capital ratio with transitional provisions (phase-in) was 12.54%. Both requirements were clearly exceeded at all times.

Deka Group own funds *in €m (Fig. 20)*

	31 Dec 2019		31 Dec 2018	
	CRR/CRD IV (without transitional provisions)	**CRR/CRD IV (with transitional provisions)**	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**
Common Equity Tier 1 (CET1) capital	4,579	4,579	4,460	4,460
Additional Tier 1 (AT1) capital	474	489	474	495
Tier 1 capital	**5,053**	**5,069**	**4,933**	**4,954**
Tier 2 (T2) capital	775	775	807	807
Own funds	**5,828**	**5,844**	**5,741**	**5,762**
Credit risk	19,147	19,147	18,744	18,744
Market risk	9,269	9,269	6,348	6,348
Operational risk	3,243	3,243	3,365	3,365
CVA risk	570	570	565	565
Risk-weighted assets	**32,229**	**32,229**	**29,021**	**29,021**
%				
Common Equity Tier 1 capital ratio	**14.2**	**14.2**	**15.4**	**15.4**
Tier 1 capital ratio	**15.7**	**15.7**	**17.0**	**17.1**
Total capital ratio	**18.1**	**18.1**	**19.8**	**19.9**

The leverage ratio determined in accordance with the Delegated Regulation of 17 January 2015, i.e. the ratio of Tier 1 capital to total assets (leverage ratio exposure), adjusted in line with regulatory requirements, stood at 4.9% as at 31 December 2019 (year-end 2018: 4.6%). Taking account of the phase-in provisions, the leverage ratio for the Deka Group was 4.9% (year-end 2018: 4.6%). This increase was attributable to a rise of €120m in Tier 1 capital, accompanied by a reduction in leverage ratio exposure by €4,068 m – in line with the development of total assets. This was at all times substantially above the minimum leverage ratio of 3.0% to be adhered to from June 2021 onwards.

The MREL ratio as at the reporting date was approximately 22%, considerably above the statutory minimum.

Macroeconomic stress tests

Macroeconomic stress testing was expanded to the normative perspective in the reporting year. In the economic perspective, the methodological change resulted in a significant increase in risk capacity utilisation in the stress scenarios, just as it did in the current situation.

The in-depth analysis of the results of the macroeconomic stress scenarios in both perspectives also takes into account their probability of occurrence and lead time, as well as the possible mitigation measures available if necessary. Under this approach, the internal thresholds were complied with at all times during the reporting period and at the reporting date in all the scenarios examined, and no action was required in relation to capital adequacy.

Liquidity adequacy in financial year 2019

The Deka Group continued to have sufficient liquidity, measured using the liquidity balances and LCR, throughout the reporting period.

Economic perspective

There were clear positive liquidity balances in all relevant maturity bands of the "combined stress scenario" funding matrix for periods of up to 20 years. This was also the case for the alternative stress scenarios. Limits were complied with throughout the 2019 financial year.

As at 31 December 2019, the accumulated liquidity balance of the Deka Group's "combined stress scenario" funding matrix in the short-term range (up to one week) stood at €5.5bn (year-end 2018: €8.7bn). In the maturity band of up to one month, the liquidity surplus totalled €11.8bn (year-end 2018: €11.4bn), and in the medium-term range (three months) it amounted to €12.7bn (year-end 2018: €15.2bn).

As in previous years, a substantial part of the Group's liquidity generation and provision was attributable to business with savings banks and funds. In relation to the net cash flows of €–10.9bn to day 1, the Deka Group has a high liquidity potential (€13.2bn) that is readily convertible at short notice. The Group has access to a large portfolio of liquid securities, which are eligible as collateral for central bank borrowings, as well as to available surplus cover in the cover pool and corresponding repo transactions. The strict requirements concerning the liquidity potential ensure that the securities used for this purpose can generate liquidity even in a stressed market environment.

"Combined stress scenario" funding matrix of Deka Group as at 31 December 2019 *€m (Fig. 21)*

	D1	>D1-1M	>1M-12M	>12M-5Y	>5Y-20Y	>20Y
Liquidity potential (accumulated)	13,175	14,792	2,651	–237	137	213
Net cash flows from derivatives (accumulated)[1]	–315	2,245	5,829	4,768	4,335	4,355
Net cash flows from other products (accumulated)	–10,573	–5,274	2,108	3,511	–1,253	–4,517
Liquidity balance (accumulated)	**2,287**	**11,764**	**10,588**	**8,042**	**3,219**	**50**
For information purposes:						
Net cash flows from derivatives by legal maturity (accumulated)[1]	–315	–381	–1,018	–2,544	–789	4,355
Net cash flows from other products by legal maturity (accumulated)	–9,755	–14,345	–24,998	–9,458	–6,967	–5,436
Net cash flows by legal maturity (accumulated)	**–10,069**	**–14,727**	**–26,016**	**–12,001**	**–7,756**	**–1,081**

[1] Including lending substitute transactions and issued CLNs

As at 31 December 2019, 58.6% (year-end 2018: 64.0%) of total refinancing related to repo transactions, overnight and time deposits and other money market products. The remainder of the refinancing concerned capital market products, primarily with longer maturity profiles. Structured issues made up 63% of total capital market issues. The refinancing profile for lending business was well balanced, given the maturity structure.

Money market refinancing remained broadly diversified across a range of investor groups. Most of the investors in money market refinancing are financial service providers such as clearing houses, stock exchanges and funds, or large banks and savings banks. Savings banks accounted for 11.7% of money market refinancing, while funds represented 27.0%.

Some 62.8% of total refinancing was obtained in Germany and other eurozone countries. Approximately 29.6% of total refinancing was accounted for by issues of bearer securities that cannot be attributed to any buyer country.

Normative perspective

The liquidity and funding position remained sufficient , as expressed in a liquidity coverage ratio (LCR) for the Deka Group of 170.6% as of 31 December 2019. This was an increase of 20.8 percentage points from year-end 2018. In percentage terms, the decline in net cash outflows was greater than the decline in holdings of high-quality liquid assets. The average for the reporting year was 146.1% (previous year: 144.8%). The LCR fluctuated within a range from 131.0% to 170.6%. It was thus always substantially above the minimum limit of 100.0% applicable in 2019.

The regulatory requirements and internal thresholds in relation to the LCR were met throughout the period under review.

Both perspectives (macroeconomic stress tests)

The internal thresholds were complied with in both perspectives at all times, even in the macroeconomic stress testing.

Individual risk types

Counterparty risk

Strategic framework and responsibilities

The credit risk strategy stipulates the parameters for all Deka Group transactions that involve counterparty risk. It applies to all organisational units of the Deka Group and serves in particular as the foundation for the Group's credit risk principles for loans as defined by section 19 (1) KWG and describes the business divisions and segments that are the focus of lending activities – including the specific risk determinants and minimum standards for new business. Furthermore, the credit risk strategy serves to distinguish between the individual risk segments and governs the handling of intra-risk concentrations, cluster risks and exposures to shadow banking entities under the EBA guidelines. All lending decisions that deviate from the credit risk strategy are classified as significant and must be reported in the credit risk report in accordance with MaRisk. Counterparty risks are monitored and managed in accordance with standard principles, regardless of whether the risks stem from trading or non-trading transactions.

In the context of risk-bearing capacity, counterparty risks are limited by allocating risk capital (risk appetite) both overall and at business division level. For individual counterparties, risk is restricted using a limit system based on factors such as creditworthiness, collateral, duration and country and sector considerations. Management and monitoring of risk concentrations (cluster risks and risks from exposures to shadow banking entities) also takes place at individual counterparty level. In addition, strict lending standards apply depending on the risk segment. These concern, for instance, lending structure and adequate risk sharing by the borrower. In addition, a blacklist is used in line with the credit risk strategy to avoid undesirable lending business that could involve reputational risks or an increased level of risk, or which does not meet the high sustainability requirements.

In accordance with MaRisk, there must be a functional separation in the lending business between the "front office" and the "back office" that extends to the responsible members of the Board of Management. The responsibilities performed by the "front office" particularly include monitoring risks at borrower and portfolio level, reviewing specific items of collateral, early risk identification (administrative office), managing non-performing and troubled loans and making decisions regarding loan-loss provisioning for major exposures. Responsibility for applying risk classification procedures, and for establishing, reviewing and monitoring those procedures is classified as a front office function, as is reporting.

Authority levels for lending decisions are based on the net total limit and the gross limit or gross amount. The approval of the Board of Management – and potentially the additional consent of the Risk and Credit Committee – may be necessary, depending on the amount and the rating limits.

The Management Committee for Assets and Liabilities (*Managementkomitee Aktiv-Passiv* – MKAP) and the Risk Management Committee (*Managementkomitee Risiko* – MKR) are responsible for strategically managing counterparty risks and their risk concentrations across all risk types. A number of sub-committees have been assigned to the MKR to deal with counterparty risk. The Rating Committee regularly analyses and assesses the internal rating procedures employed for measuring risk and, where relevant, their inclusion in the pooling system developed in joint projects with Rating Service Unit GmbH (RSU) and S-Rating und Risikosysteme GmbH (SR). The Monitoring Committee is responsible for regularly analysing and discussing matters in connection with the methods and procedures employed for early risk identification as well as for monitoring and managing exposures with increased counterparty risk (non-performing loans and those on the watch list). The duties of the Risk Provisioning Committee include regularly analysing and discussing matters in connection with the planning, monitoring and management of risk provisions for loan losses, and also monitoring and managing defaulted exposures (restructuring and liquidation cases) in the lending business as well as in the securities portfolios not recognised at fair value through profit or loss.

Responsibilities for the assessment and monitoring of country risks are consolidated in the Country Risk Committee. The committee discusses country ratings on both a regular and ad hoc basis. It also defines country limits, identifies countries to be excluded (blacklist for high-risk countries) and determines measures to reduce overruns of country limits as well as other risk-reducing measures.

Management and limit-setting

The Deka Group uses different tools to manage its counterparty risk: overall analysis at the total portfolio level and a multi-level system of volume-based limits.

Portfolio model

The starting point for the strategic analysis of counterparty risk is the allocation of capital, which is derived from the Deka Group's risk and capital planning. It is the foundation for the limitation and monthly monitoring of counterparty risk at total portfolio level and at the level of individual business divisions, including the Treasury corporate centre. The allocation is quantified based on the Deka Group's credit portfolio model, which is used to determine the portfolio's risk of loss in the form of a credit value-at-risk (CVaR) metric for a one-year holding period and at a confidence level of 99.9%, in line with DekaBank's target rating. Risk concentrations are taken into account directly through this model: portfolios that have a strong concentration on individual groups of counterparties, regions or sectors involve a higher economic capital commitment than those that are more diversified. The individual risk ratios are reviewed on a monthly basis to provide a foundation for overall management decisions.

Operating management limits

The key instrument for daily operational management of counterparty risk is a system of fixed, complementary volume-based limits. In light of the concentration on specific groups of counterparties, regions and sectors that results from the Group's business model, the limitation of both unsecured volume (net limitation) and the total volume (gross limitation) plays a central role in this process. The amount of the limits is primarily oriented towards the internal rating of the corresponding counterparties. In order to limit concentration, additional targets have been set for the maximum permitted amount per counterparty (gross limit €3.5bn/net total limit €1.6bn). Particularly important counterparties from a business policy perspective (clusters) are also subject to additional reporting above a specific amount. Separate limits apply in the case of exposures to shadow banking entities. The Deka Group distinguishes between transparent shadow banking entities (principal approach) and less transparent shadow banking entities (fallback approach). Further minimum requirements for the quality of collateral received apply to particularly significant repo lending transactions. These requirements are contained in the collateral policy. Furthermore, liquidation risks associated with repo lending transactions are further limited by the application of supplementary limits in order to take into account potential fluctuations in the value of the underlying securities.

Loans that involve specific project, sustainability or reputational risks are not entered into. Detailed risk determinants and minimum standards have also been established for the individual financing categories.

The explicit limitation of country risks serves to effectively limit positions in countries with elevated risk. Only the risk position relating to Germany is excluded from this process of limit-setting.

In retail customer lending business, counterparty risks are limited by the provision of collateral.

Quantification of counterparty risk

Market prices are always used to determine gross counterparty risk. In the case of products for which there is no observable market value, the net present value is used. The outstanding receivable amount is used for advance performance risk and open items. The adjusted gross position is then calculated by deducting specific insolvency-proof collateral. The overall net position is arrived at by deducting additional collateral and positions that reduce risk, with valuation of collateral following the internal regulations that apply in each case.

In order to achieve consistency between the strategy system, management tools and risk reporting, the concepts of volume used in risk reporting – gross or net loan volume – are closely aligned with the metrics used for limit-setting, namely adjusted gross position and overall net position. Gross and net loan volumes referred to below relate to the adjusted figures.

The assessment of counterparty risks for individual borrowers includes the use of internal rating systems. Borrowers are assigned to an internal rating class with corresponding estimates of the probability of default (PD).

The internal rating systems currently used are tailored to different risk segments, including corporates, banks, governments, funds and specialised financing. The rating systems include conventional scorecard models and models in which the probability of default is estimated using simulated macro and micro scenarios for risk drivers and expected cash flows. The regulator has approved the rating systems for the foundation internal ratings-based approach (IRBA).

When measuring the transfer risk on payment obligations that are denominated in a foreign currency from the borrower's perspective, the borrower rating is influenced by the country rating.

All of the rating modules in use are calibrated to a one-year probability of default. The rating classes are uniformly assigned according to the probability of default based on the master scale of the German Savings Bank and Giro Association (*Deutsche Sparkassen- und Giroverband* – DSGV). This scale serves as a standard reference for a differentiated creditworthiness assessment. The DSGV master scale provides for a total of 21 rating classes for non-defaulting borrowers and three for defaulting borrowers.

Counterparty risks from a portfolio perspective are assessed with the help of an internally developed credit portfolio model. The portfolio model is largely based on a credit metrics approach. In addition to default risks, the risks arising from a change in ratings are also taken into consideration. The probability distribution for changes in the value of the loan portfolio is generated using a Monte Carlo simulation.

The CVaR and, for information purposes, the expected shortfall (ES) are key figures for management decisions and are both determined with a holding period of 250 trading days and a confidence level of 99.9%. Risk concentrations are taken into account by considering the dependency structure of risk factors. In particular, the modelling approach selected considers dependencies between crisis events. In addition to the CVaR from the credit portfolio model, the CVaR for certain guarantee funds and fund units in the Group's own investment portfolio are also taken into account, along with the expected shortfall (ES).

The standard risk costs incorporated into the calculation of the expected return on equity are based on an expected-loss approach and relate to the likelihood of default, the loss rate and the maturity of the transactions. The cost of equity is determined using risk amounts differentiated by individual transaction and corresponding sector and regional allocations. Risk concentrations are included for individual counterparties (clusters), regions and industries by taking into account the cost of equity in the structuring of loan terms.

Management and monitoring of counterparty risks

The Deka Group's counterparty risk, as determined in this way, is directly compared with allocated risk capital. Credit risks are thus monitored based on a redistribution of the CVaR to individual transactions and reaggregation to the business divisions.

Daily management and monitoring of counterparty risk uses a volume-based limitation of the net position and the adjusted gross position.

As a supplement to its volume-based limits, the Deka Group uses thresholds for risk concentrations in connection with individual counterparties, known as clusters. This entails further precautionary procedures for large exposures and monitoring routines for risk concentrations as appropriate. Thresholds for sectors are not meaningful due to the Deka Group's specific business model, and are thus not taken into account.

The Risk Control corporate centre monitors the limits using a centralised limit monitoring system at both the borrower-unit level and the borrower level. A comprehensive and market-based early warning system ensures that the individual counterparties subject to limits are monitored so that, in the event of extraordinary developments, countermeasures can be taken at an early stage. At a portfolio level, an analysis of the most significant borrowers and sectors is also carried out, based on CVaR. Maximum country limits are derived from a limit matrix, which is calculated based on a foreign currency (FC) country rating and the gross domestic product. Individual country limits within the limit matrix are approved by the Country Risk Committee. The Risk Control corporate centre monitors compliance with the respective country limits. Overruns are reported immediately to the members of the Country Risk Committee and to the Capital Markets Credit Risk Management unit. This unit acts as the central administrative office for country limits. An analysis of the most significant countries or regions is also carried out from a portfolio perspective, based on CVaR.

In addition to requirements concerning the liquidity of the securities, the additional investment criteria for securities portfolios in the Treasury corporate centre include, in particular, stipulations regarding issuers, credit rating and portfolio diversification. Compliance with these rules is monitored daily by the Risk Management unit, which is independent of trading operations. Any breaches are reported immediately. In addition, reporting takes place monthly to the MKR and MKAP. This includes an analysis of the holdings in the liquidity reserve portfolios and the portfolio structure.

The Deka Group has issued extensive processing and valuation guidelines for collateral obtained in lending and trading transactions. The procedures for verifying valuation of collateral received in the course of lending business, including guarantees, sureties, charges on commercial and residential property, registered liens and the assignment of receivables, are applied on an annual basis. Valuation of collateral and of any discounts applied to it is primarily based on the creditworthiness of the party providing the guarantee, or in the case of asset collateral, on the market value, fair value or lending value of the financed property.

Management and monitoring activities also focus on financial collateral provided in the form of securities and obtained as part of repo lending transactions. These comprise by far the largest share of the collateral portfolio as compared to the lending business.

The Group's collateral policy defines the eligibility criteria for securities borrowed by counterparties or received as collateral in repo lending transactions. In addition, risk concentrations are restricted using category-specific concentration limits for equities and bonds, as well as a concentration limit (volume restriction) for each counterparty that applies across all categories.

The Capital Markets business division is responsible for compliance with the requirements of the collateral policy. It is supported operationally in this regard by the Capital Markets Collateral Management unit. A review independent of trading is performed daily by the Risk Management unit. Market- and counterparty-specific matters that could significantly affect the risk profile or profitability of the Capital Markets business division are analysed in the Risk Talk, which takes place every two weeks. In addition, an analysis of collateral is reported to the MKAP on a monthly basis.

Performance of stress tests

In addition to the macroeconomic stress tests performed across all risk types, additional sensitivity tests are conducted specifically for counterparty risk. Scenarios include, for example, a rating downgrade for public authorities and federal state banks as well as an increase in downgrade probabilities or loss ratios for certain collateral. The results of the stress tests are determined quarterly and reported to the Stress Testing Committee, the Board of Management, the Risk and Credit Committee and the Administrative Board. They therefore enable the Group to identify areas for action as early as possible if crisis situations start to unfold.

Default monitoring

The Monitoring Committee is operationally responsible for monitoring and managing non-performing loans and those on the watch list. This includes specifying early warning indicators and criteria to allocate exposures to different monitoring levels.

Operational responsibility for monitoring and managing restructuring and liquidation cases lies with the Risk Provisioning Committee. The latter is also responsible for regularly analysing and discussing matters in connection with planning, monitoring and managing loan loss provisions.

DekaBank determines loan loss provisions and provisions for off-balance sheet lending business in accordance with the expected credit loss model under IFRS 9. Details of this methodology can be found in the notes to the consolidated financial statements

Current risk situation

The counterparty risk determined on the basis of the credit value at risk (CVaR), with a confidence level of 99.9% and a holding period of one year, declined moderately in the reporting year to €1,354m (year-end 2018: €1,416m). Risk capital allocated to counterparty risk stood at €1,835m (year-end 2018: €1,905m). Utilisation of this amount was 73.8% (year-end 2018: 74.3%). The level of risk capacity utilisation therefore remained non-critical. The decline in the CVaR resulted primarily from a reduction in bond holdings in the Strategic Investments unit and from methodological changes to bring the determination of loss ratios into line with the IFRS 9 approach. The volume increase for guarantee products slightly offset the decline in risks.

The risk position of the cluster portfolio was assessed using an expected shortfall redistribution, which also resulted in a moderate decrease compared to the previous year. Risk concentration within the ten largest counterparty clusters remained almost unchanged as a proportion of the overall portfolio. Risk concentration thus remained in line with the Deka Group's credit risk strategy.

Gross loan volume fell by €9.7bn from the end of 2018 (€151.3bn) to €141.5bn. A large part of the decline was attributable to the financial institutions risk segment, where there was an impact from lower deposits with Deutsche Bundesbank and a decline in the bond volume. Another reason was the reduction of the repo lending volume with central counterparties. Increased money market transactions and rising market values of interest rate hedging instruments in the savings banks risk segment created an opposing effect. A higher bond volume in the corporates and public sector international risk segments also had an upward effect on gross loan volume. The public sector Germany risk segment was marked by rising volumes for German government and federal state-issued bonds, an increase in municipal loans, a decline in risk-reducing cash collateral accepted for interest rate hedging transactions, and rising market values of interest rate hedging instruments. Volume in the lending business also exceeded the prior-year figure. This was due to a variety of financing loans for infrastructure, transport, export and real estate, the vast majority of which were secured. The ship portfolio's share of gross loan volume rose slightly to 1.0% (year-end 2018: 0.7%). Given the continuing difficult market environment, the ship financing portfolio is still being closely followed and monitored on an ongoing basis.

Gross loan volume *€m (Fig. 22)*

	31 Dec 2019	31 Dec 2018
Financial institutions	63,226	84,522
Savings banks	10,548	7,358
Corporates	13,792	12,792
Public sector International	3,953	2,726
Public sector Germany	11,532	7,541
Transport and export finance	6,402	6,192
Property risks	11,492	10,039
Funds (transactions and units)	16,186	16,347
Other	4,416	3,772
Total	**141,548**	**151,288**

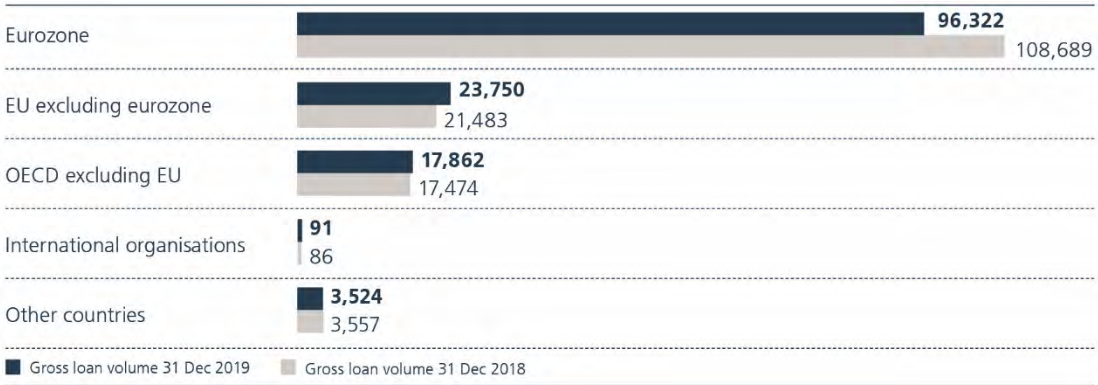
The net loan volume fell by €6.3bn from €71.5bn at year-end 2018 to €65.3bn. This decline was significantly smaller than the fall in gross loan volume. This was because the decline in business volume resulted in lower deductions for secured lending when converting from gross to net loan volume. This mainly reflected the offsetting of reverse repo transactions, especially as a result of the decreased volume of reverse repos in the financial institutions risk segment. The decline in volume in the financial institutions risk segment, which was also visible after netting, was primarily due to lower deposits with Deutsche Bundesbank. The volume of lending to savings banks and the German public sector had a compensatory effect in net terms as well as in gross terms. Securing of loans in the transport and export finance and property risks risk segments meant that the increase was lower than that for gross loan volume.

Net loan volume *€m (Fig. 23)*

	31 Dec 2019	31 Dec 2018
Financial institutions	20,826	33,559
Savings banks	10,292	7,064
Corporates	6,970	6,900
Public sector International	1,254	1,469
Public sector Germany	9,168	7,108
Transport and export finance	589	820
Property risks	2,600	2,046
Funds (transactions and units)	9,157	8,810
Other	4,416	3,770
Total	**65,273**	**71,545**

A substantial portion of the decline in gross loan volume related to the eurozone, owing to the lower level of Bundesbank deposits, the low repo volume with the central counterparty EUREX, the reduction in repo transactions with counterparties in Germany and France, and the reduced lending volume in Germany, Luxembourg and Belgium. Gross loan volume in the eurozone fell to 68.0% of total gross loan volume from 71.8% at the end of 2018. The gross loan volume attributable to Germany fell by €9.5bn to €58.1bn. In the eurozone, €15.7bn of the gross loan volume was attributable to counterparties in Luxembourg. Counterparties in France accounted for 6.0% of the gross loan volume, and counterparties in Belgium accounted for 3.1%. At €23.7bn, gross loan volume in EU countries outside the eurozone was higher than at the end of 2018, primarily due to increased volumes of repo lending, bond trading and loans with counterparties in the UK. Due to the Brexit negotiations, the country and sovereign limit for the UK continues to be closely monitored. In the OECD countries outside the European Union, the slight increase was due in particular to a greater exposure to bonds and securities lending with US counterparties and to transport and real estate financing in North America. Meanwhile, there was a reduction in the volume attributable to financial institutions in Switzerland.

Gross loan volume by region *€m (Fig. 24)*



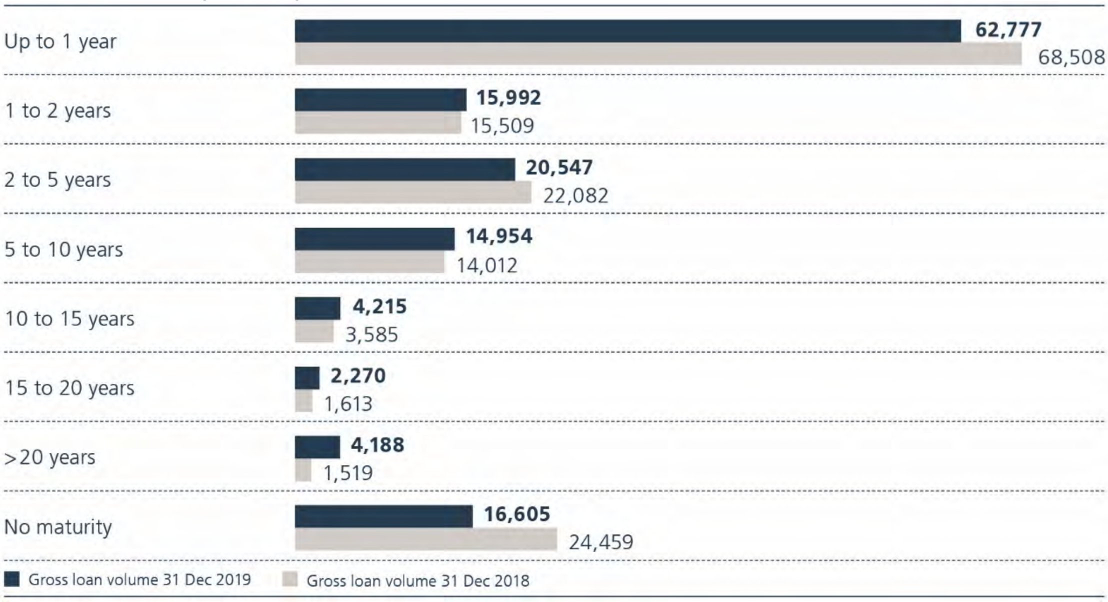
The gross loan volume attributable to borrowers in Italy declined from €1.2bn at the end of 2018 to €1.1bn. The relevant country limit was also substantially reduced in the course of the year. Due to the collateralisation provided by repo/lending transactions, the security provided for the bond portfolio using protection buyer CDS and the securing of loans through, for example, ECA guarantees, the net loan volume attributable to borrowers in Italy, Spain and the UK was lower than the gross loan volume.

Gross loan volume by risk segment for selected countries as at 31 December 2019 *€m (Fig. 25)*

	Italy	Spain	United Kingdom	United States
Financial institutions	388	2,834	16,452	3,009
Corporates	161	362	1,922	2,120
Public sector International	187	118	1,215	840
Transport and export finance	176	0	262	860
Energy and utility infrastructure	0	97	128	58
Property risks	191	1	2,374	3,026
Funds (transactions and units)	0	1	1	0
Other	8	37	129	0
Total	**1,110**	**3,450**	**22,484**	**9,912**
Change vs. previous year				
Financial institutions	84	909	1,100	506
Corporates	1	2	232	121
Public sector International	–34	40	598	760
Transport and export finance	–28	0	63	182
Energy and utility infrastructure	0	44	128	–28
Property risks	–59	0	161	234
Funds (transactions and units)	0	1	–43	0
Other	–7	–4	6	0
Total	**–43**	**991**	**2,246**	**1,774**

The gross loan volume remained focused primarily on the short-term segment at the end of 2019. The proportion of transactions with a time to maturity of less than one year was 44.4% (year-end 2018: 45.3%). The proportion of maturities longer than ten years was 7.5%, compared with 4.4% at 31 December 2018. The average legal residual term of gross lending was 3.5 years (year-end 2018: 2.6 years).

Gross loan volume by maturity *€m (Fig. 26)*



There was no significant change in the level of risk concentration in the loan portfolio during the reporting year. As at 31 December 2019, 20.9% (year-end 2018: 18.3%) of total gross loan volume was attributable to borrower units with a gross limit of at least €2.5bn or an overall net limit of at least €1.0bn (counterparty clusters). The number of counterparty clusters remained unchanged year-on-year at 26. Of the cluster portfolio, 32.4% related to counterparties in the German public sector, the savings banks and other alliance partners. A total of 17.9% of net loan volume related to counterparty clusters (year-end 2018: 15.9%).

The Deka Group also limits the shadow banking entity portfolio in accordance with EBA requirements. Shadow banking entities include, among others, money market funds, credit funds and inadequately regulated credit institutions. In addition to the overall limits imposed on shadow banking entities, limits are imposed based on the principal and fallback approaches. This does not affect the limits at the level of individual counterparties. As in the previous year, less than 3% of net loan volume as at 31 December 2019 related to shadow banking entities under the principal approach (limit utilisation of total net risk position: 45%) and less than 1% to shadow banking entities under the fallback approach (limit utilisation of total net risk position: 48%). The levels of utilisation are considered acceptable. This view is backed up by the shadow banking entities' average rating of 3 (principal approach) or AA– (fallback approach) on the DSGV master scale.

For the gross loan volume, there was an improvement in the average rating score by one notch to a rating of 2 on the DSGV master scale. The average probability of default as at 31 December 2019 was 14 basis points (bps) (year-end 2018: 15 bps), mainly due to an improved rating for ECA-backed export financing in Angola. For the net loan volume, the average rating score remained unchanged at A–. The probability of default remained constant at 9 bps. 84% of net loan volume remained in the same grouping (determined by rating class) as at the end of 2018. The target rating under the credit risk strategy was achieved for both the gross and net loan volumes.

Net loan volume by risk segment and rating *€m (Fig. 27)*

	Average PD in bps	Average rating 31 Dec 2019	31 Dec 2019	Average PD in bps	Average rating 31 Dec 2018	31 Dec 2018
Financial institutions	7	A	20,826	5	A+	33,559
Savings banks	1	AAA	10,292	1	AAA	7,064
Corporates	14	2	6,970	12	2	6,900
Public sector International	7	A	1,254	8	A	1,469
Public sector Germany	1	AAA	9,168	1	AAA	7,108
Public infrastructure	20	3	1,273	16	3	984
Transport and export finance	79	7	589	176	9	820
Energy and utility infrastructure	42	5	2,749	55	6	2,052
Property risks	10	A–	2,600	9	A–	2,046
Retail portfolio	3	AA	394	3	AA	733
Funds (transactions and units)	11	2	9,157	10	A–	8,810
Total	**9**	**A–**	**65,273**	**9**	**A–**	**71,545**

Market price risk

Strategic framework and responsibilities

The Deka Group's market price risk strategy, based on the Group's overall risk strategy, stipulates parameters for risk management in all organisational units regarding all positions in the trading and banking book that are exposed to market price risk. It sets objectives, priorities and responsibilities for market price risk management and, together with the liquidity risk strategy, governs the business focus of trading activities (trading strategy).

Market price risks need to be considered in the Asset Management divisions, in the Capital Markets business division and in the Treasury corporate centre. Market price risks in the Financing business division are passed on to the Treasury corporate centre.

The Deka Group's investment management companies are generally not subject to any market price risks beyond those associated with the investment funds. However, market price risks can arise for the Deka Group if products are provided with a guarantee. Market price risks from guarantee products are incorporated into the analysis of risk-bearing capacity and attributed to the Asset Management Securities business division. Market price risk from guarantee products is managed by the Board of Management with the support of the Treasury corporate centre.

Within the risk management organisation, the Board of Management decides the market price risk limits for the Group as a whole, as well as at the level of the business divisions, including the Treasury corporate centre. It also decides on limits for interest rate risk in the banking book using an earnings-based approach. The relevant department heads are responsible, in consultation with the head of Risk Control, for reallocating existing limits below the level of the Capital Markets business division and Treasury where appropriate. The allocation of limits reflects both organisational structure and the distinction between the trading and the banking book.

The MKR and MKAP make recommendations with respect to the definition of the framework for the management of strategic market price risk positions to the Board of Management, which then adopts resolutions accordingly. The MKR issues recommendations on changes to the capital allocation in the economic perspective during the year, on thresholds for the Common Equity Tier 1 capital ratio in the normative perspective and on limiting interest rate risks in the banking book using an earnings-based approach. The MKAP gives recommendations on the operational management of interest rate risks in the banking book using an earnings-based approach. In its capacity as a sub-committee, the Risk Talk supports the MKR and the Board of Management in relation to the Capital Markets business division's operational processes for managing and monitoring market price risk. To do so, it conducts in-depth analysis on a range of issues relating to market and counterparty risks and makes recommendations and binding decisions on matters that might materially influence the Capital Markets business division's risk profile or profitability. These committees make an important contribution to communication between the departments responsible for the control and monitoring of market price risks. In terms of the management of guarantee products, the Board of Management is supported by Treasury and the MKAP, and particularly by a special central sub-committee of the MKAP for guarantee products. The aim of this sub-committee is to ensure a comprehensive overall picture of the guarantee products at the Deka Group.

Execution of transactions and recording exposures are the responsibility of the operating units. In terms of market price risks, they are solely responsible for the implementation of strategic guidelines and operational management within the prescribed risk limits.

Management and limit-setting

In the economic market price risk calculation, risk ratios are calculated on a net-present-value basis using the value-at-risk approach and with scenario analyses. The basis for daily market price risk monitoring (including interest rate risk in the banking book) is a system of operational limits that is consistent with the Group's overall risk-bearing capacity. This system defines limits in line with the business model for the various portfolio levels and risk categories. It also takes into account the focal areas of the portfolio determined by the business model. In addition, limits are set based on operating metrics such as sensitivities. These are primarily used for operational management of the capital markets business in order to monitor adherence to the risk strategies on an ongoing basis. In addition to the net-present-value approach, interest rate risks in the banking book are also calculated and limited using an earnings-based approach. Stop-loss limits are another management tool for limiting losses. In the event that a limit is exceeded, the MKAP formulates recommendations for the Board of Management on mitigation measures, while the MKR is responsible, if required, for recommending measures in relation to risk appetite.

Value-at-Risk (VaR)

VaR is calculated with a confidence level of 99.9% and a holding period of one year when analysing risk-bearing capacity; when determining the utilisation of operating limits, DekaBank calculates VaR for a holding period of ten days and a confidence level of 99.0%.

The operating VaR therefore corresponds to the maximum loss on a position held over a period of ten trading days, with a probability of 99.0%.

VaR key ratios are determined on a daily basis for all relevant risk categories and portfolios and are compared with the associated portfolio-specific limits.

To determine VaR, a sensitivity-based Monte Carlo simulation is used across all portfolios. This simulation ensures that all market price risks are identified in an integrated manner. The selection of risk factors is closely based on business activities and on the focal areas of the portfolio determined by the business model. Issuer-specific curves for credit spread risk are of particular importance. Appropriate consideration is given to credit spread risks, using the relevant credit spread curves, and basis risk.

Sensitivity-based management metrics

The input parameters for this risk model are the sensitivity metrics delta, gamma and vega. These first and second ranking sensitivities express the price sensitivity of financial instruments to changes in underlying risk factors and are used to determine overall risk. They are also available as additional management metrics for risk assessment purposes.

Sensitivity analyses are defined as simple shifts in the different risk factors for interest rate, credit spread, share price and exchange rate movements. The sensitivity analyses are used to support the operational management of the risks from trading and treasury positions.

To calculate share price risk, each share is included as an individual risk factor and considered accordingly when determining risk. The specific interest rate risks (credit spread risks) are calculated on an integrated basis using the sensitivities of the underlying segment-specific or name-specific credit spread curves. There are also residual risks relating to individual issues.

The model ensures that all risk factors associated with the trading strategy are identified, including non-linear risks and credit spread risks. Daily risk measurement is performed for all types of market price risk, both in the trading book and the banking book. This guarantees a comprehensive view of all market price risks, while adequately taking into account concentration and diversification effects by including correlations across all portfolios and risk types.

Market price risks that result from granting guarantees are measured using an approach specifically developed for this purpose and geared towards risk-bearing capacity, which does not take into account diversification effects with regard to other market price risks.

Scenario considerations and stress analyses
The limit system is supplemented with regular market price risk-specific stress tests. Using these tests, the sensitivity of the portfolio is constantly tested with regard to a wide variety of trends in the various risk factors. Once again, the focus is on risks that are particularly relevant, using separate, portfolio-specific analyses.

Market price risk-specific stress tests take place at both overall portfolio level and for the banking book in isolation.

Market price risks are also an important component of the analysis of significant macroeconomic scenarios across all risk types.

Interest rate risk in the banking book using the earnings-based approach
Under the earnings-based approach, interest rate risk in the banking book is measured using the net interest income from changes in interest rates. In the EaR approach, net interest income is simulated using various hypothetical shifts in the reference yield curve for each currency and compared to a reference scenario (using a reference yield curve applicable at the measurement date).

The scenarios used to measure interest rate risk in the banking book under the earnings-based approach are also part of the net present value scenarios for the banking book. The various hypothetical shifts in the reference yield curve for each currency are used consistently in both approaches.

Interest rate risk in the banking book under the earnings-based approach is calculated each quarter and monitored. The scenarios look at the three years following the date on which the calculation is based. The results of the change in net interest income at Group level are limited for each stress scenario and annual tranche. A dedicated escalation process must be adhered to in the event of any limit breaches.

Backtesting of VaR risk ratios and validation
Various steps are taken to test the quality of the VaR forecast, including regular backtesting for various portfolio levels. In this process, the daily results that are theoretically achieved assuming unchanged positions on the basis of the market developments observed on the following day are compared with the forecast value-at-risk figures for the previous day. In addition, dirty backtesting regarding the actual change in value is also carried out, taking trading activities into account. The backtesting findings are also used to enhance the risk model. The results are reported on a quarterly basis. Overall, the backtesting results confirm the suitability of the market price risk measurement at both the bank level and at the level of subordinate organisational units. In addition, the approximation error of the delta-gamma approximation is reviewed on a monthly basis by carrying out a full valuation of the portfolio.

Risk models are validated on both a regular and ad hoc basis, and the results play an important role in assessing whether the models are adequate. Accordingly, any requirements for further development that arise from the validation procedure are then integrated into the enhancement process for assessing risks. Overall, the validation exercises carried out confirm that the market risk model is appropriate.

Current risk situation
In the context of risk-bearing capacity, market price risk at the Deka Group (value-at-risk, confidence level 99.9%, holding period of one year) as at the reporting date stood at €363m. The decline since the end of 2018 (€520m) was primarily due to lower risk from guarantee products as a result of the use of a risk-free yield curve to calculate the market price risk on guarantees and a positive stock market performance. Another contribution to the decline in risks came from market-driven changes, which were reflected in the correlation effects between credit spread risk and general interest rate risk and in a fall in interest rate risk.

With a confidence level of 99% and a holding period of ten days, market price risk (value-at-risk), excluding guarantee risks, stood at €41.8m as at the reporting date (year-end 2018: €50.6m). The decline in risk resulted primarily from the aforementioned fall in interest rate risks, especially in the Treasury corporate centre. Utilisation of the operational management limit at Deka Group level (excluding guarantees) stood at €76.5m (year-end 2018: €71m). This represented a utilisation level of 55% and was therefore non-critical.

Deka Group value-at-risk excluding guarantee risks[1] (confidence level 99%, holding period ten days)
€m (Fig. 28)

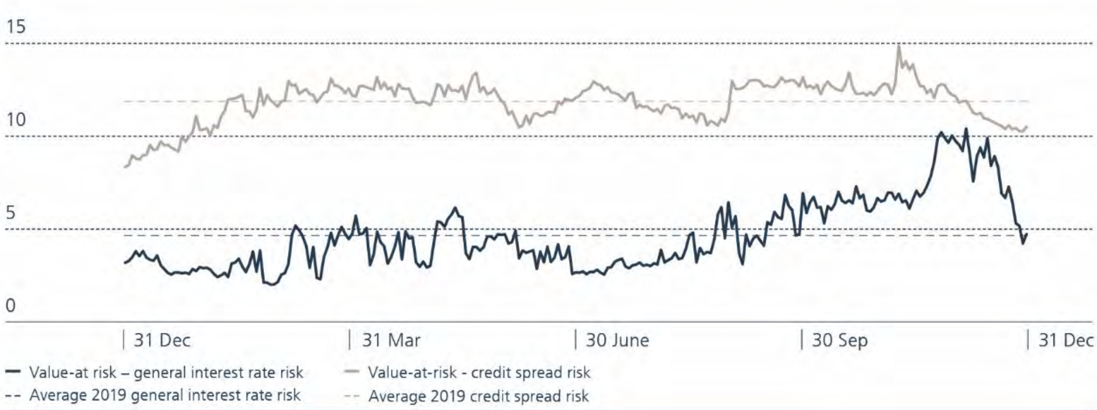
	31 Dec 2019						
Category	**Asset Management Securities business division**	**Asset Management Real Estate business division**	**Asset Management Services business division**	**Capital Markets business division**	**Treasury**	**Deka Group excluding guarantees**	Change in risk
Interest rate risk	0.0	0.2	3.9	35.9	10.8	42.9	–16.7%
Interest rate – general	0.0	0.2	4.4	5.0	5.8	13.8	–8.0%
Credit Spread	0.0	0.0	1.8	38.2	11.9	48.3	0.6%
Share price risk	0.2	1.3	0.3	5.0	0.0	5.1	4.1%
Currency risk	0.0	0.0	0.0	0.8	3.1	3.8	18.8%
Total risk	**0.2**	**1.3**	**3.9**	**34.9**	**11.3**	**41.8**	–17.4%

[1] Risk ratios for interest rate risk and total risk taking account of diversification. Includes issue-specific credit spread risk.

At the end of 2019, the VaR for credit spread risk totalled €48.3m, which was close to the level seen at year-end 2018 (€48.0m). In line with the business model, risk concentration in terms of credit spread risk was mainly attributable to German, western European and US bonds issued by the public sector, financial institutions and corporates. Risk concentration for credit spread risk at the end of 2019 was consistent with the Deka Group's market price risk strategy.

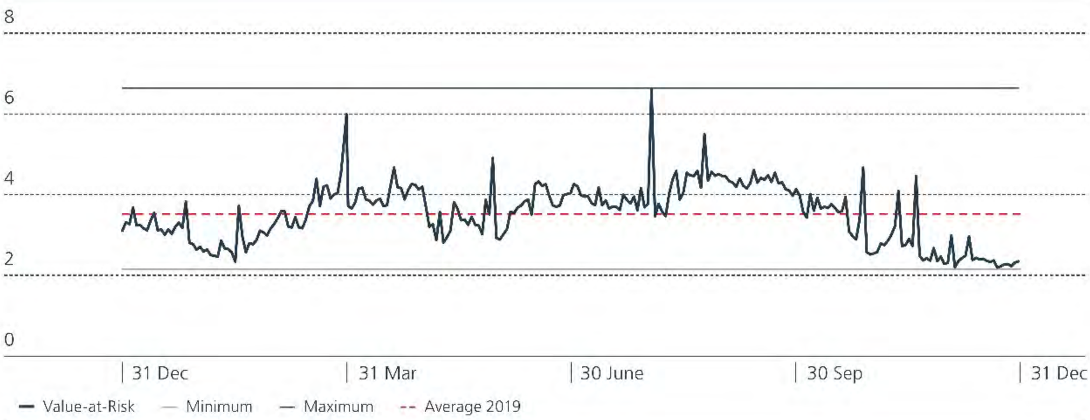
The VaR for general interest rate risk (excluding risks on guarantee products) decreased from €15.0m at year-end 2018 to €13.8m. In addition to the market-driven development already mentioned, this was due to a change in the interest rate delta calculation.

Value-at-risk – General interest rate risk and credit spread risk in the Capital Markets trading book over the course of 2019 *€m (Fig. 29)*



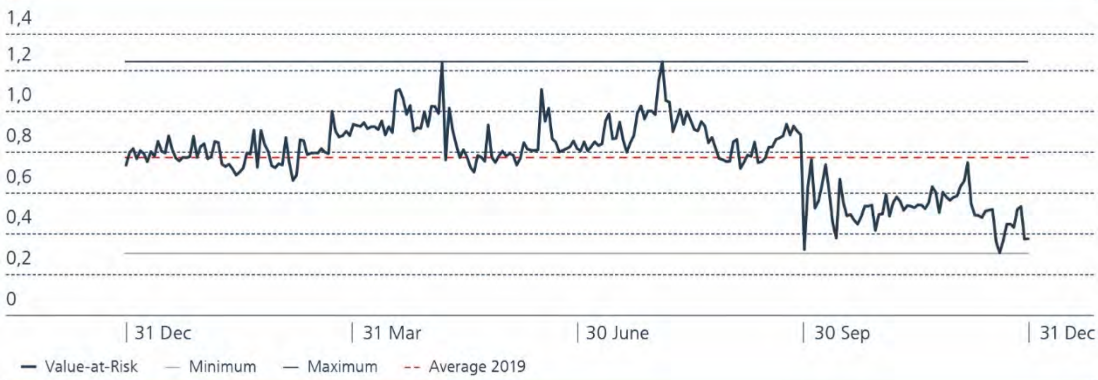
Share price risk rose compared with the year-end figure for 2018 (€4.9m) to €5.1m and remained insignificant. Share price risk in the Capital Markets business division trading book totalled €2.3m (year-end 2018: €3.1m).

Value-at-risk – Share price risk in the Capital Markets trading book over the course of 2019 *€m (Fig. 30)*



As in the previous year, currency risk resulted mostly from positions in US dollars and British pounds. It stood at €3.8m (year-end 2018: €3.2m) and continued to be of minor significance. The increase resulted mainly from changes in holdings of sterling in the Treasury corporate centre. Currency risk in the Capital Markets business division trading book stood at €0.4m (year-end 2018: €0.8m).

Value-at-risk – Currency risk in the Capital Markets trading book over the course of 2019 *€m (Fig. 31)*



Operational risk

Strategic framework and responsibilities

The strategy laid down by the Deka Group to deal with operational risks (OR strategy) forms the basis for organisation of operational risk management. It defines the framework for the Group-wide establishment and operation of a standard system for identifying, assessing, monitoring and managing operational risks. The OR strategy applies to all organisational units of the Deka Group.

Roles and responsibilities

Due to the process-specific nature of operational risks (OR), the Deka Group pursues a decentralised approach to identifying, measuring and managing them, which contrasts with the approach taken for conventional financial risks. This approach to operational risks is based on coordinated collaboration between the units set out below.

The full Board of Management is responsible for the appropriate handling of operational risks in the Deka Group. In this respect, it is specifically responsible for defining and regularly reviewing the OR strategy, ensuring the required conditions for Group-wide implementation of the strategy are in place and adopting measures for OR management at the Group level.

The Operational Risk unit is responsible for central components of standardised operational risk management, especially the methodological approach, independent OR reporting, and provision of quality assurance and specialist support for local units implementing the management methods. The risk modelling unit is responsible for designing and enhancing the model used to quantify operational risks, while the model risk management and validation unit is responsible for independently validating it.

Risks are identified, measured and managed on a decentralised basis by various functions within the individual Group units. While the division heads are responsible for implementing the requirements specified in the OR strategy and the actual management of operational risks, OR managers are responsible for decentralised application of the relevant methods, particularly with regard to ensuring consistent risk assessments. The OR managers are supported by assessors, who, as process experts, identify and evaluate OR loss scenarios as part of a self-assessment process, and by loss documenters.

Cross-divisional functions
In addition to the methods for which the central OR Control unit is responsible, several specialised cross-divisional functions at Deka Group level play an important role in identifying, assessing and managing operational risks.

In the annual Fraud Prevention Forum, the Central Office for financial crime and the Operational Risk unit work closely with representatives of the business divisions and corporate centres to identify and assess scenarios regarding other criminal offences (such as employee fraud). In its role as the Forum's sponsor, the Operational Risk unit provides the Forum with information on loss events and identified fraud scenarios, and incorporates the assessments developed at the Forum into the OR records as scenario analyses.

The Data Protection Officer informs and advises DekaBank's Board of Management, the senior management of Deka Group companies and the employees specifically involved in data processing with regard to their obligations under the General Data Protection Regulation (GDPR) and other data protection rules and regulations of the European Union and other jurisdictions. In the event of changes to legislation, the officer initiates changes to organisational structures, IT systems or business processes. The officer monitors compliance with all data protection requirements in the event of changes to IT systems or changes in structures and workflows, conducts regular control procedures and reports directly to the Board of Management and the senior management of Deka Group companies at least once a year.

The BCM/ISM unit advises the DekaBank Board of Management, the senior management of Deka Group companies and the units providing security in the first line of defence (e.g. IT, HR, facility management) on all issues relating to information security. It provides a catalogue of security measures within this context, which, depending on requirements, provide an adequate level of protection for the Deka Group's information. It reviews compliance with these security measures on a regular basis. Defined procedures are used to identify and evaluate information security risks and make them transparent to risk owners so as to follow up on implementation of risk-mitigation measures and incorporate them into risk reporting. The unit also has a leading supportive role in defining and implementing Business Continuity Management (BCM) across the Deka Group. BCM also looks after all the emergency precautions to protect the Deka Group from damage caused by interruptions to business processes in the event of emergencies and crises. Among other things, the aim is to reduce the likelihood of occurrence of risks that could interrupt business operations.

Outsourcing management at the Deka Group is laid down in the outsourcing strategy and is built on a two-tier model, consisting of a central Outsourcing Management section and local outsourcing units (hybrid vendor management). The Deka Group's Central Outsourcing Management (ZAMD) section lays down overarching governance rules for outsourcing, assists with their implementation and checks compliance with requirements. ZAMD also acts as the link between the Board of Management and the senior management of Deka Group companies on the one hand, and the contacts responsible for outsourcing on the other.

Methods used

The Deka Group uses various methods for the management and control of operational risk. These complement each other and, taken together, enable a comprehensive management process for these risks.

The methods involve both a forward-looking (ex-ante) perspective, including self-assessment and scenario analysis, as well as a backward-looking (ex-post) perspective based on Group-wide loss documentation.

The self-assessment is based on detailed OR loss scenarios and is performed at least once a year. As well as describing and assessing risks with regard to their loss potential and the frequency with which they occur, the self-assessment process also identifies suitable measures to mitigate risk.

The scenario analysis serves as a detailed investigation and assessment of potentially serious loss events from operational risks, which, due to their cross-unit nature and extremely high maximum loss potential, cannot be adequately identified or quantified via the self-assessment process. As part of this process, regularly updated risk factors related to both the Group's internal controls and its business environment are incorporated into the assessment of scenarios. These factors therefore increase the sensitivity of the scenarios to risk and help to identify developments and determine management actions in a timely manner.

OR loss events are recorded in a structured manner with the help of a central loss database starting from a minimum gross limit of €5,000 at the Deka Group level. As well as providing a description of the loss, the database includes documentation that covers the causes of the loss and suitable measures to avoid similar cases in the future. Any expected mitigation of losses is only taken into account where the loss reduction is permissible under accounting rules. The results of the loss documentation are also used to support the ex-post validation of the risk assessments in the course of the self-assessment.

To determine the economic capital requirement for operational risks, the Deka Group uses an advanced measurement approach (AMA) that has been approved by regulatory authorities. This approach quantifies the Bank's operational risk based on a loss distribution approach, using methods set out in the approach itself and external loss data to supplement the data on internal losses. The value-at-risk figures thus identified are incorporated into both the regulatory capital and reserves requirement and the internal risk-bearing capacity analysis of the Deka Group.

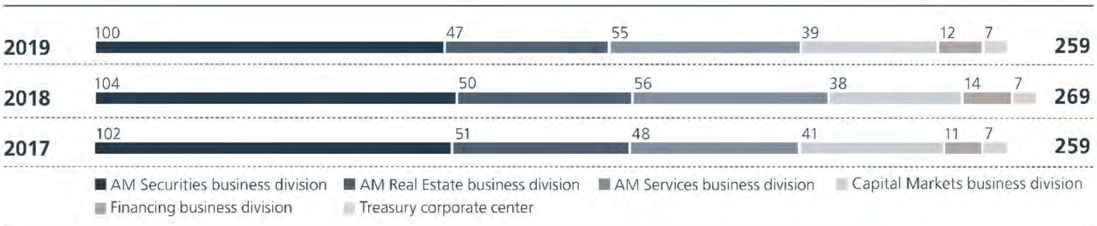
In addition to the macroeconomic stress tests, which cover all types of risk, specific stress scenarios are examined for operational risk. These involve, for example, a sharp deterioration in the reliability of IT infrastructure, the occurrence of serious fraud involving an internal employee or the failure of critical control processes due to a shortage of staff. Sensitivity to isolated stress factors is also analysed and the OR scenarios with the highest contribution to risk examined. The results of the stress tests are determined quarterly and reported to the Stress Testing Committee, the Board of Management, the Risk and Credit Committee and the Administrative Board. They therefore enable the Group to identify areas for action as early as possible if crisis situations start to unfold.

Current risk situation

The VaR for operational risk (confidence level of 99.9%, holding period of one year) fell moderately from €269m at year-end 2018 to €259m. This was due to effects from changes in loss documentation (ex post) and updates to various scenario assessments (ex ante). On the ex-post side, the recording of loss mitigation, and the derecognition of several loss events that were only recorded on a precautionary basis, had the effect of reducing risks. On the ex-ante side, the improvement in the proportion of successfully tested emergency plans, for example, acted as an internal control factor to reduce the risks in various scenario analyses. The changes in business activities in Luxembourg and the associated derecognition of loss scenarios also resulted in a fall in risk. The allocation of VaR to the business divisions and the Treasury corporate centre for internal management purposes resulted in a slight shift from the Asset Management Securities and Asset Management Real Estate business divisions to the other business divisions and the Treasury corporate centre. This was due to the development of loss events described above.

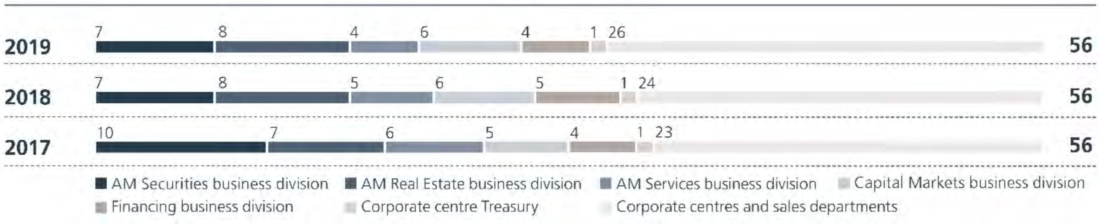
Risk capital allocated to operational risk stood unchanged at €335m. At 77.5%, utilisation remains at a non-critical level.

Value-at-Risk *€m (Fig. 32)*



The OR loss potential identified in the Group-wide risk inventory remained unchanged year-on-year at €56m. The factors increasing and reducing risk almost balanced each other out over the course of the year. For example, the estimated Group-wide risk from business process interruptions due to unavailability of staff or infrastructure was reduced, while there was an increase in loss potential due to the additional inclusion of risks from the incomplete implementation of information security management requirements. In contrast to VaR, which is an upper limit for losses with a specific probability that the limit will not be exceeded, loss potential is an expected value that results from the estimated frequency of occurrence and scale of losses of all OR scenarios in the Deka Group.

Loss potential *€m (Fig. 33)*



In the loss documentation, five major loss events (> €100 thousand) were newly recorded for the reporting period compared with the end of 2019 and two were recorded retrospectively for previous periods. Three of the loss events were attributable to costs and to provisions for labour law disputes. Two resulted from the poor performance of service providers, and another two from internal process-related errors. By contrast, three loss events recorded in previous years, initially on a precautionary basis, were reduced to a symbolic value following completion of the investigations, and one loss event was further mitigated by taking into account a refund payment.

Based on the Federal Ministry of Finance (BMF) circular on the tax treatment of cum/cum transactions of 17 July 2017, tax risks exist in connection with relief from capital yields tax (*Kapitalertragsteuer*) on share transactions made around the dividend record date in the years 2013 to 2015. All matters are reported in the consolidated financial statements as at 31 December 2019 in accordance with DekaBank's interpretation of the relevant tax regulations and accounting standards.

In addition, DekaBank has begun voluntary investigations – which were completed in 2019 – to ascertain whether its involvement enabled third parties to conduct share trades around the dividend record date and make use of abusive tax structures or whether it was otherwise involved in such structures. No evidence to this effect has emerged from these investigations. Based on the findings available to it, DekaBank therefore considers it unlikely that the tax authority will be able to make a claim in relation to these matters.

Business risk

The business risk strategy set by the Board of Management serves throughout the Group as the basis for monitoring and managing business risks and incorporating them into the Group's risk-bearing capacity analysis. A variety of complementary instruments are employed to identify, assess and manage business risks.

Key risk factors for the investment fund business are the planned and actual commission income and expenses and the assets under management (total customer assets). Both assets under management and net commission income depend on customer behaviour and the market environment. Account is taken of fund price movements and unexpected net outflows when determining fund volatility. For banking activities, margins on commission business are taken into account as an additional risk factor. There are currently no business risks to be considered in the Treasury corporate centre.

In addition to regular risk measurement, risk type-specific stress tests are performed for business risk to examine its sensitivity in relation to changes in customer behaviour and changes of a non-legal nature in the economic environment. Net commission income, which is taken into account in business risk, is the major risk driver. Sensitivity analyses examine, for example, the effect of a stock market shock and a decline in net inflows. The effects of hypothetical scenarios (e.g. reputational damage) and historical scenarios are also analysed. The latter scenarios include the market slump during the financial crisis and after the terrorist attacks. The results of the stress tests are determined quarterly and the impacts examined. They serve primarily to identify areas for action.

In the year under review, the VaR for business risk increased significantly to €375m (year-end 2018: €250m). The increase in risk was due primarily to increased volatility of equity funds and a rise in the expected net commission income (which is taken into account in business risk) in the Asset Management Securities and Asset Management Services business divisions. Risk capital allocated to business risk was increased to €440m (year-end 2018: €365m). Utilisation was 85.3% and thus at a non-critical level.

Further investment

Investment risk

Equity investments include all direct and indirect holdings of the Deka Group in other companies, regardless of their legal form. Equity investments held as credit substitute transactions fall under the credit risk strategy. In principle, the Deka Group pursues strategic interests when taking an equity interest. There is no intention to achieve short-term profit.

The basis for determining the investment risk position is the IFRS book value of the (unconsolidated) equity investment. The risk is measured on the basis of the volatility of a benchmark index from the equity market.

The VaR of investment risk was €44m at year-end 2019, up significantly on the level of €36m at the end of the previous year. The reason for the increase in risk was the significant increase in the IFRS carrying value of an equity investment as a result of the fair value measurement in accordance with IFRS 9. Risk capital allocated to investment risk stood at €70m (year-end 2018: €60m). Utilisation of this amount was 62.2%.

Consolidated financial statements 2019

The consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS). They comprise the balance sheet, statement of profit or loss and other comprehensive income, statement of changes in equity, statement of cash flows and the notes. The economic result is the key in-house management indicator within the meaning of the requirements of IFRS 8 (Operating Segments) and is based on the figures according to IFRS accounting standards.

Consolidated financial statements

Statement of profit or loss and other comprehensive income
for the period from 1 January to 31 December 2019

€m	Notes	2019	2018	Change	
Interest income[1]		1,100.2	1,006.0	94.2	9.4%
Interest expenses		930.6	883.6	47.0	5.3%
Net interest income	[32]	**169.6**	**122.4**	47.2	38.6%
Risk provisions in the lending and securities business	[17], [33]	**–10.6**	**22.4**	–33.0	–147.3%
Net interest income after provisions		**159.0**	**144.8**	14.2	9.8%
Commission income		2,606.9	2,400.6	206.3	8.6%
Commission expenses		1,263.2	1,182.7	80.5	6.8%
Net commission income	[34]	**1,343.7**	**1,217.9**	125.8	10.3%
Net income from the derecognition of financial assets measured at amortised cost	[35]	**12.7**	**4.8**	7.9	164.6%
Trading profit or loss	[36]	**46.3**	**210.8**	–164.5	–78.0%
Profit or loss on financial assets mandatorily measured at fair value	[37]	**88.1**	**–94.6**	182.7	193.1%
Profit or loss on financial instruments designated at fair value	[38]	**32.3**	**52.7**	–20.4	–38.7%
Profit or loss from fair value hedges	[39]	**–11.2**	**–0.3**	–10.9	(< -300%)
Profit or loss on financial investments	[40]	**3.9**	**54.1**	–50.2	–92.8%
Administrative expenses	[41]	**1,085.7**	**1,038.5**	47.2	4.5%
Other operating profit	[42]	**–178.4**	**–34.8**	–143.6	(< -300%)
Total of profit or loss before tax		**410.7**	**516.9**	–106.2	–20.5%
Income taxes	[43]	**155.1**	**178.1**	–23.0	–12.9%
Interest expenses for atypical silent capital contributions		**46.3**	**53.0**	–6.7	–12.6%
Total of profit or loss		**209.3**	**285.8**	–76.5	–26.8%
Thereof:					
Attributable to non-controlling interests		–	–	–	n/a
Attributable to the shareholders of DekaBank		209.3	285.8	–76.5	–26.8%
Changes not recognised in profit or loss	[31], [66]				
Items reclassified to profit or loss					
Change in reserve for financial assets measured at fair value through other comprehensive income		–16.2	–106.7	90.5	84.8%
Change in cash flow hedges valuation reserve		–	3.4	–3.4	–100.0%
Change of the foreign currency basis spread of hedging derivatives		2.5	N/A	N/A	N/A
Change in currency translation reserve		0.1	0.1	0.0	0.0%
Deferred taxes on items reclassified to profit or loss	[53], [62]	4.3	32.7	–28.4	–86.9%
Items not reclassified to profit or loss					
Revaluation gains/losses on defined benefit pension obligations		–38.6	–30.7	–7.9	–25.7%
Change in valuation reserve for own credit risk of financial liabilities designated at fair value		5.2	3.8	1.4	36.8%
Revaluation reserve investments accounted for using the equity method		–	–	–	n/a
Deferred taxes on items not reclassified to profit or loss	[53], [62]	19.0	8.5	10.5	123.5%
Other comprehensive income		**–23.7**	**–88.9**	65.2	73.3%
Comprehensive income for the period under IFRS		**185.6**	**196.9**	–11.3	–5.7%
Thereof:					
Attributable to non-controlling interests		–	–	–	n/a
Attributable to the shareholders of DekaBank		185.6	196.9	–11.3	–5.7%

[1] In total, interest income of €599.3m (previous year: €518.7m) were recorded in relation to financial assets that are recognised at fair value through profit or loss. Negative interests from financial assets that are not recognised at fair value through profit or loss were considered for the first time in the reporting year. The previous year's figure was adjusted accordingly.

Statement of financial position as at 31 December 2019

€m	Notes	31 Dec 2019	31 Dec 2018	Change	
Assets					
Cash reserves	[44]	**3,826.9**	**15,302.5**	–11,475.6	–75.0%
Due from banks	[16], [45]	**22,581.2**	**23,972.6**	–1,391.4	–5.8%
(net after risk provisions amounting to)	[17], [47]	(0.2)	(0.2)	0.0	0.0%
Due from customers	[16], [46]	**28,368.5**	**24,419.9**	3,948.6	16.2%
(net after risk provisions amounting to)	[17], [47]	(89.3)	(84.0)	5.3	6.3%
Financial assets at fair value	[18], [48]	**30,442.2**	**25,045.4**	5,396.8	21.5%
a) Trading portfolio		23,225.1	14,669.8	8,555.3	58.3%
b) Financial assets mandatorily measured at fair value		7,217.1	10,375.6	–3,158.5	–30.4%
(of which deposited as collateral)	[77]	(8,783.0)	(5,355.7)	3,427.3	64.0%
Positive market values of derivative hedging instruments	[10], [19], [49]	**132.7**	**13.5**	119.2	(> 300%)
Financial investments	[20], [50]	**10,747.6**	**10,795.0**	–47.4	–0.4%
a) Financial assets measured at amortised cost		5,395.1	5,026.9	368.2	7.3%
b) Financial assets measured at fair value through other comprehensive income		5,336.1	5,751.7	–415.6	–7.2%
c) Shares in at-equity accounted companies		16.4	16.4	0.0	0.0%
(net after risk provisions amounting to)	[17], [47]	(7.9)	(5.9)	2.0	33.9%
(of which deposited as collateral)	[77]	(1,840.1)	(2,727.7)	–887.6	–32.5%
Intangible assets	[21], [51]	**183.7**	**187.6**	–3.9	–2.1%
Property, plant and equipment	[22], [52]	**179.0**	**25.6**	153.4	(> 300%)
Current income tax assets	[24], [53]	**171.6**	**195.2**	–23.6	–12.1%
Deferred income tax assets	[24], [53]	**300.4**	**202.5**	97.9	48.3%
Other assets	[23], [54]	**348.2**	**283.8**	64.4	22.7%
Total assets		**97,282.0**	**100,443.6**	–3,161.6	–3.1%
Liabilities					
Due to banks	[25], [55]	**17,548.8**	**22,949.8**	–5,401.0	–23.5%
Due to customers	[25], [56]	**23,699.6**	**25,723.2**	–2,023.6	–7.9%
Securitised liabilities	[25], [57]	**17,752.1**	**14,790.7**	2,961.4	20.0%
Financial liabilities at fair value	[18], [58]	**29,902.9**	**29,306.9**	596.0	2.0%
a) Trading portfolio		28,993.0	27,827.8	1,165.2	4.2%
b) Financial liabilities designated at fair value		909.9	1,479.1	–569.2	–38.5%
Negative market values of derivative hedging instruments	[10], [19], [59]	**368.5**	**39.3**	329.2	(> 300%)
Provisions	[26], [27], [60], [61]	**527.9**	**348.4**	179.5	51.5%
Current income tax liabilities	[24], [62]	**75.5**	**62.2**	13.3	21.4%
Deferred income tax liabilities	[24], [62]	**4.4**	**33.6**	–29.2	–86.9%
Other liabilities	[28], [63]	**1,014.1**	**820.1**	194.0	23.7%
Subordinated capital	[29], [64]	**824.3**	**899.4**	–75.1	–8.4%
Atypical silent capital contributions	[30], [65]	**52.4**	**52.4**	–	0.0%
Equity	[31], [66]	**5,511.5**	**5,417.6**	93.9	1.7%
a) Subscribed capital		191.7	191.7	–	0.0%
b) Additional capital components		473.6	473.6	–	0.0%
c) Capital reserve		190.3	190.3	–	0.0%
d) Retained earnings		4,733.3	4,614.1	119.2	2.6%
e) Revaluation reserve		–132.6	–115.4	–17.2	–14.9%
f) Currency translation reserve		0.1	0.0	0.1	(> 300%)
g) Accumulated profit/loss (consolidated profit)		55.1	63.3	–8.2	–13.0%
h) Minority interest		–	–	–	n/a
Total liabilities		**97,282.0**	**100,443.6**	–3,161.6	–3.1%

Statement of changes in equity for the period from 1 January to 31 December 2019

€m	Subscribed capital	Additional capital components	Capital reserve	Retained earnings	Consolidated profit/loss	Provisions for pensions[1]	Cash flow hedges
Equity as at 1 January 2018	**191.7**	**473.6**	**190.3**	**4,411.0**	**72.3**	**–154.1**	**–3.4**
Total of profit or loss	–	–	–	–	285.8	–	–
Other comprehensive income	–	–	–	–	–	–30.7	3.4
Comprehensive income for the period under IFRS	**–**	**–**	**–**	**–**	**285.8**	**–30.7**	**3.4**
Changes in the scope of consolidation and other changes[2]	–	–	–	–19.4	–	–	–
Allocation to reserves from retained earnings	–	–	–	222.5	–222.5	–	–
Distribution	–	–	–	–	–72.3	–	–
Equity as at 31 December 2018	**191.7**	**473.6**	**190.3**	**4,614.1**	**63.3**	**–184.8**	**–**
Total of profit or loss	–	–	–	–	209.3	–	–
Other comprehensive income	–	–	–	–	–	–38.6	–
Comprehensive income for the period under IFRS	**–**	**–**	**–**	**–**	**209.3**	**–38.6**	**–**
Changes in the scope of consolidation and other changes[2]	–	–	–	–35.0	–	–	–
Allocation to reserves from retained earnings	–	–	–	154.2	–154.2	–	–
Distribution	–	–	–	–	–63.3	–	–
Equity as at 31 December 2019	**191.7**	**473.6**	**190.3**	**4,733.3**	**55.1**	**–223.4**	**–**

[1] Revaluation gains/losses on defined benefit obligations
[3] Comprises the payment of interest of the Additional Tier 1 bond, which is classified as equity capital under IFRS.

Revaluation reserve								
Change of the foreign currency basis spread of hedging derivatives	Equity-accounted companies	Financial assets measured at fair value through other comprehensive income	Own credit risk of financial liabilities designated at fair value	Deferred taxes	Currency translation reserve	Total before minority interest	Minority interest	Equity
N/A	**–6.6**	**135.4**	**–12.6**	**14.9**	**–0.1**	**5,312.4**	**–**	**5,312.4**
N/A	–	–	–	–	–	285.8	–	285.8
N/A	–	–106.7	3.8	41.2	0.1	–88.9	–	–88.9
N/A	**–**	**–106.7**	**3.8**	**41.2**	**0.1**	**196.9**	**–**	**196.9**
N/A	–	–	–	–	–	–19.4	–	–19.4
N/A	–	–	–	–	–	–	–	–
N/A	–	–	–	–	–	–72.3	–	–72.3
N/A	**–6.6**	**28.7**	**–8.8**	**56.1**	**0.0**	**5,417.6**	**–**	**5,417.6**
–	–	–	–	–	–	209.3	–	209.3
2.5	–	–16.2	5.2	23.3	0.1	–23.7	–	–23.7
2.5	**–**	**–16.2**	**5.2**	**23.3**	**0.1**	**185.6**	**–**	**185.6**
–	6.6	–	–	–	–	–28.4	–	–28.4
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–63.3	–	–63.3
2.5	**–**	**12.5**	**–3.6**	**79.4**	**0.1**	**5,511.5**	**–**	**5,511.5**

Statement of cash flows for the period from 1 January to 31 December 2019

€m	31 Dec 2019	31 Dec 2018
Total of profit or loss	**209.3**	**285.8**
Non-cash items in net income and adjustments to reconcile net profit with cash flow from operating activities		
+/– Write-downs and write-backs		
on receivables and financial investments	11.5	–14.6
on intangible assets and property, plant and equipment	54.0	18.0
+/– Allocation to/reversal of provisions	204.0	92.5
+/– Profit or loss from fair value hedges	11.2	0.3
+/– Other non-cash items	–449.2	–187.8
+/– Profit or loss on the disposal of financial investments and property, plant and equipment	0.5	0.0
+/– Other adjustments	303.9	332.7
= **Sub-total**	345.2	526.9
Change to assets and liabilities arising from operating activities		
+/– Due from banks	1,561.7	2,438.8
+/– Due from customers	–3,940.2	–4,241.5
+/– Financial assets at fair value	9,622.1	1,595.8
+/– Financial investments	64.4	813.1
+/– Other assets arising from operating activities	–542.8	–116.8
+/– Due to banks	–5,392.5	3,729.5
+/– Due to customers	–2,005.0	–923.4
+/– Securitised liabilities	2,967.9	556.6
+/– Financial liabilities at fair value	–13,979.9	1,357.8
+/– Other liabilities arising from operating activities	373.2	–14.4
+ Interest paid	509.0	457.7
+ Dividends received	10.5	14.3
– Interest paid	–572.3	–454.8
– Income tax payments	–222.0	–214.4
Cash flow from operating activities	**–11,200.7**	**5,525.2**
+ Proceeds from the disposal or redemption of		
equity investments	–	0.4
– Disbursements for the purchase of		
Equity investments	–5.1	–
intangible assets	–7.4	–6.9
property, plant and equipment	–1.3	–2.3
+ Proceeds from the sale of shares in affiliated, non-consolidated companies	–	0.2
– Disbursements for the acquisition of shares in affiliated, non-consolidated companies	–0.0	–
+ Dividends received	2.6	2.4
Cash flow from investing activities	**–11.2**	**–6.2**
+ Proceeds from issue of new equity capital	–	–
– Payments to company owners and minority interests	–124.8	–155.5
– Dividends paid	–63.3	–72.3
– Outflow of funds from subordinated capital	–75.6	–28.4
+/– Changes in scope of consolidation and other changes	0.0	–
Cash flow from financing activities	**–263.7**	**–256.2**
= Changes to cash and cash equivalents	–11,475.6	5,262.9
+ Cash and cash equivalents at the start of the period	15,302.5	10,039.6
Cash and cash equivalents at the end of the period	**3,826.9**	**15,302.5**

The cash flow statement shows the change in the Deka Group's cash balance during the financial year. The item cash and cash equivalents corresponds to the balance sheet item cash reserves (see note [44]).

Cash flow from operating activities was determined using the indirect method. In other words, the total of profit or loss was adjusted to eliminate non-cash items such as measurement results and additions to provisions. The item other adjustments mainly includes the reclassification of interest and dividends received as cash and interest and income tax payments made during the financial year which have to be reported separately in accordance with IAS 7. In addition to the disbursements relating to short-term leases and leases of low-value assets reported under administrative expenses, disbursements for payments of principal and interest pursuant to IFRS 16 were also reported under cash flow from operating activities within the Deka Group. In the 2019 financial year, €1.4m of this amount related to interest payments and €38.6m to payments of principal.

Cash flow from investing activities shows the proceeds and disbursements relating to items whose purpose relates in principle to long-term investment or use.

Financing activities include equity as well as cash flows from atypical silent capital contributions and from subordinated capital. The table below provides an overview of movements in financing liabilities.

		Cash changes	Non-cash changes			
€m	2018		Acquisition	Exchange rate movements	Fair value changes	2019
Subordinated liabilities	899.4	–75.6	–	–	0.5	824.3
Typical silent capital contributions	–	–	–	–	–	–
Total subordinated capital	**899.4**	**–75.6**	**–**	**–**	**0.5**	**824.3**
Atypical silent capital contributions	52.4	–	–	–	–	52.4

The statement of cash flows is of minor importance for banks as it does not provide any information about the actual liquidity position. For details of Deka Group’s liquidity risk management, please see the risk report.

Notes

Accounting standards

1 Accounting principles

These financial statements are the consolidated financial statements of DekaBank Deutsche Girozentrale (parent company). DekaBank is a German institution incorporated under public law with registered offices in Frankfurt/Main and Berlin (Germany) and is entered in Commercial Register A of the Local Court (*Amtsgericht*) of Frankfurt am Main under the number HRA 16068.

These consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS). The applicable IFRS rules are those published by the International Accounting Standards Board (IASB) and adopted by the European Union (EU) into European law at the time the financial statements are prepared. Account is also taken of the national regulations contained in the German Commercial Code (*Handelsgesetzbuch* – HGB) under section 315e of the HGB. The management report was prepared in accordance with section 315 of the HGB.

The consolidated financial statements, which are reported in euros, comprise the statement of financial position, the statement of profit or loss and other comprehensive income, the statement of changes in equity, the cash flow statement and the notes. All amounts are rounded in accordance with standard commercial practice. This may result in small discrepancies in the calculation of totals within tables.

2 Accounting standards applied for the first time and to be applied in future

The following new or amended standards and interpretations that have a material impact on the consolidated financial statements were applied for the first time in the reporting year. A number of other standards and interpretations were also adopted. These, however, are not expected to have a material impact on the consolidated financial statements.

IFRS 16

As at 1 January 2019, the Deka Group implemented IFRS 16 “Leases”, in accordance with the transitional provisions set out in IFRS 16.C5(b), using the modified retrospective method. This means that comparative figures for the previous year have not been restated. IFRS 16 replaced IAS 17 “Leases”, as well as the associated interpretations IFRIC 4, SIC-15 and SIC-27.

Simplifications applied

In accordance with the transitional provisions, the Deka Group has refrained from reassessing whether existing agreements constitute leases and applies the new provisions of IFRS 16 to all leases previously classified as operating leases under IAS 17.

Furthermore, the Deka Group has made use of the following simplifications when applying IFRS 16 for the first time:

- The simplification rules for short-term leases were applied to leases that had a remaining life of less than twelve months at the time of initial adoption.
- Initial direct costs were not included in the measurement of right-of-use assets.
- The accounting provisions of IFRS 16 were not applied to leases involving low-value assets.
- A uniform discount rate was applied to portfolios with similar leasing arrangements.
- The term of a lease featuring extension or termination options was determined retrospectively.

Effects of first-time application

In the opening balance sheet as at 1 January 2019, property, plant and equipment increased by €191.3m due to the capitalisation of right-of-use assets. The right-of-use assets recognised are split into the following categories of underlying assets:

€m	31 Dec 2019	1 Jan 2019
Office properties	150.6	185.5
Motor vehicles	5.2	4.6
Plant and equipment	0.9	1.2
Total right-of-use assets for leases	**156.7**	**191.3**

The total amount of other liabilities increased by €196.9m as at 1 January 2019 due to the recognition of lease liabilities. On the other hand, other liabilities from lease incentives received were reduced by €5.6m.

€m	Total
Disclosed commitments from operating leases according to IAS 17	**209.6**
Short-term leases	– 0.6
Leases of low value assets	– 10.3
Contracts, not in the scope of IFRS 16	– 1.1
Anpassungen aufgrund von Verlängerungs-/Kündigungsoptionen	1.0
Anpassungen aufgrund von Indizes, die sich auf variable Zahlungen auswirken	3.7
Other adjustments	– 0.4
Discounting	– 5.0
Lease liabilities as at 1 January 2019 according to IFRS 16	**196.9**

The incremental borrowing rate applied to the lease liability as at 1 January 2019 was up to 1.28%, depending on the lease term. The weighted average incremental borrowing rate was 0.84%. There was no effect on the Deka Group’s retained earnings.

The presentation of leases in the IFRS financial statements differs from that in the tax balance sheet. After taking the effects from netting into account, there were no effects on either the deferred tax assets or deferred tax liabilities reported as at 1 January 2019. As at 31 December 2019, the deferred tax assets reported were up by €1.6m.

Regarding the accounting policies that apply to leases, we refer to note [14] “Lease accounting”.

Annual Improvements

As at 1 January 2019, the Deka Group also implemented the amendments to four existing standards from the “Annual Improvements to IFRS Standards 2015-2017 Cycle” published in December 2017. With the exception of the amendments to IAS 12, the amendments did not have any material impact on the consolidated financial statements. With its amendment to IAS 12, the IASB clarified that all income tax consequences of dividends have to be recognised in the same line item as the underlying transactions or events that generated the distributable profits. As a result, the tax benefit of €9.1m recognised in the 2019 reporting year was reported for the first time in the income statement under “Income taxes” instead of under retained earnings, as was the case in the past. We also refer to note [43] “Income taxes”.

IFRS 9

In the fourth quarter of 2019, the Deka Group applied the IFRS 9 regulations governing hedge accounting prospectively for the first time. Up until then, the Deka Group had made use of the option to account for hedges in accordance with the provisions of IAS 39 until further notice. This meant that interest rate fair value hedges in place on the date of the changeover that had previously been recognised under IAS 39 were carried forward in accordance with IFRS 9 regulations on general hedge accounting from the date of the changeover onwards. Based on the standards governing general hedge accounting, the Deka Group also designated currency fair value hedges for the first time. The application of the IFRS 9 regulations on general hedge accounting did not result in any first-time application effects on the balance sheet or equity. Prior-year figures have not been adjusted. Regarding the accounting policies that apply to hedges, we refer to note [10] "Hedge accounting".

New standards and interpretations and amendments to existing standards and interpretations published by the IASB and IFRIC which do not have to be applied until subsequent financial years were not applied early. Changes relevant to the Deka Group are presented below.

IAS 1 and IAS 8

In October 2018, the IASB issued amendments to IAS 1 "Presentation of Financial Statements" and IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors". The amendment clarifies the definition of "material" and aligns the definition used in the Conceptual Framework and the standards themselves. The definition is supplemented by explanatory paragraphs in IAS 1. The previous definition of "material" in IAS 8 is replaced by a reference to IAS 1. Application of the new rules is mandatory for financial years beginning on or after 1 January 2020. Voluntary early adoption is permitted. The amendments have no effect on the consolidated financial statements.

IFRS 9

In September 2019, the IASB published amendments to IFRS 9, IAS 39 and IFRS 7 – reform of LIBOR and other benchmark interest rates (IBOR reform). The amendments to the standard feature relief provisions in connection with hedge accounting. The relief means that the hedges concerned do not generally need to be terminated. Any ineffectiveness, however, still has to be recognised in the income statement. In addition, the amendment to IFRS 7 requires the disclosure of the nominal amount of hedging instruments to which the relief is applied, and the disclosure of any significant assumptions or judgements the entity made in applying the relief. Qualitative information also has to be provided about how the Deka Group is impacted by IBOR reform and how it is managing the transition process. Application of the new rules is mandatory for financial years beginning on or after 1 January 2020. The amendments have no effect on the current consolidated financial statements.

Standards and interpretations not yet adopted into European law

IFRS 3

In October 2018, the IASB published amendments to IFRS 3 "Business Combinations". The amendments relate to the definition of a business and include clearer guidance on how to distinguish a business from a group of assets when applying IFRS 3. The amended definition is to be applied to acquisition transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2020. Application of the new rules is mandatory for financial years beginning on or after 1 January 2019. Voluntary early adoption is permitted. The amendment has no effect on the consolidated financial statements.

Segment reporting

3 Segmentation by operating business divisions

Segment reporting under IFRS 8 is based on the management approach. Segment information is presented in line with internal reporting as submitted to the Chief Operation Decision Maker on a regular basis for decision-making, resource allocation and performance assessment purposes. The Deka Group's management reporting is based on IFRS.

As total profit before tax is of limited suitability for the internal management of the business divisions, the economic result has been defined as the key management indicator. Due to the requirements of IFRS 8, the economic result has also been included in external reporting as material segment information.

In addition to the total of profit or loss before tax, the economic result includes changes in the revaluation reserve (before tax) as well as the interest- and currency-related valuation result from financial instruments recognised at amortised cost. This allows economic hedges that do not meet the IFRS criteria for hedge accounting to be fully reflected for internal management purposes. The economic result also includes the interest expense on Additional Tier 1 bonds, which is reported directly within equity, as well as effects relevant for management. The latter relate to a provision for potential charges where the probability of such charges arising in the future is assessed as possible, and which are taken into account within corporate management activities as a result of the use of the economic result for management purposes, but which may not yet be reported under IFRS because they are not sufficiently substantiated. The measurement and reporting differences versus the IFRS consolidated financial statements are shown in the reconciliation to consolidated profit before tax in the "reconciliation" column.

Another key indicator for the operating segments, in addition to the economic result, is total customer assets. Total customer assets primarily comprise the income-relevant assets of the mutual and special funds under management (including ETFs) in the Asset Management Securities and Asset Management Real Estate divisions, as well as certificates issued by the Deka Group. Other components are the volume of direct investments in cooperation partner funds, the cooperation partner, third-party fund and liquidity portions of fund-based asset management as well as advisory/management mandates and master funds. Total customer assets also include fund units of €1.7bn held as part of the proprietary portfolio (previous year: €1.7bn). These mainly relate to start-up financing for investment funds.

Based on the definition of section 19 (1) of the German Banking Act (*Kreditwesengesetz* – KWG), gross loan volume includes additional risk exposures such as, among other things, underlying risks from equity derivative transactions and transactions for the purposes of covering guarantee payments on guarantee funds, as well as the volume of off-balance sheet counterparty risks.

The following segments are essentially based on the business divisional structure of the Deka Group, as also used in internal reporting. The segments are defined by the different products and services of the Deka Group.

Asset Management Securities

The Asset Management Services reporting segment focuses on the active fundamental and quantitative management of mutual securities funds and special funds, advisory mandates and asset management concepts, passive exchange-traded funds and combinations of these forms of investment, such as ETF-based asset management products for private investors and institutional customers alike. This offering is rounded off by services covering all aspects of the fund value chain. These include, in particular, asset servicing, which is used by institutional investors to pool their investments in master funds. In addition to investment funds and asset management concepts, the product range also includes products from selected international cooperation partners. The Deka Group's investment funds cover all major asset classes: equity, bond, money market, mixed funds, capital protected funds and combinations of these funds.

Asset Management Real Estate

The Asset Management Real Estate reporting segment focuses on providing property investment products for private and institutional investors. The product range includes open-ended mutual property funds, special property funds and credit funds that invest in property, infrastructure and transport loans, and property advice for institutional investors. In addition to fund management, fund risk management and development of property-related products, the segment also covers the purchase and sale of real estate and the management of such assets, including all other property-related services (property management).

Asset Management Services

The Asset Management Services reporting segment focuses on providing banking services for asset management. The services range from managing custody accounts for customers to custodial services for investment funds. The segment also provides digital support for the securities business of the savings banks, especially through the provision of multi-channel solutions.

Capital Markets

The Capital Markets reporting segment is the central product, solution and infrastructure provider and service provider in the Deka Group's customer-focused capital markets business. The segment concentrates on the generation of customer-driven business in the triangle of savings banks, the Deka Group and selected counterparties and business partners, which include external asset managers, banks, insurance companies and pension funds. In this environment, the Capital Markets segment offers carefully coordinated, competitive capital market and credit products. In addition, the Capital Markets reporting segment is responsible for the Deka Group's strategic investments, which comprise the securities in the proprietary portfolio that are not held for liquidity management purposes.

Financing

The Financing reporting segment is made up of real estate financing and specialist financing, including financing of the savings banks. Lending is taken onto our own statement of financial position via the banking book, as well as being packaged as an investment product for other banks or institutional investors via club deals or syndications. Priority is given to placements within the *Sparkassen-Finanzgruppe*. The specialist financing business concentrates on selected segments, such as infrastructure financing, ship and aircraft financing, financing covered by ECAs, public sector financing and savings bank financing. Specialised financing positions concluded before the credit risk strategy was changed in 2010 have been pooled in a legacy portfolio, which continues to be wound down while safeguarding assets. Real estate lending relates mainly to commercial real estate and is focused on marketable properties in the office, retail, shopping, hotel and logistics segments in liquid markets in Europe and North America.

Other

The Other segment primarily comprises income and expenses that are not attributable to the reportable segments. These essentially comprise overheads, actuarial gains and losses resulting from the measurement of pension obligations, and a general provision for potential losses that are not directly allocable to any operating segment. In the 2019 reporting year, there was also a one-off effect of €–140.0m from measures to strengthen the capital for a company in the equity investment portfolio. The income and expenses of the Treasury function are allocated to the other segments on a source-specific basis and are therefore shown in the presentation of the economic result of the respective segments.

	Asset Management Securities		Asset Management Real Estate		Asset Management Services		Capital Markets	
	Economic result							
€m	2019	2018	2019	2018	2019	2018	2019	2018
Net interest income	8.3	7.2	0.8	3.7	5.2	5.3	56.4	45.3
Risk provisions	–	–	–	–	0.0	–0.1	–1.7	8.3
Net commission income	787.2	649.4	286.0	303.1	183.3	181.8	55.7	56.3
Net financial income[1]	6.2	–7.7	–0.6	–4.5	2.5	–4.5	197.4	215.2
Other operating profit[2]	–7.2	–7.6	0.9	1.6	3.0	–0.4	3.5	5.0
Total income without contributions to earnings from Treasury function	**794.5**	**641.3**	**287.1**	**303.8**	**193.9**	**182.1**	**311.4**	**330.1**
Administrative expenses (including depreciation)	362.9	389.9	137.2	137.3	181.8	170.0	165.5	172.1
Restructuring expenses[2]	3.7	3.9	–	–	–	6.0	–	–
Total expenses before allocation of Treasury function	**366.6**	**393.8**	**137.2**	**137.3**	**181.8**	**176.1**	**165.5**	**172.1**
(Economic) result before tax excluding Treasury function	**427.9**	**247.5**	**149.9**	**166.5**	**12.1**	**6.0**	**145.9**	**158.1**
Treasury function	–11.2	–17.1	–3.5	–3.8	–1.7	–1.9	–38.8	–73.1
(Economic) result before tax	**416.7**	**230.5**	**146.4**	**162.7**	**10.3**	**4.1**	**107.1**	**85.0**
Cost/income ratio[3]	0.46	0.61	0.48	0.45	0.94	0.93	0.53	0.53
Total risk (value-at-risk)[4]	666	618	100	89	143	110	861	945
Total customer assets	248,520	217,337	42,222	38,099	–	–	22,670	20,443
Gross loan volume[7]	6,823	6,860	252	213	749	619	86,765	91,548

[1] This includes the result from assets held for trading (trading book portfolio), the result from non-trading assets (banking book portfolio), the result from other financial investments as well as the result from repurchased own issues.
[2] Restructuring expenses are disclosed in total profit or loss before tax under Other operating profit.
[3] Calculation of the cost/income ratio does not take into account the restructuring expenses and risk provisions.
[4] Value-at-risk for risk capacity with confidence level of 99.9% and holding period of one year. Due to the diversification within market price risk the risk for the Deka Group are not cumulative.
[5] No cost/income ratio is presented for the segment Other because as this is deemed of limited economic informative value.
[6] This includes effects relevant for management purposes of €+/–0.0m (previous year: €+35.0m) related to a provision for potential losses. This is additional information provided on a voluntary basis and does not form part of the IFRS notes.
[7] As a result of a refined calculation of over-collateralisation in the first half of the year there was a shift between the risk segments. The figures as at 31 December 2018 were adjusted for reasons of comparison.

Financing		Other[5]		Deka Group		Reconciliation		Deka Group	
Economic result								Total profit or loss before tax (IFRS)	
2019	**2018**	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
135.1	126.4	−3.4	−6.4	202.5	181.5	−32.9	−59.1	169.6	122.4
−8.8	14.7	−0.1	−0.4	−10.6	22.4	–	–	−10.6	22.4
33.7	29.6	−2.2	−2.1	1,343.7	1,218.0	–	−0.1	1,343.7	1,217.9
−2.4	−15.2	−5.5[6]	−52.5[6]	197.5	130.8	−25.4	96.7	172.1	227.5
9.7	1.7	−182.4	−44.0	−172.5	−43.7	35.1	27.6	−137.4	−16.1
167.3	**157.1**	**−193.6**	**−105.4**	**1,560.6**	**1,509.0**	**−23.2**	**65.1**	**1,537.4**	**1,574.1**
56.7	54.7	181.5	114.4	1,085.7	1,038.5	–	–	1,085.7	1,038.5
–	–	37.3	8.8	41.0	18.7	–	–	41.0	18.7
56.7	**54.7**	**218.8**	**123.2**	**1,126.7**	**1,057.2**	**–**	**–**	**1,126.7**	**1,057.2**
110.6	**102.4**	**−412.4**	**−228.6**	**434.0**	**451.8**	**−23.2**	**65.1**	**410.7**	**516.9**
−20.4	−35.0	75.6	130.9	–	–	–	–	–	–
90.3	**67.4**	**−336.8**	**−97.8**	**434.0**	**451.8**	**−23.2**	**65.1**	**410.7**	**516.9**
0.32	0.38	–	–	0.69	0.70				
512	581	178	237	2,395	2,492				
–	–	–	–	313,412	275,878				
27,300	24,004	19,659	28,045	141,548	151,288				

Reconciliation of segment results to the IFRS result
In principle, income and expenses are allocated on a source-specific basis to the relevant segment. Segment expenditure comprises direct expenses plus expenses allocated on the basis of cost and service accounting.

During the financial year, the reporting and measurement differences between internal reporting and the total profit or loss before tax under IFRS amounted to €23.2m (previous year: €–65.1m) and mainly resulted from the circumstances referred to below.

The result not recognised in profit or loss amounted to €75.3m in the reporting period (previous year: €75.2m). Of this total, €103.7m (previous year: €68.6m) was attributable to interest- and currency-related valuation results relating to financial instruments recognised at amortised cost. The result not recognised in profit or loss also includes the total interest expense (including accrued interest) of €–28.4m on the AT1 bonds (previous year: €–28.4m). Distributions made were recorded directly in equity, in accordance with IAS 32. In addition, a general provision to cover potential risks that could materialise in the coming months was recognised for the first time in the 2012 financial year. In 2019, the provision for these effects in the management accounts amounted to €–170.0m (previous year: €–170.0m). There was no effect on the economic result in the 2019 reporting year (previous year: €35.0m; reported under Other).

The change of €–53.7m in the revaluation reserve before tax (previous year: €–130.3m) was also included in the economic result. Of this, €–38.6m (previous year: €–30.7m) was attributable to the change in the revaluation reserve for provisions for pensions.

The other amounts shown in the reconciliation column concern differences in presentation between management reporting and the consolidated financial statements. Of these, €61.7m (previous year: €87.5m) relates to internal transactions that are reported in the economic result. The majority of these are included within net interest income, while the corresponding offsetting income effects are reported under net financial income. There are also reporting differences in net financial income and other operating profit from the different allocation of income effects from the repurchases of own issues.

4 Segmentation by geographical markets

Income from corporate activities by geographical markets is presented below. Allocation to a segment is carried out on the basis of the location of the branch or Group company.

	Germany		Luxembourg		Other		Total Group	
€m	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Income	1,333.8	1,438.4	199.7	133.7	3.9	2.0	1,537.4	1,574.1
Total of profit or loss before tax	287.0	472.6	121.3	43.6	2.4	0.7	410.7	516.9
Long-term segment assets[1]	326.9	202.0	35.7	11.1	0.1	0.1	362.7	213.2

[1] Long-term segment assets excluding financial instruments and deferred income tax assets

Since 1 January 2019, right-of-use assets under leases have also been reported under long-term segment assets (see note [14] "Lease accounting").

Accounting policies

5 General information

The accounting policies described were applied in a uniform and consistent manner to the reporting periods presented, with the exception of the new accounting standards which were applied for the first time in the 2019 reporting year (see note [2] "Accounting standards applied for the first time and to be applied in future").

Income and expenses are recognised on an accruals basis. They are recorded and reported in the period to which they may be assigned in economic terms. Premiums and discounts are accrued in accordance with the effective interest rate method and reported in the same way as accrued interest within the balance sheet item in which the underlying financial instrument is reported.

Both discretionary decisions and estimates are necessary as part of IFRS accounting. These are made in accordance with the relevant standard and reviewed on an ongoing basis. They are based on experience and other factors, including expectations regarding future events that appear reasonable under the given circumstances. Where discretionary management decisions or estimates have a material impact on items or scenarios, these are explained in detail either in the section on accounting policies or in the notes to the relevant items.

In the case of the scenarios listed below, discretionary decisions or estimates, or a combination of the two, were required for accounting purposes:

- the classification of financial assets (see note [8] "Financial instruments");
- the recognition of risk provisions in the lending and securities business and provisions for credit risks from off-balance sheet commitments (see note [17] and note [47] "Risk provisions in the lending and securities business");
- the fair value measurement of financial instruments (see note [68] "Fair value disclosures");
- the recognition of pension obligations (see notes [26] and [60] "Provisions for pensions and similar commitments";
- the impairment test for goodwill (see note [51] "Intangible assets");
- the recognition of other provisions and other liabilities (see note [27] "Other provisions" and note [76] "Contingent liabilities and other obligations");
- lease accounting (see note [14] "Lease accounting");
- the recognition of deferred taxes (see note [24] "Income taxes").

The disclosures in accordance with IFRS 7.31-42 "Financial Instruments: Disclosures" on the nature and extent of risks arising from financial instruments, which also form part of the notes to the consolidated financial statements, are presented in the risk report as part of the Group management report, with the exception of the qualitative and quantitative disclosures on default risk in accordance with IFRS 7.35A-36 and disclosures on the maturity analysis in accordance with IFRS 7.39(a) and (b). Information on default risk is disclosed in the notes to the consolidated financial statements in notes [17] and [47] "Risk provisions in the lending and securities business", while information on the maturity analysis is provided in note [72] "Breakdown by remaining maturity".

6 Consolidation principles

Subsidiaries are companies that are controlled by DekaBank, either directly or indirectly. Assessment of whether DekaBank, as the parent company, is able to exert control over an entity, and hence whether that entity must be consolidated, is carried out by considering the following three criteria, all of which must be fulfilled:

- DekaBank has power over the entity, directly or indirectly, by means of voting rights or other contractual rights and hence has the current ability to direct the entity's relevant activities.
- DekaBank is exposed, or has rights, to variable returns from its involvement with the entity.
- DekaBank is currently able to use its power over the entity to affect these variable returns.

If DekaBank holds more than half of the relevant voting rights of an entity, either directly or indirectly, and these voting rights currently enable it to direct the relevant activities of that entity, then control is assumed. Potential voting rights are also taken into account when determining whether the relationship involves control, provided such voting rights are deemed to be substantial.

Under certain circumstances it is possible for control over another company to exist even when the Group does not hold the majority of the relevant voting rights, for instance, by virtue of one or more contractual arrangements or statutory provisions. In assessing whether or not an entity must be consolidated, it is therefore necessary to take account of all the facts and circumstances involved. This includes considering the purpose and the relevant activities of the entity concerned. This is particularly true in the case of structured entities designed such that voting rights or comparable contractual rights are not the dominant factor in determining who controls the entity.

For this reason, the Deka Group also includes structured entities (investment funds, loan financing operations and securitisation companies) when considering which entities must be consolidated.

In assessing whether or not control exists, it is also necessary to verify, where appropriate, whether a principal-agent relationship exists. This is where power over the entity is held by an additional contractual party (agent) which exercises it on behalf of a principal, such that the principal has *de facto* control.

The Deka Group has power over investment funds it sets up and administers, which it exercises as an agent for all investors in these investment funds. As part of the start-up financing process, DekaBank holds units in the Group's own investment funds in order to make liquidity available to them. In such cases, control may arise if a significant proportion of the variable returns flow to DekaBank as an investor in the investment fund.

An entity is consolidated from the point in time at which the Group obtains control through the relevant majority voting rights or other contractual agreements, and ceases to be consolidated when there is no longer any potential for it to be subject to the Group's control. Subsidiaries are not consolidated if they are of minor significance for the presentation of the Group's financial position and financial performance.

DekaBank reviews its consolidation decisions at the end of every financial year, as well as on other occasions if required. The requirement for the Group to consolidate an entity is reviewed if voting rights or other decision-making rights arise as a result of contractual agreements or changes in financing, ownership or capital structures.

Changes in the percentage ownership of a subsidiary that do not result in a loss of control should be regarded as transactions between shareholders and recognised within retained earnings accordingly.

If the Deka Group loses control of a subsidiary, the subsidiary's assets and liabilities, and the carrying value of any non-controlling interests in the subsidiary that may exist, are derecognised. Any consideration received and any shares in the subsidiary that are retained are recognised at fair value. If a difference arises as a result of this accounting treatment, and this difference is attributable to the parent company, it is presented as a profit or loss within consolidated profit or loss. Other changes in equity with no impact on profit or loss recorded in previous periods are transferred to consolidated net profit or, if required by other IFRSs, to retained earnings.

An associate is a company over which DekaBank exercises a significant influence. As a rule, significant influence is presumed if DekaBank holds between 20.0% and 50.0% of the voting rights, either directly or indirectly. Potential voting rights – either currently exercisable or convertible – are also taken into account in assessing whether significant influence exists.

Where less than 20.0% of the voting rights are held, the assessment of whether or not significant influence exists includes other factors, such as whether the Deka Group has the option to be represented on the management or supervisory boards of the relevant company, or whether there are significant transactions between the Deka Group and the relevant company. Where such rights are held by other companies, it is possible that DekaBank may be unable to exercise significant influence, even if it holds more than 20.0% of the voting rights.

The only type of joint arrangements, as defined in IRFS 11, that exist at the Deka Group take the form of joint ventures. Joint ventures are defined as arrangements where the parties exercise joint control through voting rights held by each of them in equal proportion. Joint ventures and associates are included in the consolidated financial statements using the equity method, unless they are of minor significance for the presentation of the financial position and financial performance of the Group. Where a company valued under the equity method uses different accounting policies, appropriate adjustments are made in line with IFRS rules for consolidated financial statements by means of a separate calculation.

Subsidiaries are consolidated using the acquisition method, whereby all assets and liabilities of the subsidiary are recognised at fair value from the date of acquisition or the date the Group obtains a controlling interest. Any positive difference between the acquisition price and the fair value of the assets and liabilities acquired is reported under intangible assets as goodwill. Goodwill is tested for impairment at least once a year, or more frequently if there are indications of a possible decrease in value. If it is established that goodwill is impaired, the goodwill is written down to the lower value (see note [51] "Intangible assets"). Where third parties hold minority interests in the equity or earnings of subsidiaries of the Bank, these are reported separately as minority interests under equity and as profit attributable to non-controlling interests in the statement of profit or loss and other comprehensive income. Where third parties hold immaterial minority interests in investment funds and partnerships, and those third parties have a right to return their holdings at any time, the minority interests constitute debt capital from the Group's perspective and are thus reported under other liabilities.

Intra-Group receivables and liabilities are eliminated on consolidation, as are expenses, income and intercompany profits or losses arising from intra-Group financial and services transactions.

DekaBank's consolidated financial statements have been prepared in accordance with standard accounting policies throughout the Group.

Subsidiaries (affiliated companies and structured entities) included in the consolidated financial statements, subsidiaries (affiliated companies and structured entities) not included in the consolidated financial statements on grounds of immateriality, joint ventures, and associates are shown in the List of Shareholdings (see note [83] "List of shareholdings").

7 Scope of consolidation

The changes in the scope of consolidation in the 2019 reporting year are due to the deconsolidation of a total of five structured entities. The Deka Group no longer controls (within the meaning of IFRS 10) the structured entities Treasury One UG (haftungsbeschränkt) & Co. KG, Hamburg and Treasury Three Shipping Limited, Majuro (Marshall Islands), as the business relationship was terminated in 2019. In addition, the shares in the structured entities Masterfonds S Broker, Frankfurt am Main, A-Treasury 93-FONDS, Frankfurt am Main and A-Treasury 2000-FONDS, Frankfurt am Main were redeemed in full.

A further disposal relates to Deka Immobilien GmbH, Frankfurt am Main, which was merged with Deka Immobilien Investment GmbH, Frankfurt am Main, with retroactive effect from 1 January 2019.

Furthermore, Deka Vermögensverwaltungs GmbH, Frankfurt am Main was included in the scope of consolidation for the first time as at 31 October 2019 on the basis of the planned expansion of business activities.

For detailed information on the composition of the Group, please see note [81] "Information on holdings in subsidiaries" or the "List of shareholdings" (see note [83]).

8 Financial instruments

Recognition of financial instruments

All financial assets and liabilities, including all derivative financial instruments, are recognised in the statement of financial position in accordance with IFRS 9. Spot purchases and sales (regular way contracts) are recognised on the settlement date. Valuation effects from spot purchases and sales measured at fair value which have a settlement date after the reporting date are recognised in profit or loss and reported under other assets or other liabilities.

Financial assets are derecognised if the contractual rights arising from the asset lapse, have expired or have been transferred to parties outside of the Group, such that the risks and rewards have been substantially transferred.

If an existing asset in the AC and FVOCI categories is modified, a check is performed to determine whether the modification is significant enough to result in the derecognition of the asset. The assessment to determine whether a modification is classed as significant is based on both qualitative and quantitative criteria. Qualitative indicators for a significant modification of the contractual cash flows include inter alia a change in the debtor or adjustments to key collateral items. A modification is also classified as significant if the adjustment results in a present value difference between the original and new financial asset of at least 10%. As a result, the original financial asset is deemed to have been disposed of, and the modified financial asset is considered to have been newly acquired. The difference between the two carrying values is recognised in profit or loss. An insignificant modification, on the other hand, merely results in an adjustment to the gross carrying value of the modified financial asset. The difference between the original contractual cash flows and the modified cash flows, discounted at the original effective interest rate, is recognised in profit or loss as a modification gain/loss in the income statement item net interest income or risk provisions in the lending and securities business.

Financial liabilities are derecognised when the principal has been repaid in full.

If an existing financial liability in the AC category is exchanged for a liability with the same borrower subject to fundamentally different contractual conditions, or if a financial liability in the AC category is substantially modified, the original liability is derecognised and a new liability recognised. The difference between the two carrying values is recognised in profit or loss.

Categorisation of financial instruments

Financial instruments are measured at fair value at the date of acquisition. The subsequent measurement of financial assets and liabilities is governed by the IFRS 9 measurement category to which they are allocated at the date of acquisition.

The classification rules under IFRS 9 provide for a classification model for assets that is based on the underlying business model and contractual cash flows.

The business model reflects how financial assets are managed in order to generate cash flows.

For classification purposes in accordance with IFRS 9, the Deka Group makes a distinction between the following business models:

"Held to collect":	Financial assets are held with the aim of collecting the contractual cash flows.
"Held to collect and sell":	Financial assets are held with the aim of both collecting the contractual cash flows and selling the financial assets.
"Residual":	This business model is used for financial assets that cannot be classified as either "held to collect" or "held to collect and sell".

Allocation to a particular business model is based on groups of financial assets (portfolios). The division between business models is based on the actual circumstances at the time of assessment. The factors taken into account include the following:

- the Group-wide business and risk strategy;
- the way in which the performance of the business model in the individual business divisions (and the financial assets held in these divisions) is evaluated and reported to the key management personnel of the Deka Group;
- the frequency, volume and timing of sales in previous periods, the reasons for those sales and expectations regarding future sales activity.

In this respect, it is ultimately the key management personnel of the Deka Group who are responsible for defining the individual business models.

Sales from "Held to collect portfolios" are not considered detrimental to the "Held to collect" business model if they are executed for specific reasons or are infrequent or insignificant (both individually and in the aggregate). Within the Deka Group, checks to ensure that sales from "Held to collect portfolios" are not considered detrimental are performed for each portfolio group. Both qualitative criteria and quantitative thresholds (both portfolio-based and results-based) have been defined for this purpose. In the Deka Group, this means, for example, that a sale of financial instruments due to a deterioration in the debtor's credit risk, or a sale shortly before an instrument reaches maturity (generating proceeds from the sale that are almost equivalent to the outstanding contractual cash flows) is not considered detrimental to an existing intention to hold.

Where a financial asset is allocated to the "held to collect" or "held to collect and to sell" business model, it is necessary to check at initial recognition whether the SPPI (cash flow) condition is met, in order to determine its measurement category under IFRS 9. In determining whether the contractual cash flows relate exclusively to payments of principal and interest, the contractual terms are to be analysed at the time of initial recognition at the level of the individual financial asset. In particular, this involves analysing contractual provisions that can change the timing or amount of contractual cash flows, such as contract renewal and termination options, variable or conditional interest payment agreements and agreements with rights of recourse to certain assets (known as "non-recourse financing").

The cash flow condition for non-recourse financing is reviewed as part of a review process comprising several stages within the Deka Group. The first step involves examining whether the financing arrangement could include a side agreement that is detrimental with regard to SPPI. This check is carried out irrespective of the type of financing. The second step involves identifying non-recourse financing. This category largely comprises financing of special purpose vehicles in which the Deka Group has a right of recourse only to the assets of the special purpose vehicle or cash flows from these assets to satisfy its claim. The cash flow condition is always met for financing arrangements like these if, based on an economic assessment of all of the information available, it is the credit risk, and not the borrower's investment risk, that dominates the financing arrangement in question. Within the Deka Group, factors such as the minimum rating in accordance with the credit risk strategy, the loan-to-value (LTV) ratio, additional collateral furnished and the borrower's capital resources are usually taken into account in this regard. Financing arrangements where full repayment of the loan is substantially dependent on how the value of the financed asset develops run contrary to the nature of a simple loan agreement, meaning that they are to be measured at fair value through profit or loss.

For the SPPI condition to be met, all contractual cash flows from the financial assets must solely represent payments of principal and interest, where the interest essentially represents consideration for the time value of money and the credit risk. In addition, basic lending arrangements can also include fees for other credit risks (such as liquidity risk), as well as costs associated with holding the financial asset for a specified period of time (such as service fees or administrative costs).

If the cash flow condition is met, the asset is measured at amortised cost if classified in the "held to collect" business model, or at fair value through other comprehensive income if classified in the "held to collect and sell" business model. Financial assets that are held for trading or classified in the "residual" business model are measured at fair value through profit or loss.

Explanation of the individual IFRS 9 measurement categories

Assets measured at amortised cost (AC)

Financial assets are allocated to this category if they belong to a portfolio with a "held to collect" business model and their cash flows solely comprise payments of principal and interest.

Financial assets in this category are measured initially at fair value. In subsequent periods, they are measured at amortised cost using the effective interest method. Interest income, impairments, profits/losses on disposal and currency translation effects are recognised in profit or loss. Impairment losses are calculated using the expected credit loss model under IFRS 9.

In the Deka Group, loans and securities are usually allocated to this category, provided that they are not purchased with the intent to resell or are held for liquidity management purposes and meet the SPPI condition.

Assets measured at fair value through other comprehensive income (FVOCI)

Financial assets are allocated to this category if they belong to a portfolio with a "held to collect and sell" business model and their cash flows solely comprise payments of principal and interest.

Assets in this category are measured at fair value on both initial and subsequent measurement. Changes in value are generally recognised in other comprehensive income (OCI) until the asset is either derecognised or reclassified. Interest income, impairments and currency translation effects, on the other hand, are recognised in profit or loss. Impairments are determined in accordance with the expected credit loss model under IFRS 9, in the same way as for financial assets measured at amortised cost. On derecognition or reclassification, the cumulative gain or loss recognised in other comprehensive income (OCI) is reclassified to profit or loss.

In the Deka Group, securities (debt instruments) held for liquidity management purposes are classified in this category.

In addition, where an equity instrument is not held for trading, an irrevocable election may be made at initial recognition to measure it at fair value through other comprehensive income. This option is currently not exercised in the Deka Group. Equity instruments are thus always measured at fair value through profit or loss. Equity instruments that are held for trading must generally be measured at fair value.

Assets measured at fair value through profit or loss (FVTPL)
Financial assets held for trading are classified in this category.

Financial assets are also classified in this category if they are not held for trading but also do not fall under the "held to collect" or "held to collect and sell" business models. In addition, financial assets not held for trading are also measured at fair value through profit or loss as a mandatory requirement if they are held within the "held to collect" or "held to collect and sell" business model but do not meet the SPPI condition.

It is also possible to assign financial assets (excluding debt instruments) irrevocably to this category upon acquisition if doing so eliminates or significantly reduces a measurement or recognition inconsistency (an "accounting mismatch"). The Deka Group does not currently make use of this option under IFRS 9.

Such assets are measured at fair value through profit or loss both on initial recognition and in subsequent periods.

In the Deka Group, securities, receivables and all derivatives (which are not designated as hedges), along with holdings in unconsolidated subsidiaries, joint ventures and associated companies, as well as other equity investments are normally allocated to this category

Liabilities measured at fair value through profit or loss (LFV)
Within this category, a distinction is made between financial liabilities in the trading portfolio and those which are irrevocably designated at fair value (provided that certain conditions are met) upon acquisition (fair value option). Financial liabilities in this category are generally measured at fair value through profit or loss.

Financial liabilities are classified as part of the trading portfolio if they were issued or entered into primarily with a view to redemption in the short term.

Liabilities designated at fair value arise through the exercise of the fair value option under IFRS 9. Financial liabilities are designated at fair value if they are managed as a unit on a fair value basis in accordance with the Bank's documented risk management strategy. Both the risk and the results thereof are determined on the basis of fair values and reported to the Board of Management. Exercising the fair value option results in this case in the harmonisation of economic management with the presentation of the financial position and financial performance. In addition, the fair value option is exercised for financial liabilities in order to avoid the potential obligation to separate embedded derivatives and to eliminate or significantly reduce measurement or recognition inconsistencies (accounting mismatches).

Changes in the fair value of designated liabilities that result from changes in own credit risk are not to be recognised in profit or loss but should instead be recognised in other comprehensive income (OCI). However, this will not be the case if a measurement or recognition inconsistency would be created or enlarged as a result. Upon disposal, the cumulative changes in value recognised in other comprehensive income (OCI) cannot be reclassified to profit or loss (known as "recycling"). By contrast, reclassification from other comprehensive income (OCI) to retained earnings is possible. This means that effects from the Deka Group's own credit risk are generally not recognised in profit or loss.

The Bank calculates the change in value arising from changes in creditworthiness – irrespective of whether this is recognised in profit or loss or in other comprehensive income – as the difference between the result based on full fair value measurement and the result from measurement based on swap rates for the relevant issue currency, plus the spread which applied at the time of sale in the market for similar liabilities. The valuation result arising from changes in creditworthiness during the reporting period is calculated as the movement in this difference relative to the nominal value as at the reporting date. This calculation method takes into account all relevant available data for determining the change in value of the designated financial instruments arising from changes in creditworthiness and is therefore appropriate.

Liabilities measured at cost (LAC)
This category comprises those financial liabilities, including securitised liabilities, that are not measured at fair value through profit or loss. They are stated at amortised cost using the effective interest method.

9 Fair value measurement of financial instruments

Fair value is deemed to be the amount that would be received on the sale of an asset or paid for the transfer of a liability in an arm's length transaction between market participants at the measurement date.

The fair value of financial instruments is determined on the basis of market prices or observable market data as at the reporting date and by using generally recognised valuation models.

Where no prices are available on an active market, valuation models are used that are considered appropriate for the financial instruments in question. Observable market data is always used as the basis where available. However, the availability of observable stock market prices, valid prices or market data varies depending on the financial instrument and can change over time. Furthermore, the valuation models are periodically readjusted and validated as required. Depending on the financial instrument and market situation, it may be necessary to include assumptions and estimates made by the Bank in the valuation. The Bank is also responsible for selecting suitable modelling techniques and appropriate parameters and assumptions. The assumptions underlying financial valuation models can have a considerable effect on the fair value determined. Where there are no prices from active markets, the fair value is therefore deemed to be the model value as at the reporting date, which reflects a realistic estimate of how the market would be likely to value the financial instrument.

Where bid and ask prices are available for assets and liabilities, the provisions of IFRS 13 state that the price to be used to determine the fair value is that which best reflects the fair value within the bid-ask spread, with the use of mid-market pricing being an acceptable valuation convention. DekaBank generally measures financial instruments at mid-market prices. For illiquid financial instruments assigned to level three of the fair value hierarchy, bid-ask adjustments are taken into account.

Furthermore, the Bank takes credit valuation adjustments (CVAs) or debit valuation adjustments (DVAs) into consideration when measuring OTC derivatives in order to allow for its own credit risk or that of counterparties, unless these are already included elsewhere in the valuation model. If netting agreements exist for counterparties, the calculation is performed based on the net exposure at counterparty level. In other cases, the calculation is performed on the basis of the individual exposures. The Deka Group takes a funding valuation adjustment (FVA) into account, which represents the implicit market refinancing costs for uncollateralised derivative positions. The maturity structure of funding is thus considered to be an important component of fair value for uncollateralised derivatives.

10 Hedge accounting

The Deka Group enters into derivatives both for trading purposes and hedging purposes. Please refer to the risk report for a description of the overall risk management strategy. Derivatives entered into for hedging purposes can be treated, together with qualifying underlying transactions, as a hedge accounting item (hedge accounting) under certain conditions. With the first-time application of IFRS 9, the IASB has provided the option of applying the previous provisions of IAS 39 Hedge Accounting until further notice, instead of the new provisions on hedge accounting under IFRS 9. The Deka Group initially made use of this option. In the fourth quarter of 2019, the Group then transitioned to the hedge accounting rules set out in IFRS 9.

In the banking book, in line with its strategic orientation, the Deka Group mainly executes transactions involving interest-related products for which a significant part of the change in market value in the transaction currency results from the interest component. General interest rate risks are systematically hedged against market fluctuations. Interest rate swaps, in particular, are used to manage this risk.

General interest rate risks result from changes in currency-specific benchmark yield curves (usually swap curves) and their volatility. The fixed interest rate on a position may deviate from the relevant market interest rate due to future market developments, resulting in changes in the value of the financial product. For example, the value of a purchased fixed-rate bond decreases when the market interest rate rises. Changes in the risk profile of the banking book are monitored, as part of the risk management system, using sensitivity indicators and are hedged in line with the targeted interest rate position, unless the interest rate risks already offset each other within the primary banking business on the assets and liabilities side. The hedging instrument position used to manage the interest rate risk is continuously adjusted to reflect changes in the interest rate risk. In general, the Deka Group strives to ensure matching parameters such as maturity and repayment structure when using derivative hedging instruments to hedge underlying transactions. The risk of interest-rate induced market price changes for fixed-interest asset items is offset by concluding what are known as payer swaps (the Deka Group pays fixed interest and receives variable interest). In cases involving fixed-rate items on the liabilities side, the Deka Group uses receiver swaps to hedge the risk (the Deka Group pays variable interest and receives fixed interest).

In addition to interest rate risks, the Deka Group's primary banking transactions also give rise to currency risks, namely when the currency transactions in a foreign currency on the assets side and liabilities side do not offset each other in terms of their amount and maturity. In these cases, derivative and primary currency hedging transactions are executed to limit the currency risks and maturity mismatches as part of the Deka Group's macro management activities.

The currency risk arises from potential changes in exchange rates for those foreign currencies in which the Deka Group executes primary banking transactions. If the value of the foreign currency falls against the euro, this reduces the value of the foreign currency asset item in euros. If, in such cases, there are no, or only insufficient, primary financing funds available in the relevant foreign currency, the Deka Group uses cross-currency swaps, for example, in which the Bank receives euros and pays in a foreign currency, for hedging purposes as part of its macro management activities.

Fair value hedges for interest rate risks

In order to be able to reflect the interest rate risk management approach described above on the balance sheet, the Deka Group sets up targeted hedges on the face of the balance sheet. The main objective pursued by setting up and cancelling these hedge accounting relationships is to largely avoid the inconsistent interest-driven measurement of balance sheet assets and liabilities. In order to achieve this objective, there is no need to designate all risk positions as hedge accounting relationships, as some of the transactions offset each other with regard to the measurement of interest rate risk. The hedges to be designated are determined as part of a dynamic process. The hedges designated in the Deka Group as part of this process exclusively comprise micro fair value hedges of the swap curve risk.

Hedge accounting relationships have to be documented individually at the time they are established. The main items documented are the identification of the hedged item and the hedge, as well as the type of risk hedged. In addition, IFRS 9 requires prospective testing of hedge effectiveness on an ongoing basis, i.e. an assessment to determine whether changes in the value of the hedged item and the hedging instrument can be expected to substantially offset each other in the future. The Deka Group uses regression analysis to demonstrate prospective effectiveness. If, at any given point in time, a hedge is no longer classified as effective based on the prospective effectiveness test, it is reversed. Hedges also have to be reversed if the underlying or hedging transaction is derecognised in the balance sheet, if the risk management objective changes or if credit risk begins to dominate the changes in value of the hedged item and hedging instrument.

For interest rate fair value hedges, changes in the value of the underlying transaction that are attributable to the hedged risk are included in the “Profit or loss from fair value hedges” along with the offsetting change in the fair value of the hedge. The hedged interest component of the underlying transactions is calculated, for this purpose, as the change in fair value of the underlying transaction due to a change in the currency-specific 3-month-based swap curve. The valuation spread (compared with the swap rate) on the side of the underlying transaction at the time the hedge is established is kept constant over the entire term of the hedge. The change in value in relation to the hedged interest rate risk (swap curve) – where appropriate together with the gains or losses from currency translation in cases involving foreign currency transactions – generally accounts for the bulk of the change in the value of the underlying transaction due to market price risk.

There is a close economic relationship within the meaning of IFRS 9 between the designated hedged items and the hedging transactions, as the swap rate is both an important component in the pricing of the originally valued hedged items and the underlying of the hedging transactions with matching maturities.

Since the hedging transactions are not associated with a basis risk, within the meaning of IFRS 9, that could be systematically counteracted by rebalancing the hedge ratio, one unit of a designated interest rate fair value hedge generally also hedges one unit of a hedged item.

Within the context of interest rate fair value hedge accounting, medium and long-term lending, securities and issuing transactions are designated as underlying transactions. The financial assets designated as underlying transactions have the measurement categories AC and FVOCI, while financial liabilities designated as underlying transactions have the measurement category LAC. The underlying transactions hedged using fair value hedges are shown in the same balance sheet item as non-hedged transactions. The carrying value of the interest rate-hedged underlying transactions in the AC and LAC measurement categories is adjusted to reflect the change in fair value attributable to the hedged risk (known as a hedge adjustment). The derivatives used in fair value hedges are shown on the balance sheet under “Positive market values of derivative hedging instruments” or “Negative market values of derivative hedging instruments”.

Expected ineffectiveness in interest rate fair value hedges mainly results from the difference in the discounting of hedged items and hedges. This arises because the derivative hedging transactions secured by cash collateral are measured on the basis of OIS curves, whereas the underlying transactions are measured on the basis of 3-month-based swap curves (meaning that changes in the tenor basis spread between the 3-month-based swap curve and the OIS curve result in hedge ineffectiveness). Another reason for expected ineffectiveness lies in the potential fair value of the reference interest rate component of the variable sides of the derivative hedging transactions on the reporting date.

Fair value hedges for currency risks

In the reporting year, the Deka Group recognised the macro currency hedging strategy described above by designating currency fair value hedges, using what is known as a bottom layer hedge designation (which is one of the group hedges under IFRS 9), for the first time. This type of designation involves designating the bottom layer of the underlying transactions as a whole, together with the associated cross-currency swaps, as a currency fair value hedge for each designated currency.

Within the Deka Group, the group of underlying transactions as a whole, in the meaning referred to above, comprises financial assets in the AC and FVOCI measurement categories. On the product side, loan receivables, securities and cash receivables from (reverse) repo transactions and from money market trading activities are included. The cross-currency swaps concluded as part of the Deka Group's macro management activities are designated as hedging transactions, with their currency basis element being excluded in each case from designation as "hedge costs". The changes in the fair value of the cross-currency swaps that are attributable to the currency basis element are recognised in other comprehensive income (or on a cumulative basis in the revaluation reserve for currency fair value hedges, which forms part of cumulative OCI) for as long as hedge accounting continues to apply. The other changes in the value of the designated cross-currency swaps are recognised in the profit or loss from fair value hedges, together with the spot rate-related change in value of the underlying transactions. The changes due to the hedged risk (spot rate-related changes in value) of the underlying transactions – together with any interest-rate-related changes in the present value of fixed-interest transactions – account for the majority of the changes in value of the underlying transactions due to market price risk.

The Deka Group's currency management system does not currently involve hedging any currency using hedges in another, highly correlated currency. This means that the accounting hedges set up all share one feature: the currency of the underlying and hedging transactions are always identical (there are no basis risks within these hedges). Consequently, there is always a close economic relationship, within the meaning of IFRS 9, between the designated underlying transactions and the hedging transactions. As a result, one hedged currency unit is always hedged by one currency unit derivative. This hedge ratio of 1:1 continues to apply over time, as the lack of basis risk means it does not need to be recalibrated in line with IFRS 9.

Within the Deka Group, the prospective effectiveness of currency fair value hedges is tested both initially and on an ongoing basis using the critical term match method, in which the critical terms of the underlying transaction and the hedging instrument (currency, nominal value and maturity) are compared against each other.

Even if the critical terms of the underlying transaction and the hedging transaction match, the currency fair value hedges can be expected to show a certain degree of ineffectiveness over time. This is because, even after separating the currency basis element, the two variable legs of a cross-currency swap used as a hedging instrument show an interest rate valuation result on the reporting date, whereas the underlying transaction is only measured at the spot rate.

The balance sheet presentation of the currency-hedged underlying transaction does not differ from that of non-hedged transactions. The hedging transactions are shown on the balance sheet under "Positive market values of derivative hedging instruments" or "Negative market values of derivative hedging instruments".

Apart from the two types of fair value hedges referred to above, the Deka Group does not use any other form of hedge accounting. Note [39], note [49], note [59] and note [73] contain detailed quantitative disclosures on fair value hedges for interest rate/currency risks.

11 Structured products

Structured products are financial instruments composed of a host contract and one or more derivative financial instruments (embedded derivatives), whereby the embedded derivatives constitute an integral part of the contract and cannot be traded separately. If the host contract is a financial asset under IFRS 9, the embedded derivative must be accounted for together with the host contract under IFRS 9. The assessment of the contractual cash flow characteristics criterion of a structured financial asset is applied accordingly to the entire financial asset, including the embedded derivative.

Embedded derivatives whose host contract is not a financial asset under IFRS 9 must be separated from the host contract subject to the following conditions and accounted for as standalone derivatives:

- the structured financial instrument is not already measured at fair value through profit or loss;
- the economic characteristics and risks of the embedded derivative do not show any close relationship with the economic characteristics and risks of the host contract, and
- the contractual standards of the embedded derivatives, if they were treated as independent financial instruments, would meet the criteria for a derivative.

There were no host contracts subject to separation at the reporting date.

12 Currency translation

Currency translation in the Deka Group is carried out in accordance with IAS 21. All monetary foreign currency items and pending spot foreign-exchange transactions are converted using the mean spot rate as at the reporting date. Realised and unrealised gains and losses from currency translation are included in "Trading profit or loss" in the income statement to bring the gains and losses from currency translation into line with the amounts recognised resulting from the related currency-specific transactions (derivatives) that hedge these monetary assets and liabilities.

Non-monetary items are converted in accordance with their applicable valuation standard: Non-monetary items valued at amortised cost are converted at the rate applicable at the time of initial recognition (historical rate). Non-monetary items carried at fair value are converted at the year-end closing rate in the same way as monetary items.

Realised expenses and income are translated at the spot rate that applies at the time they are realised.

The financial statements of foreign subsidiaries prepared in a foreign currency are converted using the modified closing rate method. All assets and liabilities are converted at the rate prevailing on the reporting date. The items in the statement of profit or loss and other comprehensive income are converted using the arithmetic mean of the month-end exchange rates during the reporting year. With the exception of the revaluation reserve (converted using the rate prevailing on the reporting date) and the total profit or loss for the year (from the statement of profit or loss and other comprehensive income), equity is converted on the basis of historical exchange rates at the time of acquisition by the Group. The resulting translation differences are posted under equity in the currency translation reserve.

13 Genuine repurchase agreements and securities lending transactions

The Deka Group engages in both genuine securities repurchase agreements and securities lending transactions.

Genuine repurchase agreements are contracts transferring securities in return for consideration, in which it is agreed at the same time that the securities must subsequently be transferred back to the pledgor in return for payment of a sum agreed in advance. The pledgor continues to account for the transferred securities in the previous measurement category, as the principal risks and rewards of ownership are not transferred. A liability for the pledgor or a receivable for the pledgee is accounted for in the amount of the cash sum received or paid, respectively. Provided the IAS 32 netting criteria are met, receivables and liabilities from genuine repurchase agreements are offset against one another and recorded on the balance sheet on a net basis under assets due from banks or customers, or liabilities due to banks or customers.

The term “securities lending” means transactions where securities are transferred by the lender to the borrower with the obligation that the borrower, upon expiry of the agreed time, will transfer back securities of the same type, quality and quantity and will pay a consideration for the term of the loan. The securities loaned are treated for accounting purposes in the same way as genuine repurchase agreements. Collateral must generally be provided for securities lending transactions. Cash collateral is reported on the lender’s balance sheet as a liability and in the balance sheet of the borrower as a receivable. Collateral provided by the borrower in the form of securities continues to be carried in the accounts of the borrower.

Lending and repurchase agreements are carried out under the conditions usual for the market. Transactions are either subject to the clearing conditions of the respective central counterparty, or are conducted using the standard German or international framework agreements. The securities transferred may in principle be resold or re-pledged by the recipient, provided no contractual agreement or regulation exists that would prevent this. In the event of the sale of borrowed securities or collateral, the resulting short position is reported under financial liabilities at fair value.

Income and expenses from repurchase agreements and securities lending transactions in the trading book are reported under trading profit or loss, while income and expenses from banking book portfolios are reported under net interest income.

Forward repos constitute forward contracts as per IFRS 9 and are treated as derivatives from the trading date until the settlement date. Changes in the fair value of forward repos are recognised accordingly in trading profit or loss.

14 Lease accounting

As of 1 January 2019 (IFRS 16)

Under IFRS 16, leases are recognised in the lessee’s balance sheet as a lease liability and a right-of-use asset at the time at which the underlying asset is made available to the lessee.

An agreement is, or contains, a lease if it gives Deka Group the right to control the use of an identified asset for a period of time in exchange for consideration. The Deka Group is considered to control the use of the asset if it has the power to decide on the nature and purpose of the asset's use throughout the term of the agreement.

The Deka Group as lessee
Lease liabilities are recognised at the present value of future lease payments. When determining the minimum lease payments, particular consideration must be given to variable lease payments that depend on an index or rate. The amounts expected to be payable under residual value guarantees also have to be estimated. Lease payments are divided into their lease and non-lease components (usage-based ancillary costs or service charges).

Discounting is based on the interest rate implicit in the lease, if this can be determined; otherwise, discounting is based on the lessee's incremental borrowing rate.

The term of the lease is determined by the non-cancellable period of the lease as defined in the contract, taking into account extension options or termination rights that are to be included in the assessment. Purchase options also have to be taken into account. This means that, for accounting purposes, the term of a contract is to be taken into account beyond the non-cancellable term if it is reasonably certain that an extension option will be exercised or that a termination or purchase option will not be exercised.

At the commencement of the lease, the right-of-use asset essentially corresponds to the lease liability. Recognition of the right-of-use asset must take into account directly attributable initial costs and lease payments made prior to the provision of the underlying asset; any lease incentives received must be deducted.

During the term of the lease, the lease liability is calculated as at each reporting date by discounting the outstanding lease payments, and the resulting interest expense is recognised in profit or loss. For the purposes of subsequent measurement within the Deka Group, the right-of-use asset is measured at amortised cost and is depreciated on a straight-line basis, through profit or loss, over the shorter of the useful life or the contractual lease term. Impairment losses in excess of amortised cost are immediately recognised as write-downs.

The right-of-use assets are shown in the balance sheet under property, plant and equipment and the lease liabilities are shown under other liabilities. Within the Deka Group, the interest expense resulting from the lease liability is shown under other operating profit and the depreciation and impairment expenses for the right-of-use asset are shown under administrative expenses.

In the case of short-term leases or leases of low-value assets, the lessee can opt not to recognise the right-of-use asset and the corresponding lease liability on the balance sheet. Lease payments for these contracts are recognised as expenses on a straight-line basis over the lease term as a general rule.

As at the reporting date of 31 December 2019, the Deka Group had rental and lease agreements for office properties, motor vehicles and plant and equipment (e.g. printers). The rental agreements for office properties are generally concluded for fixed terms of five to ten years. The lease term for motor vehicles is three to four years, while plant and equipment are leased for five years on average.

The Deka Group as lessor
As at the reporting date of 31 December 2019, there are no leases in place where companies in the Deka Group act as lessor.

Until 31 December 2018 (IAS 17)
The decisive factor for the classification and consequently the accounting treatment of leases is not the legal title to the leased item but primarily the economic content of the lease agreement: if substantially all the risks and rewards associated with the legal ownership of the leased item are transferred to the lessee, the transaction will be classified as a finance lease. All other cases are deemed to be operating leases.

The Deka Group as lessee
The rental and lease agreements concluded by the Deka Group as lessee are operating leases. The property, plant and equipment to which the operating leases relate are accordingly not reported on the balance sheet. The rental and lease instalments payable by the Deka Group are recorded as administrative expenses. Lease payments made in advance are recognised as prepayments and disclosed under other assets, in order to ensure a correct cut-off between accounting periods.

The Deka Group as lessor
As at the reporting date of 31 December 2018, there were no leases in place where companies in the Deka Group acted as lessor.

15 Revenue from contracts with customers

In the Deka Group, revenue is generally realised when the performance obligation is deemed to have been fulfilled. A performance obligation is normally considered to have been fulfilled when the service has been rendered or the service agreement has been concluded.

If a service has already been rendered for which payment has not yet been made, a contract asset is recognised in the balance sheet. Conversely, a contract liability has to be recognised if the customer has already made the payment or if the Bank has an unconditional right to payment before the service has been rendered.

In the Deka Group, a receivable is recognised as and when the service is provided, as this is the point at which consideration becomes unconditional and the only thing standing in the way of performance is the period of time until the payment falls due. Fees and commission that arise over time in Asset Management are generally settled on a monthly or quarterly basis, meaning that the uncertainty with regard to the variable consideration is resolved at the end of each month or quarter. Contract assets and receivables are generally subject to the impairment provisions set out in IFRS 9.

As at the balance sheet date of 31 December 2019, the Deka Group had no contractual assets, contractual liabilities or receivables from contracts with customers in its portfolio.

In the Deka Group, there are no material contracts with customers in which the Deka Group is involved in the provision of services as an agent. As a rule, there are no contracts with more than one performance obligation either.

The contracts concluded with customers within the Deka Group do not contain any significant financing components, as the period between the provision of the service and payment does not generally exceed twelve months.

Costs incurred in initiating a contract are recognised as an immediate expense because the amortisation period does not exceed one year.

In the Deka Group, fees and commission falling within the scope of IFRS 15 arise, in particular, in connection with the asset management of investment funds and in connection with capital market and lending business activities. These are reported under net commission income (see note [34] "Net commission income").

16 Amounts due from banks and customers

The items due from banks and due from customers principally include loans granted, non-negotiable bearer and registered bonds, demand deposits, call money and time deposits. Paid cash sums and cash collateral from genuine securities repurchase agreements or securities lending transactions are also reported as receivables. Receivables are generally assigned to the IFRS 9 measurement category "Assets measured at amortised cost" if they meet the necessary classification criteria (see note [8] "Financial instruments"). Receivables in this category are measured at amortised cost using the effective interest rate method. In addition, the amortised cost has to be adjusted to reflect the expected losses calculated using the IFRS 9 expected credit loss model (see note [17] "Risk provisions in the lending and securities business").

Income from interest payments on amounts due from banks and customers is reported in net interest income. Income from the sale of receivables is recognised in the item "Net income from the derecognition of financial assets measured at amortised cost".

The measurement rules set out in note [10] "Hedge accounting" apply to receivables that are subject to fair value hedges.

17 Risk provisions in the lending and securities business

In the Deka Group, risk provisions are recognised in the amount of the expected losses (expected credit loss model) for financial instruments measured at amortised cost or at fair value in other comprehensive income. These also include loan commitments that fall within the scope of IFRS 9 and financial guarantee contracts, unless they are measured at fair value through profit or loss.

Tiered concept

Under the expected credit loss model, financial instruments have to be allocated to one of three "stages" depending on their credit quality in order to calculate the risk provisions for loan losses. The stage to which an asset is allocated affects the size of the risk provisions to be set up for that asset.

IFRS distinguishes between the following three stages:

Stage 1: Loss allowances are recognised in the amount of the expected loss for the next twelve months, unless the risk of default has significantly increased.
Stage 2: Loss allowances are recognised in the amount of the expected loss over the entire remaining life of the financial instrument if the risk of default has increased significantly.
Stage 3: Loss allowances are recognised based on the recoverable cash flows on the assumption that a loss event has already occurred.

Financial instruments that are not already impaired upon initial recognition are generally allocated to stage 1 and risk provisions are recognised in profit or loss in the amount of the expected loss for the next twelve months. If the default risk has significantly increased since the financial instrument was acquired, it is allocated to stage 2 and the lifetime expected credit loss is recognised in profit or loss. If indications exist that creditworthiness is impaired, the instrument is to be transferred to stage 3 and the expected loss for the remaining lifetime of the instrument is also recognised in profit or loss.

Within the Deka Group, significant increases in default risk since the addition of a financial instrument are assessed on the basis of quantitative and qualitative criteria, as well as based on the assessments performed by the units and committees responsible for early risk identification. A significant risk increase is assumed where the credit rating has dropped by a specified amount relative to the initial rating on the first balance sheet date, or where the exposure has been classified as requiring intensive support. A loan is classified as requiring intensive support, in particular, in cases involving non-compliance with contractual agreements providing concrete indications of an acute threat to debt servicing capabilities in the long term, as well as in the event of certain rating downgrades or repayment deferrals if the circumstances of the individual case call for intensive support.

The 12-month probability of default is used to assess the rating downgrade and adequately reflects the change in the risks expected over the remaining term of the asset.

In addition, for financial instruments where payment is more than 30 days overdue, a check is also made as to whether the presumption of a significant increase in default risk can be rebutted. This involves an analysis of the individual case, which is submitted to the Monitoring Committee so that a decision can be made. If the assumption of a significant increase in default risk cannot be refuted, these transactions are also assigned to stage 2.

For securities measured at fair value through other comprehensive income (FVOCI), the Deka Group makes use of the relief provided under the standard, whereby a test for significant risk increase may be dispensed with for instruments with a low risk of default. These exclusively comprise securities held in the liquidity reserve, which must satisfy strict requirements as to credit quality and liquidity. These securities generally have at least an investment grade rating.

If there is objective evidence that a loss event has already occurred, the financial instrument should be allocated to stage 3. Indications of impaired creditworthiness are:

- significant financial difficulty of the issuer or debtor,
- an actual breach of contract, such as a default or past-due event,
- concessions granted by the lender to the debtor for economic or contractual reasons in connection with the debtor’s financial difficulties that the creditor would not otherwise consider,
- a high probability that the borrower will enter bankruptcy or other financial reorganisation,
- the disappearance of an active market for the financial asset because of financial difficulties and
- the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

In the Deka Group, the definition of default applied for the purposes of allocation to stage 3 is based on the regulatory definition of default. Accordingly, financial assets are deemed to have defaulted if:

- it is considered unlikely that a debtor will settle its liability in full without recourse to the realisation of collateral, or
- a material liability of the debtor is more than 90 days past due.

Transfers back from stage 2 to stage 1 or from stage 3 to stage 2 or 1 are made if the indicators of a significant increase in default risk or impaired creditworthiness no longer apply on the reporting date.

In stages 1 and 2 of the impairment model, interest income is recognised on the basis of the gross carrying value – i.e. the amortised carrying value before risk provisions. If the asset is transferred to Stage 3, interest income is recognised in subsequent periods on the basis of the net carrying value – i.e. the gross carrying value less risk provisions.

If the contractual cash flows of a financial asset have been renegotiated or otherwise modified and that financial asset has not been derecognised because the modification is not significant, the stage allocation is still reviewed on the basis of the initial rating of the original asset on the first balance sheet date and is compared against the current default risk of the adjusted asset. The derecognition of a financial asset already assigned to stage 3 is effected by utilising the risk provisions. A financial asset is derecognised upon its disposal (in particular due to waivers or sales of receivables) or if there is every likelihood that no further payments will be made. This is assumed to be the case, for example, if the business relationship and loans have been terminated, if all of the collateral has been realised, or if insolvency proceedings have been concluded in respect of the borrower's assets or the opening of insolvency proceedings has been rejected due to insufficient assets. If there is insufficient risk provisioning for a financial instrument, it is written down directly in profit or loss (direct write-down). Recoveries on financial assets that were previously written off are recognised in the income statement under "Risk provisions in the lending and securities business". Receivables that have been written down can still, however, be subject to enforcement measures.

Separate provisions also apply to financial assets that already show indications of an impaired credit rating upon initial recognition (POCI). The classification of a financial instrument as a POCI asset upon initial recognition must be maintained until its disposal, irrespective of how its default risk develops. For these financial assets, risk provisions are not set up at the time of initial recognition, but rather in subsequent periods in the amount of the change in lifetime expected losses. When determining the expected credit losses, the expected cash flows are discounted using the credit risk-adjusted effective interest rate.

Determining the ECL (Expected Credit Loss)
Under IFRS 9, the ECL is determined in different ways for the different stages of the impairment model. The ECL for stages 1 and 2 is determined on the basis of the probability of default (PD), the loss given default (LGD) and the exposure at default (EAD).

At stage 1, risk provisions are set up in the amount of the 12-month ECL. This corresponds to the expected net present value loss over the remaining life of the instrument resulting from a default event that is expected to occur within the twelve months following the reporting date, weighted by the probability of this default. The current gross carrying value as at the reporting date is thus multiplied by the customer's 12-month probability of default and by the expected loss given default.

12-Month ECL = 12-month probability of default (PD) x loss given default (LGD) x gross carrying value (EAD)

In the Deka Group, a debtor's default risk is measured by the probability of default (PD). The probability of default refers to all transactions entered into with this debtor. It is defined as the average probability that a debtor in a risk class to which it is assigned by means of a rating will default within a period of twelve months. The loss given default (LGD) is defined as the level of economic loss as a percentage of the exposure at the time of default. The EAD corresponds to the gross carrying value on the reporting date when calculating the ECL for stage 1.

For financial assets in stage 2, a provision is made in the amount of the present value of the lifetime expected credit loss, i.e. the total expected credit losses from all potential default events over the remaining lifetime of the financial asset. For each time period, the exposure at default is multiplied by the relevant probability of default and the amortised loss given default and then discounted to the reporting date; the results are then added together.

$$\mathrm{ECL} := \sum_{\mathrm{i} \geq \mathrm{Stichtag}} \mathrm{EAD_i} \cdot \mathrm{PD_i} \cdot \mathrm{LGD_i} \cdot \mathrm{DF_i}$$

ECL	=	expected credit loss at calculation date
EADi	=	exposure at time i
PDi	=	marginal probability of default during the period from i to i+1
LGDi	=	loss given default at time i
DFi	=	discount factor from time i to the reporting date
i	=	start of the i+1th time period (i=0 represents the start of the first time period)

The probabilities of default for calculating the ECL at stage 2 are derived from long-term rating histories. The LGD used to calculate the ECL at stage 2 is adjusted as at each potential time of default using models for collateral values over time. The EAD is applied over the remaining life on the basis of the future cash flows associated with the financial instrument.

At stage 3, risk provisions are determined using probability-weighted cash flows in at least three scenarios. The expected cash flows are estimated on a case-by-case basis, taking into account going concern or gone concern assumptions. The amount of the ECL is the difference between the gross carrying value under IFRS 9 and the probability-weighted present value of the expected cash flows, discounted at the effective interest rate.

The ECL is calculated using prospective information, including macroeconomic factors. Macroeconomic forecasts are produced based on the process used by the Macro Research department for the purposes of preparing the official research opinion (baseline scenario) of the Deka Group using a large volume of external information. The statements relate to the analysis and forecasting of fundamental economic data and financial market indicators. The baseline scenario represents the most probable event and is supplemented by a positive and a negative scenario, including information on their respective probability of occurrence (probabilities of occurrence as at 31 December 2019: baseline scenario = 70%, negative scenario = 25% and positive scenario = 5%) to cover a wide range of possible macroeconomic developments. The forecast horizon is three years and the forecast covers those countries in which the Deka Group is primarily active. Eight predefined macroeconomic factors are taken into account for each country and scenario over the forecast period (e.g. unemployment rate, interest rates, GDP growth, oil prices, etc.).

External sources of information include, for example, economic data and forecasts published by government and monetary authorities and by supranational organisations such as the OECD and International Monetary Fund.

The modules and processes employed in the Deka Group allow the PD and LGD to be determined in a manner that is consistent with IFRS 9 while taking account of all of the available and reliable information, including economic aspects. The methods and assumptions, including forecasts, are validated on a regular basis.

18 Financial assets and financial liabilities at fair value

This item only includes financial assets and financial liabilities measured at fair value through profit or loss. For the purposes of presenting and recognising the results in the statement of profit or loss and other comprehensive income, this item is further divided into sub-categories. Financial assets include three sub-categories: trading portfolio, financial assets mandatorily measured at fair value and financial assets designated at fair value. Financial liabilities include two sub-categories: trading portfolio and financial liabilities designated at fair value.

Financial assets at fair value mainly comprise bonds and other fixed-interest securities, shares and other non-fixed-interest securities, and receivables. This item also includes the positive market values of derivative financial instruments held for trading and the positive market values of hedging derivatives that are used as hedging instruments but do not meet the requirements of IFRS 9 for hedge accounting (economic hedging derivatives). This item also includes holdings in unconsolidated subsidiaries, joint ventures and associated companies, as well as other equity investments.

Financial liabilities at fair value largely comprise trading issues and liabilities designated at fair value. This item also includes the negative market values of derivative financial instruments held for trading and the negative market values of hedging derivatives that are used as hedging instruments but do not meet the requirements of IFRS 9 for hedge accounting (economic hedging derivatives). Securities short portfolios are also reported in this line item.

Financial instruments reported under financial assets/liabilities are measured at fair value through profit or loss both on initial recognition and in subsequent periods.

19 Positive and negative market values of derivative hedging instruments

This item comprises hedging derivatives as defined in IFRS 9 (hedge accounting), with positive market values recorded as assets and negative market values recorded as liabilities on the balance sheet.

The hedging derivatives are measured at fair value. The valuation results for fair value hedges under hedge accounting rules are generally recorded through profit or loss under the item profit or loss from fair value hedges. Changes in the value of the foreign currency basis spread of currency fair value hedges, on the other hand, are recognised in other comprehensive income (OCI).

Current interest payments (payment and accrual) from derivatives recognised in line with the rules on hedge accounting are reported under net interest income.

A detailed description of the hedge accounting rules applied in the Deka Group is provided in note [10] "Hedge accounting".

20 Financial investments

Financial investments mainly comprise negotiable bonds and other fixed-interest securities. The "Financial investments" item comprises both financial assets measured at amortised cost and financial assets measured at fair value through other comprehensive income.

Financial investments are generally reported at fair value upon initial recognition. They are subsequently measured either at amortised cost, using the effective interest rate method, or at fair value in other comprehensive income, in accordance with the rules that apply to the measurement category concerned.

In accordance with IFRS 9, risk provisions are set up for all securities allocated to financial investments (see note [17] "Risk provisions in the lending and securities business"). Impairment losses are recognised in the income statement under the item "Risk provisions in the lending and securities business". Risk provisions set up for securities measured at amortised cost are reported as a deduction under financial investments. By contrast, risk provisions set up for securities measured at fair value in other comprehensive income are reported under other comprehensive income (OCI) until the security is derecognised or reclassified. On derecognition or reclassification, the cumulative gain or loss recognised in other comprehensive income (OCI) is reclassified to profit or loss. Realised gains and losses are recognised in the item "Net income from the derecognition of financial assets measured at amortised cost" or in "Profit or loss on financial investments".

The measurement rules set out in note [10] "Hedge accounting" apply to securities that are subject to fair value hedges.

Current interest income from bonds and other fixed-interest securities, including unwound premiums and discounts, is included in net interest income.

Shares in associated companies and joint ventures accounted for using the equity method are also reported under financial investments. These are recognised in the consolidated balance sheet at historical cost at the date of establishment or when significant influence was acquired. In subsequent years, the equity value shown in the balance sheet is adjusted by the proportionate changes in equity of the associated company.

The Group's share of the annual profit of the associate is reported in profit or loss on financial investments. Gains and losses on transactions with companies valued under the equity method are eliminated pro rata, based on the percentage shareholding, as part of the elimination of intercompany profits or losses. In the event of downstream delivery, i.e. if an asset ceases to be fully consolidated, the adjustment is carried out against the carrying value of the equity investment under the equity method.

If there are indications of an impairment to a holding in a company valued in accordance with the equity method, an impairment test is performed and, if necessary, the carrying value of the holding is written down. Impairment losses are reversed if the reasons for impairment no longer apply. In such a case, the carrying value is written back up to the recoverable amount, but capped at the amount of the carrying value that would have been applicable had the impairment losses not occurred in the previous periods. Impairment write-downs and write-backs are recognised through profit or loss under profit or loss on financial investments.

21 Intangible assets

Intangible assets comprise goodwill acquired in business combinations, software that has been purchased or developed in-house, and other intangible assets.

Goodwill arises on the acquisition of subsidiaries if the cost of acquisition exceeds the Group's share of the acquired entity's net assets. Goodwill is recognised at cost at the date of acquisition and is not subject to regular amortisation. In subsequent years, it is valued at cost less all accumulated impairment losses. Goodwill is subject to an impairment test each year, or more frequently if there are indications of a possible loss of value. For the purposes of impairment testing, goodwill is allocated to a cash-generating unit. If an impairment is identified during the test, the goodwill is written down.

Other intangible assets acquired as part of a business combination are amortised on a straight-line basis over their expected useful lives. Where there are signs that the expected benefit is no longer in evidence, the asset is written down.

Intangible assets acquired in return for consideration are stated at amortised cost. Software developed in-house is capitalised at cost where it meets the recognition criteria under IAS 38. The capitalised costs primarily include personnel expenses and expenses for external services. Software developed in-house or purchased is, in principle, amortised over four years on a straight-line basis. Where there are signs that the expected benefit is no longer in evidence, the asset is written down.

Scheduled amortisation and impairment losses on intangible assets are recorded under administrative expenses in the statement of profit or loss and other comprehensive income.

22 Property, plant and equipment

In addition to plant and equipment, the property, plant and equipment line item includes technical equipment and machinery. Property, plant and equipment are stated at amortised cost. Subsequent expenditure on property, plant and equipment is capitalised if an increase in the future potential benefit can be assumed. All other subsequent expenditure is recorded as an expense.

Items of property, plant and equipment (excluding leasing) are depreciated on a straight-line basis over the following periods in accordance with their estimated useful economic lives:

	Useful life in years
Plant and equipment	2 – 15
Technical equipment and machines	2 – 10

For materiality reasons, capital assets coming under section 6 (2) of the German Income Tax Act (*Einkommensteuergesetz* – EStG) are written off in the year of acquisition in accordance with tax regulations.

Impairment losses in excess of amortised cost are immediately recognised as write-downs. Scheduled depreciation and write-downs for impairment are recorded under administrative expenses, while gains and losses on the disposal of property, plant and equipment are recorded as other operating profit.

Since 1 January 2019, this item has also included right-of-use assets under leases. The accounting policies for right-of-use assets from leases reported under property, plant and equipment are presented in note [14] "Lease accounting".

23 Other assets

This balance sheet item includes assets which, when considered separately, are of minor importance and cannot be allocated to any other line item on the balance sheet. Receivables are measured at amortised cost. Positive valuation effects from regular way financial instruments measured at fair value with settlement dates after the reporting date are also reported under other assets.

24 Income taxes

As DekaBank is treated for tax purposes as an atypical silent partnership, DekaBank only incurs corporation tax to the extent that taxable income is not allocated to atypical silent partners. Taking into account the Bank's existing own shares in subscribed capital (acquired in the first half of 2011), the proportion of taxable income attributable to atypical silent partners is 45.6%. This results in a combined tax rate of 24.68% for the companies in the DekaBank fiscal group. However, in return for the allocation of the tax base, atypical silent partners are entitled to reclaim from Deka Bank the corporation tax expense attributable to them (45.6% of 15.0% corporation tax plus solidarity surcharge of 5.5% thereon, in total 7.22%). This means that DekaBank pays the atypical silent partners an amount equal to the tax expense and effectively bears this part of the tax expense, as well. Thus, in order to achieve better comparability, the portion of the corporation tax expense attributable to the atypical silent partners is also reported as tax expense. The applicable combined tax rate (trade tax plus corporation tax and solidarity surcharge) therefore totals 31.90%.

Current income tax assets or liabilities are calculated at the current tax rates expected for payments to or refunds from the tax authorities.

The income tax assessment is generally considered at the level of the individual circumstances, taking into account any existing interactions. If it is probable that the tax treatment used will be accepted, current and deferred taxes should be recognised on this basis. If, by contrast, there is uncertainty regarding the acceptance of a tax treatment (not probable), the most likely amount to be accepted is generally used, unless the expected value of various scenarios provides better predictions. It is assumed that the tax authority has full knowledge of the matter concerned. Finally, the assumptions and decisions made are reviewed at each reporting date and adjusted, if necessary, on the basis of new information.

Deferred income tax assets and liabilities are recognised for temporary differences between the carrying amounts of assets and liabilities on the IFRS balance sheet and the tax balance sheet. They are calculated based on the tax rate projected for the date they will be reversed. Deferred tax liabilities are posted for temporary differences where a tax charge will arise on reversal. If tax savings are projected when temporary differences are reversed and it is probable that they will be utilised, deferred tax assets are recorded. Actual income tax assets and liabilities and deferred tax assets and liabilities are stated net in each case, without discounting. Deferred taxes on temporary differences that have arisen with no effect on profit or loss are recorded in the revaluation reserve such that they also have no impact on profit or loss.

For tax loss carry-forwards, deferred tax assets are recorded if it is probable that they will be utilised. Loss carry-forwards in Germany can be carried forward for an unlimited period. Foreign loss carry-forwards that cannot be carried forward for an unlimited period are disclosed according to their date of expiry. Deferred tax assets arising from temporary differences and loss carry-forwards are tested for impairment at each reporting date.

25 Liabilities

Financial liabilities – unless they are measured at fair value through profit or loss – must be allocated to the measurement category "Financial liabilities measured at amortised cost" and must be measured accordingly at amortised cost using the effective interest rate method.

The valuation guidelines described in note [10] "Hedge accounting" apply to liabilities which have been designated as hedges in the context of hedge accounting.

Interest expenses for liabilities are recognised in net interest income. The result from premature repayment, however, is shown under other operating profit.

26 Provisions for pensions and similar commitments

The Deka Group offers employees various types of retirement pension benefits. These include both defined contribution plans and defined benefit plans.

For defined contribution plans, a set amount is paid to an external provider (these include Sparkassen Pensionskasse, BVV and direct pension insurance policies). In accordance with IAS 19, the Deka Group does not recognise any provisions for such commitments.

For defined benefit plans, the extent of the obligation is calculated by independent actuaries. In these cases, at each closing date the present value of the pension entitlements earned (defined benefit obligation) is determined using the projected unit credit method and compared with the fair value of the plan assets. If the calculation results in a potential asset, recognition of the asset is restricted to the present value of any economic benefit. The net interest expense (income) on the net liability (net asset) arising from defined benefit obligations to be recognised in profit or loss in the current reporting period is determined by applying the actuarial interest rate that was used to measure defined benefit obligations at the beginning of the period. Expected changes in the net liability (net asset) occurring during the year as a result of contribution and benefit payments are taken into account. Revaluations of the net liability (net asset) are recognised directly in other comprehensive income (OCI). The revaluation includes actuarial gains and losses, income from plan assets (excluding interest) and the effect of any asset ceiling (excluding interest).

As well as final salary plans and general contribution schemes, the defined benefit obligations of the Deka Group include unit-linked defined contribution plans. The final salary plans and general contribution schemes involve both individual commitments for members of the Board of Management and executive staff, and collective commitments for the general workforce. These guarantee lifelong retirement, survivors' and disability pensions. Under the unit-linked defined contribution pension commitments, contributions are made by both employer and employee and are invested mainly in the Deka Group's investment funds. When benefits become due, the employee is entitled either to a contractually agreed minimum benefit or to the market value of the underlying investment fund units, if higher.

Plan assets were created for the company retirement pensions of the Deka Group in the form of a contractual trust arrangement (CTA). These are held by a legally independent trustee – Deka Trust e.V. The plan assets for the unit-linked defined contribution plans consist primarily of fund assets allocated to each individual employee and other assets to cover the biometric risks arising from benefits becoming due early and the subsequent financing risk. In addition, commitments under final salary plans and general contribution schemes were funded through the creation of ring-fenced plan assets using a CTA. This section of the plan assets is invested in a special fund with an investment strategy based on integrated asset-liability assessment.

Commitments similar to pensions include commitments in relation to early retirement, transitional payments and obligations to pay other allowances. These are also valued actuarially, and a provision is created in the amount of the present value of the commitment. When accounting for commitments similar to pensions, in principle no actuarial profits or losses arise and the provision shown in the financial statements therefore corresponds to the present value of the commitment. Furthermore, employees of the Deka Group also have the option of paying into working hours accounts. These accounts are maintained in money and, like the defined benefit plans, are covered by plan assets in Deka Trust e.V. The amount carried in the statement of financial position is the difference between the extent of the commitments and the fair value of the plan assets.

27 Other provisions

Provisions for uncertain liabilities to third parties and imminent losses from pending transactions are recognised on a best estimate basis of the amount of the expected liability. Risks and uncertainties are taken into account when determining these provisions, as well as all relevant knowledge relating to the liability. The assumptions and discretionary decisions made in producing the best estimates are reviewed at every future balance sheet date and, if necessary are adjusted based on more recent information. This is also relevant to the sundry other provisions, which have been measured based on the most likely outcome. Further measurements of this provision, which are based on a different assessment of risks and uncertainties, would have resulted in a lower carrying value.

If the interest effect has a material impact, long-term provisions are discounted using a market rate appropriate to the residual term and stated at the present value of the liability. A pre-tax discount rate is used that reflects current market expectations relating to the interest effect and the risks specific to the liability.

Allocations and reversals are carried out via the line item in the statement of profit or loss and other comprehensive income that corresponds to the provision in terms of content. Provisions for creditworthiness risks in off-balance sheet lending business are charged to risk provisions in the lending business and reversed in the same line item.

28 Other liabilities

Other liabilities include liabilities and accruals which are not individually material and cannot be allocated to any other line item on the balance sheet. They are measured at amortised cost or at their settlement amount.

29 Subordinated capital

Subordinated capital generally comprises subordinated liabilities, profit-participation instruments and typical silent capital contributions. In the event that DekaBank becomes insolvent or is liquidated, subordinated capital may only be repaid after all non-subordinated creditors have been repaid. In accordance with the provisions of IAS 32, subordinated capital must be recognised as debt because of the contractual termination right associated with it, regardless of the likelihood that this right will be exercised. Subordinated capital is in principle shown at amortised cost.

For subordinated liabilities that are hedged against interest rate risks by a fair value hedge, changes in fair value attributable to interest rate risks must also be taken into consideration (see note [10] "Hedge accounting").

Interest expenses for subordinated capital are recognised in net interest income. The result from premature repayment, however, is shown under other operating profit.

30 Atypical silent capital contributions

Atypical silent capital contributions are shown on the balance sheet as equity under German commercial law. Under IAS 32, however, atypical silent capital contributions must be treated as debt, since atypical silent partners have a contractual termination right.

Atypical silent capital contributions are stated on the balance sheet at nominal value. The dividend distribution on subscribed capital is used as the basis for calculating the distribution to atypical silent partners. There is also an entitlement to reclaim amounts in respect of taxation. The distribution is disclosed as a separate line item – interest expenses for atypical silent capital contributions – below the total of profit or loss before tax. The amount that may be drawn in respect of tax is disclosed as a component of the tax expense (see note [24] "Income taxes").

31 Equity

Subscribed capital is the capital paid in by shareholders in accordance with the Bank's statutes. Capital reserves include premiums from the issue of shares in the company in accordance with the provisions of the Bank's statutes.

The sub-heading additional capital components comprises Additional Tier 1 bonds issued by the Bank. In accordance with the provisions of IAS 32, Additional Tier 1 bonds are recognised on the balance sheet as equity capital, since they have no maturity date, payments of interest can be totally or partially at the discretion of the issuer and the creditor has no cancellation entitlement.

Retained earnings are broken down into statutory reserves and other reserves from retained earnings. Other reserves from retained earnings include retained profits from previous years. In addition, the effects of applying IFRS for the first time are also shown in other reserves from retained earnings, with the exception of valuation effects for financial assets measured at fair value through other comprehensive income.

Revaluations of net liabilities (net assets) arising from defined benefit obligations are shown within the revaluation reserve. Revaluations consist mainly of actuarial gains and losses, and income from plan assets (excluding interest). The Deka Group does not exercise the option of transferring the cumulative gains or losses recognised in other comprehensive income to retained earnings.

The effects of fair value measurement, recognised in other comprehensive income, on financial instruments assigned to the "financial assets measured at fair value through other comprehensive income" category are also recognised in the revaluation reserve. Cumulative gains or losses are not recorded through profit or loss until the asset is sold or written down due to impairment.

The revaluation reserve also includes creditworthiness-related fair value changes to the financial obligations designated at fair value that result from the Group's own credit risk. The cumulative gains or losses recognised in other comprehensive income are only reclassified to retained earnings when the liability is disposed of.

Differences arising on the conversion of the financial statements of foreign subsidiaries prepared in a foreign currency are posted to the currency translation reserve.

With effect from the fourth quarter of 2019, the revaluation reserve also includes changes in the value of the currency basis element of derivatives designated as hedging instruments in currency fair value hedges. Upon the de-designation of a hedging derivative, the cumulative gains or losses on the derivative in OCI are transferred to the income statement.

All items in the revaluation reserve are reported before allowing for any related tax effects. Instead, the total income tax amount relating to all items in the revaluation reserve is disclosed as a combined amount in the revaluation reserve.

Minority interests, if any, are disclosed as a separate sub-item under equity.

Notes to the statement of profit or loss and other comprehensive income

32 Net interest income

In addition to interest income and expenses, this item includes the pro-rata unwinding of premiums and discounts on financial instruments. This item also includes net interest income from economic hedging derivatives and net interest income from hedging derivatives that qualify for hedge accounting. Net interest income from items in the trading book and the associated refinancing expenses are not included as they are reported in trading profit or loss.

€m	2019	2018	Change
Interest income from			
Financial assets measured at amortised cost	**682.7**	**577.1**	105.6
thereof: lending and money market transactions	582.8	501.8	81.0
thereof: fixed-interest securities	99.9	75.3	24.6
Financial assets measured at fair value through other comprehensive income	**20.5**	**25.2**	–4.7
thereof: money market transactions	–	–	–
thereof: fixed-interest securities	20.5	25.2	–4.7
thereof: current income from non-fixed-interest securities	–	–	–
Financial assets measured at fair value through profit or loss	**246.5**	**245.5**	1.0
Trading portfolio			
thereof: lending and money market transactions	38.6	18.2	20.4
thereof: interest rate derivatives (economic hedges)	136.0	156.3	–20.3
Financial assets mandatorily measured at fair value through profit or loss			
thereof: lending and money market transactions	22.9	17.7	5.2
thereof: fixed-interest securities	35.8	36.6	–0.8
thereof: current income from shares and other non-fixed-interest securities	10.6	14.3	–3.7
thereof: current income from equity investments	2.6	2.4	0.2
Financial assets designated at fair value			
thereof: lending and money market transactions	–	–	–
thereof: fixed-interest securities	–	–	–
Hedge derivatives (hedge accounting)	**21.9**	**44.1**	–22.2
Negative interest from liabilities	**128.6**	**114.1**	14.5
Total interest income	**1,100.2**	**1,006.0**	94.2
Interest expenses for			
Financial liabilities measured at amortised cost	**325.6**	**319.4**	6.2
thereof: lending and money market transactions	151.9	185.0	–33.1
thereof: securitised liabilities	139.7	98.3	41.4
thereof: subordinated liabilities	34.0	36.1	–2.1
Financial liabilities measured at fair value through profit or loss	**418.2**	**412.5**	5.7
Trading portfolio			
thereof: lending and money market transactions	–37.5	3.6	–41.1
thereof: interest rate derivatives (economic hedges)	408.0	342.5	65.5
Financial liabilities designated at fair value			
thereof: lending and money market transactions	42.1	53.8	–11.7
thereof: securitised liabilities	5.6	12.6	–7.0
thereof: subordinated liabilities	–	–	–
Hedge derivatives (hedge accounting)	**81.4**	**55.8**	25.6
Negative interest on money-market transactions and fixed-interest securities	**105.4**	**95.9**	9.5
Total interest expenses	**930.6**	**883.6**	47.0
Net interest income	**169.6**	**122.4**	47.2

33 Risk provisions in the lending and securities business

This item primarily includes expenses and income from changes in risk provisions for financial instruments in the measurement categories "Financial assets measured at amortised cost" (AC) and "Financial assets measured at fair value through other comprehensive income" (FVOCI). Also included are expenses and income resulting from the change in provisions for credit risks for loan commitments and financial guarantee contracts, if they fall within the scope of the impairment rules set out in IFRS 9. Risk provisions in the lending and securities business are recognised in the statement of profit or loss and other comprehensive income as follows:

€m	2019	2018	Change
Allocation to risk provisions/provisions for credit risks	–25.7	–10.8	–14.9
Reversal of risk provisions/provisions for credit risks	16.1	20.7	–4.6
Direct write-downs on receivables	–0.1	–	–0.1
Income on written-down receivables	1.0	4.6	–3.6
Net income from modifications in the lending business (stage 3 or POCI)	–	–	–
Risk provisions in the lending business	**–8.7**	**14.5**	–23.2
Allocation to risk provisions	–2.6	–2.9	0.3
Reversal of risk provisions	0.7	10.8	–10.1
Direct write-downs on securities	–	–	–
Net income from modifications in the securities business (stage 3 or POCI)	–	–	–
Risk provisions in the securities business	**–1.9**	**7.9**	–9.8
Risk provisions in the lending and securities business	**–10.6**	**22.4**	–33.0

34 Net commission income

Net commission income by type of service is as follows:

€m	2019	2018	Change
Commission income from			
Investment fund business	2,392.4	2,191.6	200.8
Securities business	155.3	155.1	0.2
Lending business	37.8	31.2	6.6
Other	21.4	22.7	–1.3
Total commission income	**2,606.9**	**2,400.6**	206.3
Commission expenses for			
Investment fund business	1,185.2	1,112.2	73.0
Securities business	68.0	63.7	4.3
Lending business	5.1	2.7	2.4
Other	4.9	4.1	0.8
Total commission expenses	**1,263.2**	**1,182.7**	80.5
Net commission income	**1,343.7**	**1,217.9**	125.8

As part of its activities as an asset manager, the Deka Group receives commission from contracts with customers which varies according to product category (e.g. mutual or special funds) and asset category (e.g. shares, bonds or real estate). The income is calculated and collected as described in the corresponding sales prospectuses and investment conditions of the investment funds concerned. The main types of income are explained in more detail below.

Commission income from investment fund business arises in the Asset Management Securities and Asset Management Real Estate divisions.

In the Asset Management Securities division, the Deka Group generates income from management and administrative activities and from the asset management of fund-based products. For this service, the Deka Group receives (asset) management fees, sales commission, performance-related remuneration and income from lump-sum cost allowances. Additional commission income arises in the investment fund business as a result of brokerage services provided during the reporting period. The performance obligation is fulfilled on an ongoing basis and the consideration is settled on a monthly basis in the vast majority of cases. In addition to portfolio-related commission, the Deka Group also earns sales-related commission (front-end loads) when issuing certain units in investment funds, where appropriate. The amount of the front-end load is based on the unit value at the time of issue.

In the Asset Management Real Estate division, management fees are collected for ongoing management activities in relation to the average investment fund holdings. In the case of retail products, the amount of the management fee varies, within specified ranges, depending on the performance of the investment fund's unit value over the fund financial year. These fees are settled on a monthly basis. Fees resulting from the management of the properties held in the real estate funds are collected to cover the ongoing management of these real estate funds. These fees are settled on a monthly basis. In addition, the Asset Management Real Estate division collects front-end loads in cases involving the issue of certain units in investment funds. The Deka Group also collects purchase and sales fees from investment funds that invest in real estate. The service is deemed to have been rendered when the property in question is added to, or removed from, the investment fund. This is a one-time payment which is usually calculated based on the underlying transaction volume.

Part of the commission income from the investment fund business is passed on to the sales partners in accordance with the regulatory requirements. The corresponding expense is reported under commission expenses for the investment fund business.

In the Asset Management Services division, the Deka Group provides various services for which income is reported under commission income from the securities business. These include, for example, the assumption of the role of custodian and the safekeeping of securities in securities accounts. As a custodian, the Deka Group receives a custodian fee for its ongoing activities and a securities account fee for the safekeeping of securities. The custodian fee is paid and collected monthly as a general rule and is based on the average values of the fund assets. The securities account fee also relates to a specific period. The annual fee to be paid is a fixed fee per securities account.

In the context of asset management for savings banks and institutional customers, the Deka Group receives commission fees for support services relating to the procurement and settlement of securities and financial derivatives. The fee is calculated for securities as a percentage of the transaction price, while for financial derivatives it is calculated depending on the number of contracts. Services are rendered and settled based on a point in time. These fees are allocated to the Capital Markets business division and are also reported under commission income from the securities business.

Commission income from the lending business relates almost exclusively to services in connection with the administration of loans and is not directly related to the origination of the loans. The fees are levied irrespective of the term and generally fall due at the beginning of the credit relationship (one-off amount). Commission income from the lending business is allocated to the Financing division.

Of the net commission income of €1,343.7m (previous year: €1,217.9m), €787.2m (previous year: €649.4m) is attributable to the Asset Management Securities business division, €286.0m (previous year: €303.1m) to the Asset Management Real Estate business division, €183.3m (previous year: €181.8m) to the Asset Management Services business division, €55.7m (previous year: €56.3m) to the Capital Markets business division and €33.7m (previous year: €29.6m) to the Financing business division.

35 Net income from the derecognition of financial assets measured at amortised cost

This item comprises the net income from the early disposal of financial assets measured at amortised cost. In the 2019 reporting year, receivables and loans were derecognised due to early repayments made by debtors.

€m	2019	2018	Change
Gains arising from the derecognition of financial assets measured at amortised costs	13.5	4.8	8.7
Losses arising from the derecognition of financial assets measured at amortised costs	0.8	–	0.8
Profit or loss arising from the derecognition of financial assets measured at amortised costs	**12.7**	**4.8**	7.9

36 Trading profit or loss

This item comprises sale and valuation results, dividends as well as commission from financial instruments in the trading portfolio sub-category. It also includes all results from the currency translation of financial assets and liabilities, regardless of their measurement category. The foreign exchange profit or loss came to €11.3m in the reporting year. In general, the net interest income from derivative and non-derivative financial instruments in this sub-category, together with any related refinancing expenses, is also reported under this item. However, net interest income from economic hedging derivatives (banking book portfolios) is reported under net interest income.

€m	2019	2018	Change
Sale and valuation results	263.8	345.1	–81.3
Net interest income and current income from trading transactions	–200.4	–114.0	–86.4
Commission	–17.1	–20.3	3.2
Trading profit or loss	**46.3**	**210.8**	–164.5

37 Profit or loss on financial assets mandatorily measured at fair value

This item mainly comprises gains or losses on the disposal and measurement of financial instruments in the "financial assets mandatorily measured at fair value" sub-category. However, net interest income and dividend income from financial instruments in this sub-category are disclosed under net interest income.

€m	2019	2018	Change
Sale and valuation results	87.4	–94.8	182.2
Commission	0.7	0.2	0.5
Profit or loss on financial assets mandatorily measured at fair value	**88.1**	**–94.6**	182.7

38 Profit or loss on financial instruments designated at fair value

This item mainly comprises gains or losses on the disposal and measurement of financial instruments in the "financial instruments designated at fair value" sub-category. By contrast, interest expenses and income on financial instruments in this sub-category are disclosed under net interest income.

€m	2019	2018	Change
Sale and valuation results	32.3	52.7	–20.4
Commission	–	–	–
Profit or loss on financial instruments designated at fair value	**32.3**	**52.7**	–20.4

39 Profit or loss from fair value hedges

The profit or loss from fair value hedges shows the ineffectiveness of interest rate fair value hedges and currency fair value hedges. In interest rate fair value hedge accounting, changes in the value of the underlying hedged transactions that are attributable to the hedged risk, together with changes in the fair value of the hedges, are shown as the net valuation result. In the case of currency fair value hedges, the changes in the fair value of the hedging transactions attributable to the currency basis element are recognised in other comprehensive income over the period in which the hedge accounting continues to apply. The other changes in value of the designated hedging transactions are shown as the net valuation result together with the spot rate-related change in the value of the underlying transactions.

The net valuation result is composed as follows, grouped by the type of risk hedged:

€m	2019	2018	Change
Interest rate fair value hedges			
Net valuation result from hedging financial assets	–12.4	–1.9	–10.5
Net valuation result from hedging financial liabilities	2.0	1.6	0.4
Currency fair value hedges			
Net valuation result from hedging financial assets	–0.8	N/A	N/A
Profit or loss from fair value hedges	**–11.2**	**–0.3**	–10.9

40 Profit or loss on financial investments

This item primarily comprises the gains or losses on the disposal of financial assets measured at fair value through other comprehensive income and the pro rata annual profit or loss from shares in associated companies and joint ventures accounted for using the equity method.

€m	2019	2018	Change
Sale results	3.9	53.6	–49.7
Commission	–	–	–
Net income from equity-accounted companies	–0.0	0.5	–0.5
Profit or loss on financial investments	**3.9**	**54.1**	–50.2

41 Administrative expenses

Administrative expenses comprise personnel expenses, other administrative expenses and depreciation and amortisation. The breakdown of the items is as follows:

€m	2019	2018	Change
Personnel expenses			
Wages and salaries	438.0	435.1	2.9
Social security contributions	55.0	53.5	1.5
Allocation to/reversals of provisions for pensions and similar commitments	34.5	37.1	–2.6
Expenses for defined contribution plans	4.8	4.1	0.7
Other expenses for retirement pensions and benefits	3.1	1.2	1.9
Total personnel expenses	**535.4**	**531.0**	4.4
Other administrative expenses			
Consultancy expenses	127.3	107.2	20.1
Computer equipment and machinery	83.2	80.0	3.2
Bank levy and deposit guarantee scheme	57.7	40.4	17.3
IT information services	44.2	42.0	2.2
Marketing and sales expenses	39.1	41.4	–2.3
Subscriptions and fees	31.2	29.8	1.4
Lump sum fees for fund administration services	28.7	28.8	–0.1
Rentals and expenses for buildings	17.6	51.4	–33.8
Postage/telephone/office supplies	17.3	13.4	3.9
Other administrative expenses	50.0	55.1	–5.1
Total other administrative expenses	**496.3**	**489.5**	6.8
Depreciation and amortisation of property, plant and equipment	42.7	4.0	38.7
Depreciation and amortisation of intangible assets	11.3	14.0	–2.7
Total depreciation and amortisation	**54.0**	**18.0**	36.0
Administrative expenses	**1,085.7**	**1,038.5**	47.2

From the 2019 reporting year onwards, the bank levy of €40.4m (previous year: €29.6m) and the standard contribution to the deposit guarantee scheme of the *Landesbanken* and *Girozentralen* amounting to €17.3m (previous year: €10.8m) are reported in one item. The standard contribution to the deposit guarantee scheme was previously included under the item "Subscriptions and fees". This results in more appropriate presentation and is also in line with banking practice. The prior-year figures have been adjusted to aid comparison.

Other administrative expenses primarily include travel expenses, expenses for outsourced services, expenses for the annual accounts and auditing costs.

Administrative expenses included expenses of €2.8m resulting from the leasing of low-value leased assets in non-short-term leases, and expenses of €0.9m from short-term leases.

42 Other operating profit

The breakdown of other operating profit is as follows:

€m	2019	2018	Change
Income from repurchased debt instruments	**–3.2**	**–3.2**	–
Other operating income			
Reversal of other provisions	4.0	2.7	1.3
Reversal of provisions for restructuring	4.4	2.7	1.7
Rental income	1.4	1.4	–
Other income	37.5	53.0	–15.5
Total other operating income	**47.3**	**59.8**	–12.5
Other operating expenses			
Expenses for restructuring	45.4	21.4	24.0
VAT on provision of intra-Group services	14.3	15.8	–1.5
Other taxes	0.2	0.3	–0.1
Other expenses	162.6	53.9	108.7
Total other operating expenses	**222.5**	**91.4**	131.1
Other operating profit	**–178.4**	**–34.8**	–143.6

Repurchases of the Bank's own registered and bearer bonds as well as promissory note loans raised led to a reduction in the liability (net disclosure). Repurchases of own issues result in the realisation of a gain or loss in the amount of the difference between the repurchase price and the book price.

Other operating profit declined by €143.6m in the reporting year. In view of the sustained low interest rates, a one-off effect of €140.0m, resulting from measures to strengthen the capital for a company in the equity investment portfolio, had a negative impact. Restructuring expenses of €41.0m in net terms were also incurred in the reporting year, primarily as a result of the strategic cost initiative.

In the 2019 reporting year, other expenses included interest expenses from lease liabilities amounting to €1.4m.

43 Income taxes

This item includes all domestic and foreign taxes levied on the basis of the total profit for the year. Income tax expenses comprise the following:

€m	2019	2018	Change
Current tax expense in financial year	266.7	224.6	42.1
Current tax expense/income (–) in previous years	–7.8	30.2	–38.0
Current tax expense	**258.9**	**254.8**	4.1
Effect of origination and reversal of temporary differences	–95.1	–45.3	–49.8
Effects of changes in tax legislation and/or tax rate	–0.6	–	–0.6
Prior-year deferred tax income	–8.1	–31.4	23.3
Deferred tax expense	**–103.8**	**–76.7**	–27.1
Total income tax expense	**155.1**	**178.1**	–23.0

The rate of tax that applies in Germany comprises a corporation tax rate of 15.0% plus a solidarity surcharge on this of 5.5% and the applicable rate of trade tax. As DekaBank is treated for tax purposes as an atypical silent partnership, this results in a combined tax rate of 24.68% (previous year: 24.68%) for the companies in the DekaBank tax group. Furthermore, atypical silent partners have a right to withdraw the portion of corporation tax expense attributable to them, which is equal to 7.22%. A tax rate of 31.90% (previous year: 31.90%) is therefore applied for the measurement of deferred taxes (see note [24] "Income taxes"). This tax rate is assumed as the expected tax rate in the reconciliation statement below. The other domestic companies determine their deferred taxes using tax rates of between 31.7% and 32.0%.

The foreign companies determine deferred taxes using the tax rate for the country in question. The tax rate for the DekaBank Deutsche Girozentrale Luxembourg S.A. tax group amounts to 24.94% (previous year: 26.01%). With effect from 1 January 2019 the corporate tax rate in Luxembourg was reduced from 18.0% to 17.0%. Taking into account the surcharge for the unemployment fund and trade tax, this results in a new combined tax rate of 24.94%. The change in tax rates resulted in imputed tax income of €0.6m in connection with the measurement of deferred taxes.

The origination or reversal of temporary differences led to deferred tax income of €95.1m (previous year: €45.3m in income). The current tax income for previous years (€7.8m) is almost exclusively attributable to DekaBank (previous year: €30.2m in tax expenses for previous years, also almost exclusively attributable to DekaBank). The tax audit conducted at DekaBank for the period from 2013 – 2017 was largely completed in the reporting year. Some tax provisions were reversed. In addition, deferred tax income of €8.1m (previous year: €29.3m) resulted from the further development of tax values following the tax audit.

The following statement reconciles the result before tax with the tax expense:

€m	2019	2018	Change
Total of profit or loss before tax	410.7	516.9	–106.2
x income tax rate	31.90%	31.90%	0.0
= Anticipated income tax expense in financial year	**131.0**	**164.9**	–33.9
Increase from taxes due to non-deductible expenses	60.5	14.4	46.1
Decrease from taxes on tax-exempt income	4.7	–	4.7
Withholding tax	0.2	–0.2	0.4
Tax effect of special funds	0.1	0.1	0.0
Effects of tax rate changes	–0.6	–	–0.6
Tax effect of holdings accounted for under the equity method	0.0	–0.1	0.1
Tax effects from past periods	–15.9	–1.3	–14.6
Effect of the distribution of the AT1 bond	–9.1	–	–9.1
Effects of differing effective tax rates	–8.3	–2.1	–6.2
Other	1.9	2.4	–0.5
Tax expenses according to IFRS	**155.1**	**178.1**	–23.0

The increase in the taxes due to non-deductible expenses item is largely due to the bank levy, which was higher in the reporting year than in the previous year, and from measures to strengthen the capital for a company in the equity investment portfolio.

In the IFRS consolidated financial statements, the servicing of AT1 bonds is treated as remuneration for capital and is offset directly against reserves. From a taxation point of view, the interest is accrued and is deductible. For the first time in the reporting period, this effect is recognised in profit or loss in the amount of €9.1m due to the clarification of the recognition of the tax effect resulting from dividend payments (imputed tax relief). In the previous year, this had been recognised directly in equity.

The tax-free income is mainly due to a write-back at an affiliated company and to the positive development in plan assets.

Notes to the statement of financial position

44 Cash reserves

The breakdown in cash reserves is as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Cash on hand	3.4	0.0	3.4
Balances with central banks	3,823.5	15,302.5	–11,479.0
Total	**3,826.9**	**15,302.5**	–11,475.6

The required minimum reserve was maintained at all times during the reporting year and amounted to €361.6m at the reporting date (previous year: €298.3m).

45 Due from banks

Amounts due from banks can be broken down by business type as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Current accounts	303.3	327.5	–24.2
Daily and time deposits	8,188.5	4,024.8	4,163.7
Lending business	3,219.6	3,909.1	–689.5
Genuine repurchase agreements and collateralised securities lending transactions	10,870.0	15,711.4	–4,841.4
Due from banks before risk provisions	**22,581.4**	**23,972.8**	–1,391.4
Risk provisions in the lending business	–0.2	–0.2	0.0
Total	**22,581.2**	**23,972.6**	–1,391.4

The breakdown of amounts due from banks by region is as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Domestic banks	10,380.9	12,428.4	–2,047.5
Foreign banks	12,200.5	11,544.4	656.1
Due from banks before risk provisions	**22,581.4**	**23,972.8**	–1,391.4
Risk provisions in the lending business	–0.2	–0.2	0.0
Total	**22,581.2**	**23,972.6**	–1,391.4

46 Due from customers

Amounts due from customers can be broken down by business type as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Current accounts	411.4	638.9	–227.5
Daily and time deposits	1,188.8	1,133.7	55.1
Lending business	22,334.5	18,096.6	4,237.9
Genuine repurchase agreements and collateralised securities lending transactions	4,523.1	4,634.7	–111.6
Due from customers before risk provisions	**28,457.8**	**24,503.9**	3,953.9
Risk provisions in the lending business	–89.3	–84.0	5.3
Total	**28,368.5**	**24,419.9**	3,948.6

The breakdown of amounts due from customers by region is as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Domestic borrowers	7,902.2	5,811.2	2,091.0
Foreign borrowers	20,555.6	18,692.7	1,862.9
Due from customers before risk provisions	**28,457.8**	**24,503.9**	3,953.9
Risk provisions in the lending business	–89.3	–84.0	5.3
Total	**28,368.5**	**24,419.9**	3,948.6

47 Risk provisions in the lending and securities business

Default risks in lending and securities business are recognised through provisions, including provisions for credit risks from off-balance sheet commitments. Risk provisions in 2019 were as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Risk provisions in the lending business	**90.4**	**86.0**	4.4
Risk provisions for loan losses – due from banks	0.2	0.2	0.0
Risk provisions for loan losses – due from customers	89.3	84.0	5.3
Provisions for credit risks from off-balance sheet commitments	0.9	1.8	–0.9
Risk provisions in the securities business	**8.8**	**6.9**	1.9
Risk provisions for securities[1]	8.8	6.9	1.9
Total	**99.2**	**92.9**	6.3

[1] Including risk provisions for financial assets measured at fair value through other comprehensive income

Movements in risk provisions in 2019 were as follows:

Risk provisions for financial assets measured at amortised cost

€m	Stage 1	Stage 2	Stage 3	Total
Due from banks				
Position as at 1 January 2019	**0.2**	**0.0**	**–**	**0.2**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	−0.0	0.0	–	−0.0
Allocation	0.0	–	–	0.0
Reversal	−0.0	0.0	–	−0.0
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	−0.0	−0.0	–	−0.0
Position as at 31 December 2019	**0.2**	**0.0**	**–**	**0.2**
Due from customers				
Position as at 1 January 2019	**8.7**	**12.0**	**63.3**	**84.0**
Transfer to other stages	−0.7	−0.2	–	−0.9
Transfer from other stages	0.2	0.7	0.0	0.9
Change in position including new business	2.8	−0.1	−2.1	0.6
Allocation	2.4	5.0	17.9	25.3
Reversal	−4.3	−9.7	−1.4	−15.4
Utilisation	–	–	−5.9	−5.9
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Changes in the scope of consolidation	–	–	–	–
Exchange rate-related and other changes	0.2	0.3	0.2	0.7
Position as at 31 December 2019	**9.3**	**8.0**	**72.0**	**89.3**
Financial investments				
Position as at 1 January 2019	**2.5**	**3.4**	**–**	**5.9**
Transfer to other stages	−0.0	−0.0	–	−0.0
Transfer from other stages	0.0	0.0	–	0.0
Change in position including new business	0.2	−0.0	–	0.2
Allocation	0.5	1.6	–	2.1
Reversal	−0.3	−0.0	–	−0.3
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	–	–	0.0
Position as at 31 December 2019	**2.9**	**5.0**	**–**	**7.9**

€m	Stage 1	Stage 2	Stage 3	Total
Due from banks				
Position as at 1 January 2018	**0.2**	**0.0**	**–**	**0.2**
Transfer to other stages	–0.0	–	–	–0.0
Transfer from other stages	–	0.0	–	0.0
Change in position including new business	0.1	–	–	0.1
Allocation	0.0	0.0	–	0.0
Reversal	–0.1	–0.0	–	–0.1
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	0.0	–	0.0
Position as at 31 December 2018	**0.2**	**0.0**	**–**	**0.2**
Due from customers				
Position as at 1 January 2018	**8.0**	**19.0**	**95.4**	**122.4**
Transfer to other stages	–0.4	–0.3	–0.0	–0.7
Transfer from other stages	0.3	0.4	–	0.7
Change in position including new business	2.4	–0.2	–4.2	–2.0
Allocation	1.3	2.3	3.9	7.5
Reversal	–3.0	–9.8	–2.2	–15.0
Utilisation	–	–	–24.6	–24.6
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Changes in the scope of consolidation	–	–	–7.9	–7.9
Exchange rate-related and other changes	0.1	0.6	2.9	3.6
Position as at 31 December 2018	**8.7**	**12.0**	**63.3**	**84.0**
Financial investments				
Position as at 1 January 2018	**1.2**	**4.4**	**36.6**	**42.2**
Transfer to other stages	–0.0	–0.0	–	–0.0
Transfer from other stages	0.0	0.0	–	0.0
Change in position including new business	1.0	–	–9.1	–8.1
Allocation	0.6	0.3	0.9	1.8
Reversal	–0.3	–1.3	–	–1.6
Utilisation	–	–	–28.4	–28.4
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	–	–0.0	–
Position as at 31 December 2018	**2.5**	**3.4**	**–**	**5.9**

Risk provisions for financial assets measured at fair value through other comprehensive income

€m	Stage 1	Stage 2	Stage 3	Total
Financial investments				
Position as at 1 January 2019	**1.0**	**–**	**–**	**1.0**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	–0.1	–	–	–0.1
Allocation	0.2	–	–	0.2
Reversal	–0.2	–	–	–0.2
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	–	–	–	–
Position as at 31 December 2019	**0.9**	**–**	**–**	**0.9**

€m	Stage 1	Stage 2	Stage 3	Total
Financial investments				
Position as at 1 January 2018	**1.0**	**–**	**–**	**1.0**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	0.1	–	–	0.1
Allocation	0.2	–	–	0.2
Reversal	–0.3	–	–	–0.3
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	–	–	–	–
Position as at 31 December 2018	**1.0**	**–**	**–**	**1.0**

Provisions for credit risks from off-balance sheet commitments

€m	Stage 1	Stage 2	Stage 3	Total
Loan commitments and financial guarantee contracts				
Position as at 1 January 2019	**0.9**	**0.9**	**0.0**	**1.8**
Transfer to other stages	–0.0	–0.1	–	–0.1
Transfer from other stages	0.1	0.0	–	0.1
Change in position including new business	–0.1	–	–	–0.1
Allocation	0.5	0.0	–	0.5
Reversal	–0.5	–0.8	–	–1.3
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	0.0	–	0.0
Position as at 31 December 2019	**0.9**	**0.0**	**0.0**	**0.9**

€m	Stage 1	Stage 2	Stage 3	Total
Loan commitments and financial guarantee contracts				
Position as at 1 January 2018	**1.7**	**0.1**	**0.3**	**2.1**
Transfer to other stages	–0.0	–	–	–0.0
Transfer from other stages	–	0.0	–	0.0
Change in position including new business	0.1	–0.1	–0.3	–0.3
Allocation	0.3	0.9	0.2	1.4
Reversal	–1.3	–0.0	–0.2	–1.5
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.1	–0.0	0.0	0.1
Position as at 31 December 2018	**0.9**	**0.9**	**0.0**	**1.8**

Movements in the gross carrying values relevant to risk provisions and committed/guaranteed amounts were as follows in 2019:

Gross carrying amount of financial assets measured at amortised cost

€m	Stage 1	Stage 2	Stage 3	Total
Due from banks				
Position as at 1 January 2019	**6,667.3**	**21.6**	**–**	**6,688.9**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	2,239.4	–14.7	–	2,224.7
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	9.5	0.2	–	9.7
Position as at 31 December 2019	**8,916.2**	**7.1**	**–**	**8,923.3**
Due from customers				
Position as at 1 January 2019	**18,086.4**	**673.8**	**157.5**	**18,917.7**
Transfer to other stages	–906.9	–309.6	–	–1,216.5
Transfer from other stages	302.6	849.5	64.4	1,216.5
Change in position including new business	4,182.5	–266.8	–31.7	3,884.0
Derecognition	–	–	–6.0	–6.0
Changes due to non-substantial modifications	–	–	–	–
Change in the scope of consolidation	–	–	–	–
Currency effects	304.8	9.5	2.0	316.3
Position as at 31 December 2019	**21,969.4**	**956.4**	**186.2**	**23,112.0**
Financial investments				
Position as at 1 January 2019	**4,985.2**	**38.7**	**–**	**5,023.9**
Transfer to other stages	–58.4	–2.0	–	–60.4
Transfer from other stages	2.0	58.4	–	60.4
Change in position including new business	305.2	3.6	–	308.8
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	30.9	–	–	30.9
Position as at 31 December 2019	**5,264.9**	**98.7**	**–**	**5,363.6**

€m	Stage 1	Stage 2	Stage 3	Total
Due from banks				
Position as at 1 January 2018	**7,075.7**	**12.0**	**–**	**7,087.7**
Transfer to other stages	–23.0	–	–	–23.0
Transfer from other stages	–	23.0	–	23.0
Change in position including new business	–399.5	–13.4	–	–412.9
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	14.1	–	–	14.1
Position as at 31 December 2018	**6,667.3**	**21.6**	**–**	**6,688.9**
Due from customers				
Position as at 1 January 2018	**15,514.5**	**534.9**	**236.5**	**16,285.9**
Transfer to other stages	–475.0	–253.0	–2.9	–730.9
Transfer from other stages	255.9	475.0	–	730.9
Change in position including new business	2,563.6	–92.6	–48.8	2,422.2
Derecognition	–	–	–24.6	–24.6
Changes due to non-substantial modifications	–	–	–	–
Change in the scope of consolidation	–	–	–11.3	–11.3
Currency effects	227.4	9.5	8.6	245.5
Position as at 31 December 2018	**18,086.4**	**673.8**	**157.5**	**18,917.7**
Financial investments				
Position as at 1 January 2018	**2,870.7**	**470.4**	**46.6**	**3,387.7**
Transfer to other stages	–6.9	–9.7	–	–16.6
Transfer from other stages	9.7	6.9	–	16.6
Change in position including new business	2,100.2	–428.9	–18.2	1,653.1
Derecognition	–	–	–28.4	–28.4
Changes due to non-substantial modifications	–	–	–	–
Currency effects	11.5	–	–	11.5
Position as at 31 December 2018	**4,985.2**	**38.7**	**–**	**5,023.9**

Gross carrying amount of financial assets measured at fair value through other comprehensive income

€m	Stage 1	Stage 2	Stage 3	Total
Financial investments				
Position as at 1 January 2019	**5,705.5**	**–**	**–**	**5,705.5**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	–409.9	–	–	–409.9
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–	–	–	–
Position as at 31 December 2019	**5,295.6**	**–**	**–**	**5,295.6**

€m	Stage 1	Stage 2	Stage 3	Total
Financial investments				
Position as at 1 January 2018	**8,183.4**	**–**	**–**	**8,183.4**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	–2,477.9	–	–	–2,477.9
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–	–	–	–
Position as at 31 December 2018	**5,705.5**	**–**	**–**	**5,705.5**

Gross carrying amount of off-balance sheet commitments

€m	Stage 1	Stage 2	Stage 3	Total
Loan commitments and financial guarantee contracts				
Position as at 1 January 2019	**1,982.0**	**131.3**	**0.0**	**2,113.3**
Transfer to other stages	–21.4	–125.2	–	–146.6
Transfer from other stages	125.2	21.4	–	146.6
Change in position including new business	–72.3	–9.1	–0.0	–81.4
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	18.7	0.0	0.0	18.7
Position as at 31 December 2019	**2,032.2**	**18.4**	**–**	**2,050.6**

€m	Stage 1	Stage 2	Stage 3	Total
Loan commitments and financial guarantee contracts				
Position as at 1 January 2018	**1,389.7**	**3.9**	**3.0**	**1,396.6**
Transfer to other stages	–172.0	–0.0	–0.3	–172.3
Transfer from other stages	0.3	172.0	0.0	172.3
Change in position including new business	738.1	–44.8	–2.8	690.5
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	25.9	0.2	0.1	26.2
Position as at 31 December 2018	**1,982.0**	**131.3**	**0.0**	**2,113.3**

In the 2019 reporting year, no contract values of financial assets that are currently subject to enforcement measures were derecognised.

The expected cash flows for stage 3 assets as at the reporting date result primarily from collateral held and are based on expectations from going concern or gone concern scenarios relating to individual cases.

The following table contains information on the credit quality of financial assets, loan commitments and financial guarantees measured at amortised cost or at fair value through other comprehensive income. The amounts stated for financial assets correspond to the gross carrying values. In the case of loan commitments and financial guarantees, the amounts shown in the table represent the committed or guaranteed amounts.

31 Dec 2019	Rating grades[1]						
€m	1	2 to 5	6 to 8	9 to 10	11 to 15	16 to 18 (Default)	Retail portfolio
Due from banks							
Stage 1	8,907.8	8.3	0.1	0.0	–	–	–
Stage 2	–	7.1	–	–	–	–	–
Stage 3	–	–	–	–	–	–	–
Due from customers							
Stage 1	9,161.8	9,296.4	2,598.3	743.3	155.6	–	14.0
Stage 2	–	–	492.4	318.8	145.2	–	–
Stage 3	–	–	–	–	–	186.2	–
Financial investments							
Stage 1	7,592.5	2,962.1	3.1	2.8	–	–	–
Stage 2	–	73.5	–	–	25.2	–	–
Stage 3	–	–	–	–	–	–	–
Off-balance sheet commitments							
Stage 1	440.8	1,038.7	282.9	25.6	224.2	–	20.0
Stage 2	–	–	18.4	–	–	–	–
Stage 3	–	–	–	–	–	–	–

[1] These are the rating grades according to DSGV master scale.

31 Dec 2018	Rating grades[1]						
€m	1	2 to 5	6 to 8	9 to 10	11 to 15	16 to 18 (Default)	Retail portfolio
Due from banks							
Stage 1	6,586.4	80.8	–	0.1	–	–	–
Stage 2	–	9.6	–	12.0	–	–	–
Stage 3	–	–	–	–	–	–	–
Due from customers							
Stage 1	6,606.2	8,099.4	2,406.3	872.5	90.7	–	11.3
Stage 2	–	144.6	125.0	170.7	233.5	–	–
Stage 3	–	–	–	–	–	157.5	–
Financial investments							
Stage 1	7,948.1	2,736.5	3.1	3.0	–	–	–
Stage 2	–	7.0	3.1	–	28.6	–	–
Stage 3	–	–	–	–	–	–	–
Off-balance sheet commitments							
Stage 1	881.1	475.6	459.1	70.0	70.0	–	26.2
Stage 2	–	–	–	2.0	129.3	–	–
Stage 3	–	–	–	–	–	–	–

[1] These are the rating grades according to DSGV master scale.

As at the balance sheet date, there were no financial assets in the portfolio that were already purchased or originated credit impaired.

During the period, assets whose valuation allowance was measured in the amount of the expected loss over their remaining life were subject to insignificant modifications, with an amortised cost before modification in the amount of €20.5m (previous year: €80.2m). The insignificant modification did not lead to a modification result.

As at 31 December 2019, the portfolio did not include any financial instruments (previous year: one financial instrument with a gross carrying value of €13.4m) for which no valuation allowance was recognised due to collateral.

Key ratios for provisions for loan losses:

%	2019	2018
Reversal/allocation ratio as at reporting date[1]		
(Ratio of net allocation/-reversal to gross carrying values relevant for risk provisions)	–0.03	0.05
Default rate as at reporting date		
(Ratio of defaults to gross carrying values relevant for risk provisions)	0.01	0.13
Average default rate		
(Ratio of defaults on a 5-year average to gross carrying values relevant for risk provisions)	0.28	0.31
Net provisioning ratio as at reporting date		
(Ratio of risk provisions to gross carrying values relevant for risk provisions)	0.22	0.24

[1] Reversal ratio shown without negative leading sign

The calculations of the figures above are based on a gross carrying amount relevant for risk provisioning purposes of €44.7bn (previous year: €38.4bn).

Risk provisions by risk segment:

	Valuation allowances and provisions in the lending and securities business		Defaults[1]		Net allocations to[2]/reversals of valuation allowances and provisions for credit risk	
€m	**31 Dec 2019**	**31 Dec 2018**	**2019**	**2018**	**2019**	**2018**
Customers						
Transport and export finance	72.3	67.9	3.4	19.8	–8.5	1.4
Property risks	7.7	4.8	–0.1	–0.0	–2.7	4.8
Energy and utility infrastructure	8.5	11.9	1.7	–	1.8	4.0
Financial institutions	0.7	0.7	–	–	–0.0	–0.6
Public infrastructure	0.6	0.3	–	–	0.0	0.1
Other	0.4	0.2	0.0	0.2	–0.2	0.2
Total customers	**90.2**	**85.8**	**5.0**	**20.0**	**–9.6**	**9.9**
Banks						
Financial institutions	0.2	0.2	–	–	–0.0	0.0
Other	0.0	0.0	–	–	0.0	–0.0
Total banks	**0.2**	**0.2**	**–**	**–**	**0.0**	**–0.0**
Securities						
Energy and utility infrastructure	3.8	3.3	–	–	–1.6	–0.2
Corporates	3.6	2.2	–	28.4	–0.3	7.5
Financial institutions	1.3	1.2	–	–	–0.0	0.7
Other	0.1	0.2	–	–	0.0	–0.1
Total securities	**8.8**	**6.9**	**–**	**28.4**	**–1.9**	**7.9**
Total	**99.2**	**92.9**	**5.0**	**48.4**	**–11.5**	**17.8**

[1] Includes utilisation, direct write-downs and income on written-down receivables and securities
[2] Negative in the column

48 Financial assets at fair value

Financial assets at fair value mainly comprise bonds and other fixed-interest securities, shares and other non-fixed-interest securities, and receivables. This item also includes the positive market values of derivative financial instruments held for trading and the positive market values of hedging derivatives that are used as hedging instruments but do not meet the requirements of IFRS 9 for hedge accounting (economic hedging derivatives). This item also includes holdings in unconsolidated subsidiaries, joint ventures and associated companies, as well as other equity investments.

€m	31 Dec 2019	31 Dec 2018	Change
Trading portfolio			
Debt securities and other fixed-interest securities	11,837.5	7,477.9	4,359.6
Bonds and debt securities	11,836.5	7,477.9	4,358.7
Money market securities	1.0	–	1.0
Shares and other non fixed-interest securities	3,923.9	1,511.0	2,412.9
Shares	2,265.7	486.7	1,779.0
Units in investment funds	1,658.2	1,024.3	633.9
Positive market values of derivative financial instruments	6,558.2	4,982.7	1,575.5
Positive market values of derivative financial instruments (trading)	6,487.2	4,607.3	1,879.8
Positive market values of derivative financial instruments (economic hedging derivatives)	71.0	375.4	–304.4
Loan receivables	905.5	698.2	207.3
Total – trading portfolio	**23,225.1**	**14,669.8**	8,555.3
Financial assets mandatorily measured at fair value through profit or loss			
Debt securities and other fixed-interest securities	5,227.4	7,890.2	–2,662.8
Bonds and debt securities	5,227.4	7,890.2	–2,662.8
Shares and other non fixed-interest securities	1,354.8	1,421.2	–66.4
Shares	4.2	6.7	–2.5
Units in investment funds	1,350.6	1,414.5	–63.8
Loan receivables	573.6	1,016.8	–443.2
Shareholdings	61.3	47.4	13.9
Equity investments	58.9	44.7	14.3
Shares in affiliated companies	0.6	0.9	–0.3
Holdings in joint ventures	0.0	0.0	–
Shares in associated companies	1.8	1.8	–0.0
Total – financial assets mandatorily measured at fair value through profit or loss	**7,217.1**	**10,375.6**	–3,158.5
Financial assets designated at fair value			
Debt securities and other fixed-interest securities	–	–	–
Bonds and debt securities	–	–	–
Other non fixed-interest securities	–	–	–
Loan receivables	–	–	–
Total – financial assets designated at fair value	**–**	**–**	–
Total	**30,442.2**	**25,045.4**	5,396.8

The following debt securities and other fixed-interest securities, and shares and other non-fixed-interest securities in financial assets measured at fair value, are listed on the stock exchange:

€m	31 Dec 2019	31 Dec 2018	Change
Debt securities and other fixed-interest securities	15,224.6	13,203.4	2,021.2
Shares and other non fixed-interest securities	2,718.2	994.7	1,723.5

49 Positive market values of derivative hedging instruments

The positive market values of hedging instruments that meet the criteria for hedge accounting under can be broken down by underlying hedged transaction as follows:

	31 Dec 2019			31 Dec 2018		
€m	Nominal of the hedging instruments	Carrying amount of the hedging instruments[1]	Valuation result of the hedging instruments for the reporting period[2]	Nominal of the hedging instruments	Carrying amount of the hedging instruments[1]	Valuation result of the hedging instruments for the reporting period[2]
Interest rate fair value hedges						
Financial assets measured at amortised cost						
Due from banks	1,576.5	0.2	–20.3	318.0	0.0	–1.3
Due from customers	5,613.4	11.2	–103.1	1,810.5	13.1	5.7
Financial investments	3,163.1	0.2	–11.4	1,537.0	0.0	–5.0
Financial assets measured at fair value through other comprehensive income						
Financial investments	1,110.0	1.4	–31.4	672.6	0.4	–9.0
Financial liabilities measured at amortised cost						
Due to banks	–	–	–	15.0	0.0	–
Due to customers	–	–	–	19.2	0.0	–1.1
Securitised liabilities	10.0	0.0	–0.1	75.0	0.0	0.1
Subordinated capital	20.0	0.0	1.3	125.0	0.0	1.2
Currency fair value hedges						
Bottom layer financial assets	2,492.4	119.7	29.7	N/A	N/A	N/A
Total	**13,985.4**	**132.7**	**–135.3**	**4,572.3**	**13.5**	**–9.4**

[1] The majority of interest rate swaps designated as hedging instruments are cleared via CCP. The carrying amount of these hedging instruments have been offset against the variation margin received.

[2] Includes the change in fair value of the hedging instruments used for recognising the ineffectiveness for the reporting period.

Only interest rate swaps were designated as hedging instruments for interest rate fair value hedges. Cross-currency swaps are used as hedging instruments for currency fair value hedges.

50 Financial investments

€m	31 Dec 2019	31 Dec 2018	Change
Financial assets measured at amortised cost			
Debt securities and other fixed-interest securities	5,403.0	5,032.8	370.2
Financial assets measured at fair value through other comprehensive income			
Debt securities and other fixed-interest securities	5,336.1	5,751.7	–415.6
Shareholdings			
Shares in equity-accounted companies	16.4	16.4	0.0
Financial investments before risk provisions	**10,755.5**	**10,800.9**	–45.4
Risk provisions for securities (AC)	–7.9	–5.9	2.0
Total	**10,747.6**	**10,795.0**	–47.4

Out of the bonds and other fixed-interest securities recognised under financial assets measured at amortised cost or at fair value through other comprehensive income, the following are listed on the stock exchange:

€m	31 Dec 2019	31 Dec 2018	Change
Debt securities and other fixed-interest securities	9,212.7	9,300.4	–87.7

51 Intangible assets

€m	31 Dec 2019	31 Dec 2018	Change
Purchased goodwill	148.1	148.1	–
Software	25.3	28.0	–2.7
Purchased	19.4	23.3	–3.9
Developed in-house	5.9	4.7	1.2
Other intangible assets	10.3	11.5	–1.2
Total	**183.7**	**187.6**	–3.9

Purchased goodwill includes goodwill arising on the acquisition of Deka Vermögensmanagement GmbH (formerly: Landesbank Berlin Investment GmbH) in the amount of €95.0m. For the purposes of the impairment test performed as at 31 December 2019, this goodwill was still allocated to the Asset Management Securities business division as the cash-generating unit. Purchased goodwill also includes goodwill arising on the acquisition of WestInvest Gesellschaft für Investmentfonds mbH (WestInvest) in the amount of €53.1m. The impairment test was carried out at the level of the Asset Management Real Estate division in the course of normal testing procedures as at 31 December 2019.

The recoverable amount of both cash-generating units, each taken individually, was determined on the basis of the value in use. The discount rate required for the income capitalisation approach used was derived using the capital asset pricing model (CAPM). The expected post-tax cash flows were calculated for a five-year period.

The performance of the Asset Management Securities division's total customer assets under management was identified as a key value driver in its capacity as a cash-generating unit. The forecast was based on national economic data and past empirical values. Business and earnings trends are expected to rise steadily.

The values taken for the perpetual annuity represent the forecast for 2024. The long-term growth rate is 0.50% (previous year: 1.00%). The discount rate was 8.27% (previous year: 8.27%). The value in use established using this approach was higher than the carrying value of the cash-generating unit. As a result, no impairment charge was required. As things currently stand, none of the possible changes in key assumptions used to determine the recoverable amount would result in the carrying value exceeding the value in use of the cash-generating unit.

Internal forecasts based on national economic data and specific competition and market analyses were used for the Asset Management Real Estate division cash-generating unit. Account was taken of past empirical values, particularly with regard to the material value driver, which is the future development of total customer assets. On the basis of planned net sales, the fund business is expected to see a further increase in total customer assets and to consolidate its successful market position over the next three years. This is contingent on the successful completion of planned transactions in the target segments, in which competition remains intense. For the following years 2023 and 2024, lower net inflows of funds and lower performance are expected due to the cyclical nature of sales as a result, among other things, of regulatory or political and economic uncertainties (such as rising interest rates, economic downturn). A perpetual return based on the forecast for 2024 was also taken into account and a long-term growth rate of 0.50% (previous year: 1.00%) was assumed. The discount rate was 5.80% (previous year: 6.91%). The value in use established using this approach was higher than the carrying value of the cash-generating unit. As a result, no impairment charge was required. As things currently stand, none of the possible changes in key assumptions used to determine the recoverable amount would result in the carrying value exceeding the value in use of the cash-generating unit.

Other intangible assets primarily comprise sales partnerships and customer relationships from the acquisition of Deka Vermögensmanagement GmbH (formerly: Landesbank Berlin Investment GmbH).

The following table shows the movement in intangible assets:

€m	Purchased goodwill	Software purchased	Software developed in-house	Other intangible assets	Total
Historical cost					
As at 1 January 2018	238.7	187.2	78.7	50.6	555.2
Additions	–	3.9	3.2	–	7.1
Disposals	–	–	–	–	–
Change in scope of consolidation	–	–	–	–	–
As at 31 December 2018	**238.7**	**191.1**	**81.9**	**50.6**	**562.3**
Additions	–	4.4	3.0	–	7.4
Disposals	–	–	–	20.8	20.8
Change in scope of consolidation	–	–	–	–	–
As at 31 December 2019	**238.7**	**195.5**	**84.9**	**29.8**	**548.9**
Cumulative amortisation/impairment					
As at 1 January 2018	**90.6**	**158.4**	**75.1**	**36.4**	**360.5**
Amortisation/impairment	–	9.4	2.1	2.7	14.2
Disposals	–	–	–	–	–
Change in scope of consolidation	–	–	–	–	–
As at 31 December 2018	**90.6**	**167.8**	**77.2**	**39.1**	**374.7**
Amortisation/impairment	–	8.3	1.8	1.2	11.3
Disposals	–	–	–	20.8	20.8
Change in scope of consolidation	–	–	–	–	–
As at 31 December 2019	**90.6**	**176.1**	**79.0**	**19.5**	**365.2**
Carrying value as at 31 December 2018	**148.1**	**23.3**	**4.7**	**11.5**	**187.6**
Carrying value as at 31 December 2019	**148.1**	**19.4**	**5.9**	**10.3**	**183.7**

52 Property, plant and equipment

€m	31 Dec 2019	31 Dec 2018	Change
Plant and equipment	18.3	20.0	–1.7
Technical equipment and machines	4.0	5.6	–1.6
Right-of-use assets for leases (leasing assets)	156.7	–	156.7
Total	**179.0**	**25.6**	153.4

The movement in property, plant and equipment in the Deka Group was as follows:

	Property, plant and equipment		Property, plant and equipment (leasing assets)			
€m	**Plant and equipment**	**Technical equipment and machines**	**Office properties**	**Motor vehicles**	**Plant and equipment**	**Total**
Historical cost						
As at 1 January 2018	49.1	62.0	–	–	–	111.1
Additions	0.6	1.7	–	–	–	2.3
Disposals	0.1	0.2	–	–	–	0.3
Change in currency translation	0.0	0.0	–	–	–	0.0
As at 31 December 2018	**49.6**	**63.5**	**–**	**–**	**–**	**113.1**
As at 1 January 2019 (IFRS 16)			**185.5**	**4.6**	**1.2**	**191.3**
Additions	0.5	0.7	1.7	3.1	0.2	6.2
Disposals	2.7	2.3	1.0	0.1	–	6.1
Change in currency translation	0.0	0.0	–	–	–	0.0
As at 31 December 2019	**47.4**	**61.9**	**186.2**	**7.6**	**1.4**	**304.5**
Cumulative amortisation/impairment						
As at 1 January 2018	27.6	56.1	–	–	–	83.7
Amortisation/impairment	2.0	2.0	–	–	–	4.0
Disposals	0.0	0.2	–	–	–	0.2
Change in currency translation	−0.0	−0.0	–	–	–	−0.0
As at 31 December 2018	**29.6**	**57.9**	**–**	**–**	**–**	**87.5**
Amortisation/impairment	1.9	2.2	35.6	2.4	0.5	42.6
Disposals	2.4	2.2	–	–	–	4.6
Change in currency translation	−0.0	−0.0	–	–	–	−0.0
As at 31 December 2019	**29.1**	**57.9**	**35.6**	**2.4**	**0.5**	**125.5**
Carrying value as at 31 December 2018	**20.0**	**5.6**	**–**	**–**	**–**	**25.6**
Carrying value as at 31 December 2019	**18.3**	**4.0**	**150.6**	**5.2**	**0.9**	**179.0**

53 Income tax assets

€m	**31 Dec 2019**	**31 Dec 2018**	Change
Current income tax assets	171.6	195.2	−23.6
Deferred income tax assets	300.4	202.5	97.9
Total	**472.0**	**397.7**	74.3

Deferred income tax assets represent the potential income tax relief arising from temporary differences between the values of assets and liabilities in the IFRS balance sheet and the tax balance sheet.

In the year under review, deferred tax assets included €5.4m in relation to tax loss carry-forwards at two Group companies (previous year: €4.8m).

Deferred tax assets were recognised in relation to the following line items:

€m	31 Dec 2019	31 Dec 2018	Change
Asset items			
Due from customers	0.0	1.0	–1.0
Financial assets at fair value	0.4	1.5	–1.1
Intangible assets	72.2	13.4	58.8
Other assets	2.2	3.2	–1.0
Liability items			
Due to banks	6.9	9.2	–2.3
Due to customers	41.0	47.4	–6.4
Securitised liabilities	–	0.6	–0.6
Financial liabilities at fair value	232.8	212.0	20.8
Negative market values of derivative hedging instruments	120.1	12.5	107.6
Provisions	175.8	148.0	27.8
Other liabilities	52.2	2.7	49.5
Subordinated capital	1.9	1.1	0.8
Loss carryforwards	**5.4**	**4.8**	0.6
Sub-total	**710.9**	**457.4**	253.5
Netting	–410.5	–254.9	–155.6
Total	**300.4**	**202.5**	97.9

Reported deferred tax assets include €223.7m (previous year: €167.7m) that are medium or long-term in nature.

The increase in deferred tax assets in connection with intangible assets is related to a restructuring measure in Luxembourg. This resulted in the realisation of profits in the amount of the purchasing price at the level of the transferring companies (actual tax expense) and the capitalisation of amortisable intangible assets (€63.9m in deferred income tax assets as at the balance sheet date) at the acquiring companies.

The increase in deferred tax assets under other liabilities is the result of the change in lease accounting in accordance with IFRS 16 with effect from 1 January 2019.

As at the balance sheet date, four Group companies had unrecognised loss carryforwards of €1.4m (previous year: two companies with unrecognised losses of €0.6m). There were still no other temporary differences for which deferred tax assets have not been recognised.

The netting of deferred tax assets and liabilities relates mainly to short-term deferred taxes arising from temporary differences in connection with financial assets and liabilities at fair value.

As in the previous year, there were no outside basis differences as at the reporting date that would have led to the recognition of deferred tax assets.

Deferred income tax assets amounting to €83.0m in connection with provisions for pensions (previous year: €62.3m) were offset against equity. In addition, deferred tax assets of €1.1m for creditworthiness-related fair value changes to financial liabilities designated at fair value were offset against equity (previous year: €2.8m).

54 Other assets

€m	31 Dec 2019	31 Dec 2018	Change
Amounts due from investment funds	163.7	131.4	32.3
Amounts due from non-banking business	11.5	14.7	–3.2
Amounts due or refunds from other taxes	0.7	0.4	0.2
Other miscellaneous assets	141.4	108.3	33.1
Prepaid expenses	31.0	29.0	2.0
Total	**348.2**	**283.8**	64.4

Other assets include €263.4 thousand (previous year: €45.6 thousand) that are of a medium or long-term nature.

55 Due to banks

Amounts due to banks can be broken down by business type as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Overdrafts	470.7	523.7	–53.0
Daily and time deposits	10,386.7	12,384.3	–1,997.6
Promissory note loans and registered bonds	2,882.7	2,532.1	350.6
Collateralised registered bonds and promissory note loans	74.0	67.3	6.7
Unsecured registered bonds and promissory note loans	2,808.7	2,464.8	343.9
Genuine repurchase agreements and collateralised securities lending transactions	3,613.3	7,404.8	–3,791.5
Borrowings	195.4	104.9	90.5
Total	**17,548.8**	**22,949.8**	–5,401.0

The regional breakdown of amounts due to banks is as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Domestic banks	10,915.5	13,285.7	–2,370.2
Foreign banks	6,633.3	9,664.1	–3,030.8
Total	**17,548.8**	**22,949.8**	–5,401.0

56 Due to customers

Amounts due to customers can be broken down by business type as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Overdrafts	12,507.6	13,506.4	–998.8
Daily and time deposits	8,197.1	8,163.9	33.2
Promissory note loans and registered bonds	2,165.6	2,332.6	–167.0
Collateralised registered bonds and promissory note loans	736.4	1,074.3	–337.9
Unsecured registered bonds and promissory note loans	1,429.2	1,258.3	170.9
Genuine repurchase agreements and collateralised securities lending transactions	200.6	1,092.7	–892.1
Borrowings	628.7	627.6	1.1
Total	**23,699.6**	**25,723.2**	–2,023.6

The regional breakdown of amounts due to banks is as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Domestic customers	19,685.2	19,373.2	312.0
Foreign customers	4,014.4	6,350.0	–2,335.6
Total	**23,699.6**	**25,723.2**	–2,023.6

57 Securitised liabilities

Securitised liabilities include bonds and other liabilities for which transferable certificates are issued. Own bonds held by the Deka Group with a nominal amount of €219.5m (previous year: €208.7m) were deducted from the issued bonds.

€m	31 Dec 2019	31 Dec 2018	Change
Uncovered debt securities issued	5,521.1	4,840.9	680.2
Covered debt securities issued	1,509.1	724.8	784.3
Money market securities issued	10,721.9	9,225.0	1,496.9
Total	**17,752.1**	**14,790.7**	2,961.4

58 Financial liabilities at fair value

Financial liabilities at fair value comprise trading issues and liabilities designated at fair value. This item also includes the negative market values of derivative financial instruments held for trading and the negative market values of hedging derivatives that are used as hedging instruments but do not meet the requirements of IFRS 9 for hedge accounting (economic hedging derivatives). Securities short portfolios are also reported in this line item.

€m	31 Dec 2019	31 Dec 2018	Change
Trading portfolio			
Trading issues	21,896.6	20,348.7	1,547.9
Securities short portfolios	1,096.1	1,696.1	–600.0
Negative market values of derivative financial instruments (trading)	5,885.8	5,407.4	478.4
Negative market values of derivative financial instruments (economic hedging derivatives)	114.5	375.6	–261.1
Total – trading portfolio	**28,993.0**	**27,827.8**	1,165.2
Financial liabilities designated at fair value			
Issues	909.9	1,479.1	–569.2
Total – financial liabilities designated at fair value	**909.9**	**1,479.1**	–569.2
Total	**29,902.9**	**29,306.9**	596.0

Issues are broken down by product type as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Trading portfolio			
Uncovered trading issues			
Bearer bonds issued	18,148.6	16,780.2	1,368.4
Registered bonds issued	1,461.7	1,324.2	137.5
Promissory notes raised	2,286.3	2,244.3	42.0
Total	**21,896.6**	**20,348.7**	1,547.9
Financial liabilities designated at fair value			
Uncovered issues			
Bearer bonds issued	–	230.1	–230.1
Registered bonds issued	200.7	262.3	–61.6
Promissory notes raised	125.8	162.6	–36.7
Covered issues	583.4	824.1	–240.7
Total	**909.9**	**1,479.1**	–569.2

The fair value of issues in the designated at fair value category (fair value option) includes cumulative creditworthiness-related changes in value amounting to €3.6m (previous year: €8.8m) that are recognised in other comprehensive income.

The carrying amount of liabilities whose creditworthiness-related changes in value are recognised in other comprehensive income is €94.4m (previous year: €144.8m) higher than the repayment amount.

59 Negative market values of derivative hedging instruments

The negative market values of hedging instruments that meet the criteria for hedge accounting under can be broken down by underlying hedged transaction as follows:

	31 Dec 2019			31 Dec 2018		
€m	Nominal of the hedging instruments	Carrying amount of the hedging instruments[1]	Valuation result of the hedging instruments for the reporting period[2]	Nominal of the hedging instruments	Carrying amount of the hedging instruments[1]	Valuation result of the hedging instruments for the reporting period[2]
Interest rate fair value hedges						
Financial assets measured at amortised cost						
Due from banks	75.0	0.0	–3.7	1,078.1	0.9	–11.5
Due from customers	1,380.9	35.2	–30.0	3,217.0	38.2	–21.6
Financial investments	27.5	0.0	1.1	144.2	0.1	–0.4
Financial assets measured at fair value through other comprehensive income						
Financial investments	63.5	0.0	0.3	1,458.6	0.1	–13.4
Financial liabilities measured at amortised cost						
Due to banks	282.6	0.0	–1.5	145.0	0.0	0.0
Due to customers	39.6	0.0	–0.2	171.5	0.0	–6.1
Securitised liabilities	993.8	0.1	–6.6	298.8	0.0	1.4
Subordinated capital	145.0	0.0	–1.5	–	–	–
Currency fair value hedges						
Bottom layer financial assets	9,067.0	333.1	112.1	N/A	N/A	N/A
Total	**12,074.9**	**368.5**	**70.0**	**6,513.2**	**39.3**	**–51.6**

[1] The majority of interest rate swaps designated as hedging instruments are cleared via CCP. The carrying amount of these hedging instruments have been offset against the variation margin paid.
[2] Includes the change in fair value of the hedging instruments used for recognising the ineffectiveness for the reporting period.

Only interest rate swaps were designated as hedging instruments for interest rate fair value hedges. Cross-currency swaps are used as hedging instruments for currency fair value hedges.

60 Provisions for pensions and similar commitments

The following table shows the movement in provisions:

€m	Provisions for pensions	Provisions for similar commitments[1]	Total
As at 1 January 2018	**159.4**	**23.4**	**182.8**
Allocation	32.6	4.6	37.2
Utilisation	13.1	5.9	19.0
Reclassifications	–	3.4	3.4
Change in plan assets	–11.3	–1.6	–12.9
Revaluations recognised in other comprehensive income	30.7	–	30.7
As at 31 December 2018	**198.3**	**23.9**	**222.2**
Allocation	30.9	3.6	34.5
Utilisation	15.5	5.3	20.8
Reclassifications	–	3.5	3.5
Change in plan assets	–9.2	–1.4	–10.6
Revaluations recognised in other comprehensive income	38.6	–	38.6
Reclassification due to net asset	0.5	–	0.5
As at 31 December 2019	**243.6**	**24.3**	**267.9**

[1] Including provision for working hours accounts

The present value of the obligations can be reconciled to the provision on the balance sheet as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Present value of fully or partially funded defined benefit obligations	900.3	765.6	134.7
Fair value of plan assets at reporting date	698.3	599.0	99.3
Funding status	**202.0**	**166.6**	35.4
Present value of unfunded defined benefit obligations	65.4	55.6	9.8
Reclassification due to net asset	0.5	–	0.5
Provisions for pensions	**267.9**	**222.2**	45.7

The movement in the net liability was as follows:

	Defined benefit obligations		Fair value of plan assets		Net obligation/ (net asset)	
€m	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
As at 1 January	**821.2**	**795.1**	**599.0**	**612.3**	**222.2**	**182.8**
Current service cost	27.0	29.4	–	–	27.0	29.4
Interest expense or income	15.2	14.8	11.3	11.6	3.9	3.2
Other pension expenses	3.6	4.6	–	–	3.6	4.6
Pension expenses (recognised in profit or loss)	**45.8**	**48.8**	**11.3**	**11.6**	**34.5**	**37.2**
Actuarial gains/losses from:						
Financial assumptions	108.8	–	–	–	108.8	–
Demographic assumptions	0.2	4.8	–	–	0.2	4.8
Experience adjustment	7.0	–11.9	–	–	7.0	–11.9
Income from plan assets excluding interest income	–	–	77.4	–37.8	–77.4	37.8
Revaluation gains/losses (recognised in other comprehensive income)	**116.0**	**–7.1**	**77.4**	**–37.8**	**38.6**	**30.7**
Transfers	3.5	3.4	–	–	3.5	3.4
Employer contributions	–	–	5.6	5.8	–5.6	–5.8
Employee contributions	–	–	7.4	7.8	–7.4	–7.8
Benefits paid	–20.8	–19.0	–2.4	–0.7	–18.4	–18.3
Other changes	–	–	–	–	0.5	–
As at 31 December	**965.7**	**821.2**	**698.3**	**599.0**	**267.9**	**222.2**
Comprising:						
Final salary plans and general contribution schemes	575.8	499.2	390.5	366.6	185.3	117.6
Unit-linked defined contribution plans	355.9	289.9	298.0	224.0	57.9	41.8

The present value of the defined benefit obligation was calculated using the Heubeck 2018 G mortality tables based on the following actuarial parameters:

%	**31 Dec 2019**	**31 Dec 2018**	Change
Actuarial interest rate	1.1	1.9	–0.8
Pension trend for adjustments according to Section 16(2) Company Pension Funds Act (BetrAVG)[1]	1.8	1.8	–
Pension adjustment with overall trend updating[1]	2.3	2.3	–
Salary trend[1]	2.5	2.5	–

[1] Not relevant for the valuation of unit-linked pension commitments as these are not dependent on final salary

For non-vested projected benefits, staff turnover profiles published by Heubeck-Richttafeln-GmbH are also used in the calculation with a level parameter of 1.5. The discount factor for similar commitments was –0.56% (previous year: –0.28%). This rate takes account of the shorter time to maturity compared to pension commitments as well as the rate of adjustment in early retirement and transitional payments not shown separately.

The sensitivity analysis presented below shows how a change in significant actuarial assumptions can affect the defined benefit obligation (DBO). This analysis considers the change in one assumption, leaving the other assumptions unchanged relative to the original calculation. This means that potential correlation effects between the individual assumptions are disregarded. The sensitivity analysis only applies to the present value of the DBO and not to the net obligation, as the latter is determined by a number of factors including both the actuarial assumptions and the fair value of the plan assets.

	Change in actuarial assumptions	Effect on defined benefit obligations	
€m		**31 Dec 2019**	**31 Dec 2018**
Actuarial interest rate	Increase of 1.0 percentage points	– 132.8	– 115.1
	Reduction of 1.0 percentage points	174.0	147.3
Salary trend	Increase of 0.25 percentage points	6.5	5.8
	Reduction of 0.25 percentage points	– 6.2	– 5.5
Pension trend	Increase of 0.25 percentage points	19.7	16.2
	Reduction of 0.25 percentage points	– 18.7	– 15.4
Life expectancy	Extended by 1 year	30.0	23.6

At the balance sheet date, plan assets were as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Mutual funds	307.1	231.7	75.4
Equity funds	284.8	211.9	72.9
Bond funds	2.2	2.0	0.2
Mixed funds	10.4	9.5	0.9
Near-money-market funds	9.7	8.3	1.4
Special funds	390.7	366.6	24.1
Insurance contracts	0.5	0.7	– 0.2
Total	**698.3**	**599.0**	99.3

Apart from insurance contracts, the plan assets consist of assets for which quoted market prices are available on an active market. As at 31 December 2019, the plan assets included €697.8m of the Deka Group's own investment funds (previous year: €598.3m). They did not include properties used by the Deka Group or other assets.

The units in mutual funds are used to finance unit-linked commitments and working hours accounts. For obligations under final salary plans and general contribution schemes, investments have been made in a special fund whose investment strategy is based on an integrated asset-liability approach. Insurance contracts relate mainly to term life assurance policies. The risks associated with defined benefit obligations include not only the usual actuarial risks, such as longevity risk and interest-rate risk, but also risks in connection with the plan assets. In particular, the plan assets may be subject to market price risks.

Income from the plan assets is assumed to match the actuarial interest rate, which is determined on the basis of corporate bonds with a credit rating of at least AA. If the actual return on the plan assets falls below the actuarial interest rate applied, the net obligation arising from the defined benefit commitments is increased. However, in view of the composition of the plan assets, it is assumed that the actual return over the medium to long term will exceed the yield on good-quality corporate bonds.

The amount of the net obligation is also affected in particular by the actuarial interest rate. The current very low level of interest rates leads to a relatively high net obligation. A further decline in corporate bond yields would lead to a further increase in the defined benefit obligations, which may only be partially offset by the positive performance of the plan assets.

The weighted average maturity of the defined benefit pension obligations was 15.8 years as at the balance sheet date (previous year: 16.1 years).

The present value of the defined benefit obligations is made up as follows:

€m	**31 Dec 2019**	**31 Dec 2018**	Change
Current scheme members	523.8	439.0	84.8
Former scheme members	207.7	178.8	28.9
Pensioners and surviving dependents	234.2	203.4	30.8
Present value of defined benefit obligation	**965.7**	**821.2**	144.5

For the 2020 financial year it is expected that contributions amounting to €13.0m (previous year: €13.6m) will have to be allocated to the defined benefit schemes.

61 Other provisions

€m	**31 Dec 2019**	**31 Dec 2018**	Change
Provisions in investment funds business	58.5	66.6	–8.1
Provisions for restructuring measures	42.3	18.4	23.9
Provisions for legal risks	13.1	26.6	–13.5
Provisions for credit risks	0.9	1.8	–0.9
Provisions in human resources	0.6	2.7	–2.1
Provisions for operational risks	0.4	0.6	–0.2
Sundry other provisions	144.2	9.5	134.7
Total	**260.0**	**126.2**	133.8

Provisions in investment funds business are created, among other things, for funds with formal guarantees and targeted returns, as described below.

The Deka Group's range of products includes investment funds with guarantees of various types. Upon maturity of the fund or at the end of the investment period, the investment management company guarantees that the investor will receive either the capital originally invested or the unit value at the start of that investment period. The amount of the provision is the forecast shortfall at the guarantee date, which is the difference between the expected unit value and the unit value guaranteed. As at the balance sheet date, provisions of €11.2m (previous year: €2.9m) had been made based on the performance of the relevant funds. As at the reporting date, the guarantees covered a maximum total volume of €2.3bn (previous year: €3.1bn) as at the respective guarantee dates. The market value of the relevant funds totalled €2.7bn (previous year: €3.2bn). This includes funds with a forecast return performance, as described below, which had a volume of €0.3bn (previous year: €1.4bn).

Investment funds whose return is forecast and published on the basis of current money market rates set by the Group exist in two varieties: with or without a capital guarantee. The level of the provision is determined using potential loss scenarios taking account of the risks related to liquidity, interest rate and spreads. As at the reporting date, provisions of €16.7m (previous year: €21.0m) had been created. The underlying total value of the funds was €1.5bn (previous year: €2.8bn), of which €0.3bn (previous year: €1.4bn) related to funds with a capital guarantee and €1.2bn (previous year: €1.4bn) to funds without a capital guarantee.

For the fund-based *Riester* products offered as private pension schemes, DekaBank provides a capital guarantee at the beginning of the disbursement phase, for which a provision of €19.2m (previous year: €31.5m) was recognised. The potential obligations under fund-based pension products total €4.3bn (previous year: €3.7bn). The market values of the fund-based pension products amount to €5.9bn (previous year: €4.4bn).

Restructuring provisions result from various restructuring activities within the Deka Group. The increase in restructuring provisions is mainly due to the strategic cost initiative. The previous year's figure included, in particular, provisions for restructuring expenses from the strategic reorganisation of DekaBank Deutsche Girozentrale Luxembourg S.A., which were, however, largely utilised or reversed in the 2019 reporting year.

Provisions for legal and operational risks are established for potential losses that could result from the use of inadequate internal processes and systems or their failure, as well as from human error and external events. The provisions mainly relate to human resources-related legal risks. Operational risks can lead to claims from customers, counterparties and supervisory authorities or to legal action.

Provisions for credit risks are provisions set up for expected losses from loan commitments, guarantees and sureties (see note [47] "Risk provisions in the lending and securities business").

The sundry other provisions were established in respect of liabilities arising from a range of issues. The increase in other provisions is mainly due to a one-off effect of €140.0m resulting from measures to strengthen the capital for a company in the equity investment portfolio.

The movement in other provisions is as follows:

€m	Opening balance 1 Jan 2019	Allocation	Utili-sations	Reversal	Reclassi-fications	Changes in the scope of consoli-dation	Accrued interest	Currency effects	Closing balance 31 Dec 2019
Provisions in investment funds business	66.6	27.6	6.2	29.5	–	–	–0.0	–	58.5
Provisions for legal risks	26.6	4.1	8.5	9.6	0.5	–	–	–	13.1
Provisions for restructuring measures	18.4	41.6	12.3	4.4	–1.0	–	–	–	42.3
Provisions for credit risks[1)]	1.8	0.6	–	1.5	–	–	–0.0	0.0	0.9
Provisions for operational risks	0.6	0.2	–	0.7	0.3	–	–	–	0.4
Provisions in human resources	2.7	1.8	0.5	0.9	–2.5	–	–	–	0.6
Sundry other provisions	9.5	140.3	3.5	0.0	–0.8	–1.3	–	0.0	144.2
Other provisions	**126.2**	**216.2**	**31.0**	**46.6**	**–3.5**	**–1.3**	**–0.0**	**0.0**	**260.0**

Some of the provisions for restructuring measures are reclassified as provisions for pensions and similar commitments in the subsequent year, in accordance with their underlying nature.

Other provisions include €144.7m (previous year: €62.9m) that are of a medium or long-term nature.

62 Income tax liabilities

€m	31 Dec 2019	31 Dec 2018	Change
Provisions for income taxes	3.6	37.8	–34.2
Current income tax liabilities	71.9	24.4	47.5
Deferred income tax liabilities	4.4	33.6	–29.2
Total	**79.9**	**95.8**	–15.9

Provisions for income taxes relate to corporation tax, the solidarity surcharge and trade tax. The provisions for income taxes reported are of a short-term nature (previous year: €5.3m that were medium or long-term in nature).

Current income tax liabilities include payments for income taxes from the reporting year and earlier periods that were due but had not yet been paid as at the reporting date. Deferred income tax liabilities represent the potential income tax charges from temporary differences between the values of assets and liabilities on the IFRS balance sheet and the tax balance sheet.

Deferred tax liabilities were recognised in relation to the following line items on the balance sheet:

€m	31 Dec 2019	31 Dec 2018	Change
Asset items			
Due from banks	10.2	0.5	9.7
Due from customers	49.7	11.2	38.5
Financial assets at fair value	271.2	244.5	26.7
Positive market values of derivative hedging instruments	11.1	19.5	–8.4
Financial investments	20.0	9.2	10.8
Shares in equity-accounted companies	0.1	0.1	0.0
Intangible assets	3.1	3.4	–0.3
Property, plant and equipment	47.8	–	47.8
Liability items			
Securitised liabilities	1.6	–	1.6
Provisions	0.1	–	0.1
Other liabilities	–	0.1	–0.1
Sub-total	**414.9**	**288.5**	126.4
Netting	–410.5	–254.9	–155.6
Total	**4.4**	**33.6**	–29.2

Reported deferred tax liabilities include €3.5m (previous year: €32.6m) that are of a short-term nature.

The netting of deferred tax assets and liabilities relates mainly to short-term deferred taxes arising from temporary differences in connection with financial assets and liabilities at fair value.

The increase in deferred tax liabilities for property, plant and equipment is due to the change in lease accounting (IFRS 16) as of 1 January 2019.

As at the reporting date, temporary differences existed in connection with outside basis differences at consolidated subsidiaries amounting to €673.2m (previous year: €418.7m), resulting in imputed deferred tax liabilities of €10.7m (previous year: €6.7m). In accordance with IAS 12.39, these have not been recognised on the balance sheet.

In the year under review, deferred income tax liabilities of €3.7m had to be recognised in connection with the fair value measurement of financial assets in other comprehensive income (previous year: €8.7m). A further €0.3m had to be recognised for risk provisions in connection with the fair value measurement of financial assets in other comprehensive income (previous year: €0.3m). In the year under review, deferred income tax liabilities of €0.8m also had to be recognised in connection with the currency fair value hedges in other comprehensive income.

63 Other liabilities

The breakdown of other liabilities is as follows:

€m	31 Dec 2019	31 Dec 2018	Change
Liabilities			
Liabilities from leasing transactions	162.1	–	162.1
Commissions not yet paid to sales offices	137.7	105.1	32.6
Shares of profit attributable to atypical silent partners	79.1	96.5	–17.4
Liabilities from current other taxes	34.4	22.0	12.4
Debt capital from minority interests	0.7	0.7	–
Unsettled securities spot deals	–	0.1	–0.1
Liabilities from non-banking transactions	0.0	0.0	–0.0
Other	75.1	98.4	–23.3
Accruals			
Sales performance compensation	327.3	287.9	39.4
Personnel costs	131.0	134.1	–3.1
Year-end audit and other audit costs	7.9	7.5	0.4
Other accruals	58.7	64.7	–6.0
Prepaid expenses	0.1	3.1	–3.0
Total	**1,014.1**	**820.1**	194.0

DekaBank offsets the share of profit attributable to atypical silent partners against the taxes already deducted for the benefit of the owners. As at the reporting date, the profit shares were €79.1m (previous year: €96.5m) higher than the taxes paid.

Debt capital from minority interests essentially comprises the minority interests in consolidated investment funds. This is presented under other liabilities, since the unit holders have a redemption right at any time.

Other liabilities (excluding leases) include €3.9m (previous year: €8.6m) that are of a medium or long-term nature.

Leases are broken down by residual term as follows:

€m	31 Dec 2019	31 Dec 2018[1]
Up to 1 year	40.2	43.6
Between 1 and 5 years	113.7	138.6
More than 5 years	12.3	27.4
Total	**166.2**	**209.6**

[1] Minimum lease payments according to IAS 17

64 Subordinated capital

€m	31 Dec 2019	31 Dec 2018	Change
Subordinated bearer bonds	186.2	186.6	–0.4
Subordinated promissory note loans	94.7	170.3	–75.6
Other subordinated liabilities	525.0	521.6	3.4
Prorated interest on subordinated liabilities	18.4	20.9	–2.5
Total	**824.3**	**899.4**	–75.1

There are no agreements or plans to convert these funds into capital or another form of debt. There is no early repayment obligation.

65 Atypical silent capital contributions

Atypical silent capital contributions amounted to €52.4m (previous year: €52.4m). The distribution on atypical silent capital contributions in the year under review was €46.3m (previous year: €53.0m).

66 Equity

€m	31 Dec 2019	31 Dec 2018	Change
Subscribed capital	286.3	286.3	–
Own shares (deduction)	94.6	94.6	–
Additional capital components (AT1 bonds)	473.6	473.6	–
Capital reserve	190.3	190.3	–
Retained earnings	4,733.3	4,614.1	119.2
Statutory reserve	6.4	6.4	–
Reserves required by the Bank’s statutes	–	51.3	–51.3
Other reserves from retained earnings	4,726.9	4,556.4	170.5
Revaluation reserve	–132.6	–115.4	–17.2
For provisions for pensions	–223.4	–184.8	–38.6
For foreign currency basis spreads of hedging derivatives	2.5	–	2.5
For equity-accounted companies	–	–6.6	6.6
For financial assets measured at fair value through other comprehensive income	12.5	28.7	–16.2
For own credit risk of financial liabilities designated at fair value	–3.6	–8.8	5.2
Deferred taxes	79.4	56.1	23.3
Currency translation reserve	0.1	0.0	0.1
Accumulated profit/loss (consolidated profit)	55.1	63.3	–8.2
Total	**5,511.5**	**5,417.6**	93.9

Notes on financial instruments

67 Result by measurement category

The individual measurement categories resulted in the following contributions to net results:

€m	2019	2018	Change
Financial assets and liabilities measured at fair value through profit or loss	– 2.7	– 7.9	– 5.2
Trading portfolio	– 149.6	39.2	188.8
Financial assets mandatorily measured at fair value through profit or loss	157.1	– 37.1	– 194.2
Financial assets designated at fair value	–	–	–
Financial liabilities designated at fair value	– 10.2	– 9.9	0.3
thereof: amounts recognised in profit or loss	– 15.4	– 13.7	1.7
thereof: amounts recognised in other comprehensive income (OCI)	5.2	3.8	– 1.4
Financial assets measured at fair value through other comprehensive income	1.8	– 39.2	– 41.0
thereof: amounts transferred to profit or loss due to derecognition	3.9	48.7	44.8
thereof: amounts recognised in other comprehensive income (OCI)	– 16.2	– 106.8	– 90.6
Financial assets measured at amortised cost	589.5	533.3	– 56.2
Financial liabilities measured at amortised cost	– 200.1	– 205.3	– 5.2
Profit or loss from fair value hedges	– 8.7	– 0.3	8.4
thereof: amounts recognised in profit or loss	– 11.2	– 0.3	10.9
thereof: amounts recognised in other comprehensive income (OCI)	2.5	–	– 2.5
thereof: amounts transferred to profit or loss due to derecognition	–	–	–

Income and expense contributions are presented in line with their allocation to measurement categories in accordance with IFRS 9. All earnings components, i.e. sale and valuation results, as well as interest, current income and commission are included. The net income from equity-accounted companies is excluded. Net interest income for hedge derivatives (hedge accounting) is also excluded for the first time. Prior-year figures have been adjusted accordingly for better comparability.

As in the previous year, no reclassifications were made in the year under review.

68 Fair value disclosures

The carrying values and fair values of financial assets and financial liabilities are divided among the measurement categories and classes of financial instruments as shown in the following table.

	31 Dec 2019		31 Dec 2018	
€m	**Fair value**	**Carrying value**	**Fair value**	**Carrying value**
Assets				
Financial assets measured at amortised cost				
Cash reserves	3,826.9	3,826.9	15,302.5	15,302.5
Due from banks	22,602.9	22,581.2	24,068.9	23,972.6
Due from customers	28,712.8	28,368.5	24,266.6	24,419.9
Financial investments	5,567.0	5,395.1	4,988.6	5,026.9
Other assets	178.4	178.4	146.3	146.3
Financial assets measured at fair value through other comprehensive income				
Financial investments	5,336.1	5,336.1	5,751.7	5,751.7
Financial assets measured at fair value through profit or loss				
Trading portfolio				
Financial assets at fair value	23,225.1	23,225.1	14,669.8	14,669.8
Financial assets mandatorily measured at fair value through profit or loss				
Financial assets at fair value	7,217.1	7,217.1	10,375.6	10,375.6
Other assets	8.8	8.8	26.9	26.9
Positive market values of derivative hedging instruments	132.7	132.7	13.5	13.5
Total asset items	**96,807.8**	**96,269.9**	**99,610.4**	**99,705.7**
Liabilities				
Financial liabilities measured at amortised cost				
Due to banks	17,623.7	17,548.8	23,056.0	22,949.8
Due to customers	23,890.8	23,699.6	25,903.7	25,723.2
Securitised liabilities	17,800.7	17,752.1	14,848.0	14,790.7
Subordinated capital	916.5	824.3	981.6	899.4
Other liabilities	359.6	359.6	174.0	174.0
Financial liabilities measured at fair value through profit or loss				
Trading portfolio				
Financial liabilities at fair value	28,993.0	28,993.0	27,827.8	27,827.8
Other liabilities	4.7	4.7	1.7	1.7
Financial liabilities designated at fair value				
Financial liabilities at fair value	909.9	909.9	1,479.1	1,479.1
Negative market values of derivative hedging instruments	368.5	368.5	39.3	39.3
Total liability items	**90,867.4**	**90,460.5**	**94,311.2**	**93,885.0**

For financial instruments due on demand or short-term financial instruments, fair value is the amount payable as at the reporting date. The carrying value therefore represents a reasonable approximation to the fair value. These include, *inter alia*, the cash reserve, overdraft facilities and demand deposits due from or owed to banks and customers, and financial instruments included in other assets or other liabilities. In the following description of the fair value hierarchy, financial assets amounting to €4,753.6m (previous year: €16,465.9m) and financial liabilities amounting to €13,342.8m (previous year: €14,211.4m) are not allocated to any level of the fair value hierarchy.

Fair value hierarchy

Financial instruments carried at fair value on the balance sheet, as well as financial instruments that are not measured at fair value but whose fair value must be stated, must be allocated to the following three fair value hierarchy levels specified in IFRS 13, depending on the input factors influencing their valuation:

Level 1 (Prices quoted in active markets): Financial instruments whose fair value can be derived directly from prices on active, liquid markets are allocated to this level.

Level 2 (Valuation method based on observable market data): Financial instruments whose fair value can be determined either from similar financial instruments traded on active and liquid markets, from similar or identical financial instruments traded on less liquid markets, or based on valuation methods with directly or indirectly observable input factors, are allocated to this level.

Level 3 (Valuation method not based on observable market data): Financial instruments whose fair value is determined based on valuation models using, among other things, input factors not observable in the market, provided they are significant for the valuation, are allocated to this level.

The tables below show the fair values of the financial instruments recognised on the balance sheet, according to their level in the fair value hierarchy.

	Prices listed on active markets (level 1)		Valuation method based on observable market data (level 2)		Valuation method not based on observable market data (level 3)	
€m	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018
Financial assets measured at fair value through profit or loss						
Debt securities, other fixed-interest securities and loan receivables	7,921.7	6,007.8	7,792.0	6,767.7	2,830.3	4,307.6
Shares and other non fixed-interest securities	5,228.6	2,880.5	50.1	51.7	–	–
Derivative financial instruments	119.8	83.4	6,077.0	4,791.5	361.4	107.8
Interest-rate-related derivatives	0.1	0.1	5,440.0	4,230.1	345.3	61.5
Currency-related derivatives	–	–	200.0	119.7	–	–
Share and other price-related derivatives	119.6	83.3	437.0	441.7	16.1	46.3
Shareholdings	–	–	–	–	61.3	47.4
Positive market values of derivative hedging instruments	–	–	132.6	13.5	0.1	–
Financial assets measured at fair value through other comprehensive income						
Debt securities and other fixed-interest securities	2,193.5	2,368.2	3,142.5	3,383.5	–	–
Shares and other non fixed-interest securities	–	–	–	–	–	–
Financial assets measured at amortised cost						
Due from banks	–	–	19,052.1	20,169.2	3,225.1	3,548.1
Thereof: assets from genuine re-purchase agreements and collateralised securities lending transactions	–	–	10,870.0	15,711.4	–	–
Due from customers	–	–	6,080.2	5,768.2	22,218.9	17,859.8
Thereof: assets from genuine re-purchase agreements and collateralised securities lending transactions	–	–	4,523.1	4,634.7	–	–
Debt securities and other fixed-interest securities	2,996.7	2,606.3	2,239.8	1,478.0	330.5	904.3
Total	**18,460.3**	**13,946.2**	**44,566.3**	**42,423.3**	**29,027.6**	**26,775.0**

€m	Prices listed on active markets (level 1)		Valuation method based on observable market data (level 2)		Valuation method not based on observable market data (level 3)	
	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018
Financial liabilities measured at fair value through profit or loss						
Securities short portfolios	825.6	1,264.3	270.4	431.2	–	0.6
Derivative financial instruments	116.4	190.8	5,507.8	5,403.5	376.0	188.7
Interest-rate-related derivatives	–	–	4,460.7	3,899.8	276.7	159.0
Currency-related derivatives	–	–	172.1	113.9	–	–
Share and other price-related derivatives	116.4	190.8	875.0	1,389.8	99.3	29.7
Issues	–	–	18,629.5	19,493.4	4,177.0	2,334.4
Negative market values of derivative hedging instruments	–	–	368.5	39.3	–	–
Financial liabilities measured at amortised cost						
Due to banks	–	–	16,952.4	22,421.9	200.6	104.9
Thereof: liabilities from genuine repurchase agreements and collateralised securities lending transactions	–	–	3,613.3	7,404.8	–	–
Due to customers	–	–	10,644.8	11,714.3	738.4	682.9
Thereof: liabilities from genuine repurchase agreements and collateralised securities lending transactions	–	–	200.6	1,092.7	–	–
Securitised liabilities	–	–	17,786.1	14,848.0	14.6	–
Subordinated capital	–	–	–	79.6	916.5	902.0
Total	**942.0**	**1,455.1**	**70,159.5**	**74,431.2**	**6,423.1**	**4,213.5**

Level reclassifications

The following reclassifications between level 1 and level 2 of the fair value hierarchy took place in respect of assets and liabilities measured at fair value and held in the portfolio at the reporting date:

€m	Reclassifications from level 1 to level 2		Reclassifications from level 2 to level 1	
	2019	2018	2019	2018
Financial assets measured at fair value through profit or loss				
Debt securities, other fixed-interest securities and loan receivables	1,636.9	2,815.5	1,236.1	188.2
Derivative financial instruments	21.0	114.6	25.7	–
Share and other price-related derivatives	21.0	114.6	25.7	–
Financial liabilities measured at fair value through profit or loss				
Securities short portfolios	25.7	113.9	35.7	32.3
Derivative financial instruments	19.6	584.2	29.0	–
Interest-rate-related derivatives	–	–	0.1	–
Share and other price-related derivatives	19.6	584.2	28.9	–

Financial instruments were transferred from level 1 to level 2 during the year under review because prices on an active market could no longer be demonstrated for these financial instruments. Financial instruments were also transferred from level 2 to level 1 because, at the reporting date, prices were available for these financial instruments on an active market which could be used unchanged for valuation purposes.

Within the Deka Group, reclassifications between the different levels of the fair value hierarchy are deemed to have taken place at the end of the relevant reporting period.

Fair value hierarchy level 1

Where securities and derivatives are traded on active markets with sufficient liquidity, and hence where stock market prices or executable broker quotations are available, these prices are used to determine the fair value.

The fair value of units in unconsolidated investment funds is generally determined from the redemption price published by the investment management company.

Fair value hierarchy level 2

Fair values for insufficiently liquid bearer bonds are determined on the basis of discounted future cash flows. Instrument-specific and issuer-specific interest rates are used for discounting. Discount rates are determined from market prices of similar liquid securities, selected according to criteria in the categories of issuer, sector, rating, rank and maturity.

Derivative financial instruments are measured using standard valuation models, such as the Black-Scholes model, the Black-76 model, the SABR model, the Bachelier model, the G1PP model, the G2PP model or the local volatility model. The models are always calibrated using observable market data.

Interest rate and interest rate/currency swaps and unlisted interest rate futures are measured on the basis of the discounted cash flow model using the market interest rates applying to the remainder of the term of the financial instruments. The tenor structures of the individual interest rates are taken into account by means of separate forward interest rate curves. Interest rate swaps are discounted using the currency-specific interest rate curve. This is used for bootstrapping the forward yield curve. For the foreign currency cash flows in interest rate/currency swaps, discounting is carried out taking into account the cross-currency basis.

Fair values for forward currency contracts are determined at the reporting date on the basis of the future rates, which in turn are quoted by FX swap points in the market.

Fair values of single name and index credit default swaps are determined using a standard hazard rate model calibrated to the respective par CDS spreads.

The fair value of deposits and borrowings is determined by discounting future cash flows using discount rates that are customary for comparable financial transactions with similar terms on liquid or less liquid markets.

The fair value of receivables and liabilities from genuine securities repurchase agreements is calculated by discounting future cash flows using the corresponding credit risk-adjusted discount rate. The discount rate applied takes into account the collateral criteria agreed at the time of concluding the genuine securities repurchase agreement.

If no price is observable on an active market for financial liabilities, fair value is determined by discounting the contractually agreed cash flows using an interest rate at which comparable liabilities could have been issued. Any existing collateralisation structure is taken into account, such as that used for *Pfandbriefe*, for example.

Fair value hierarchy level 3

Fair values of amounts due from banks or due from customers relating to lending business are determined using the present value method. Future cash flows from receivables are discounted at a risk-adjusted market rate based on the categories of borrower, sector, rating, rank and maturity.

If loan receivables are recognised at fair value, a granular analysis is carried out when determining the first spread component. In particular, side agreements such as the borrower's rights of termination or caps/floors are taken into account. These side agreements are each taken into account using suitable, recognised valuation procedures. Loans are allocated to level 3 irrespective of their IFRS category.

The debt securities, other fixed-interest securities and loan receivables disclosed under financial assets measured at fair value through profit or loss are bonds, promissory note loans, originated loans and non-synthetic securitisations. Since early 2009, the Bank has been winding down the latter whilst safeguarding assets.

The fair value of the bonds is calculated either using the discounted cash flow model based on credit spreads that cannot be observed on the market or on the basis of indicative quotations that implicitly result in a valuation spread. The promissory note loans are also measured using the discounted cash flow model based on credit spreads that cannot be observed on the market. Assuming an average uncertainty of five basis points relating to the credit spreads, the fair value of the bonds and promissory note loans could have been €5.0m higher or lower.

Determining the fair value of loan receivables also involves the use of spreads that are not observable in the market. Assuming an average uncertainty of fifty basis points relating to the credit spreads, the fair value of the loan receivables could have been €0.6m higher or lower.

The fair value of the non-synthetic securitisation positions in the portfolio is determined on the basis of indicative quotations. These quotations are obtained from various brokers as well as from market price providers, such as S&P. The bid-ask spreads from the available price indications for the individual securitisation positions were used to determine a cautious bid-ask spread, which was used as an estimate for price sensitivity. Using this bid-ask spread, a variation range of 0.16 percentage points averaged across the portfolio was obtained. On this basis, the market value of the securitisation positions concerned could have been €0.06m higher or lower.

The Bank also allocates to level 3 a limited number of equity, credit and interest rate derivatives or issues with embedded equity, credit and interest rate derivatives, for example if unobservable valuation parameters are used which are significant for their valuation. For equity and interest rate derivatives whose valuation requires correlations, the Bank typically uses historical correlations with the relevant share prices or interest rate fixings, or changes to these. The sensitivity of the equity option positions concerned was around €–2.6m as at 31 December 2019. For interest rate derivatives based on an index spread, the sensitivity in terms of the correlation between the relevant reference indices is mapped via shifts in the model parameters. The resulting change in the correlation is approximately +1.1%, giving rise to a measurement difference of €+0.2m. There are also equity derivatives with a maturity that is longer than the equivalent (based on the underlying) exchange-traded equity (index) options. The temporal extrapolation uncertainty as at 31 December 2019 is approximately €4.4m with an equity vega of 1.4. For credit default swaps (CDS) and credit linked notes with a longer maturity than CDS spreads quoted on the market, a temporal extrapolation uncertainty of five basis points is assumed. As at 31 December 2019, this results in a value of €2.1m.

There are no publicly quoted market prices for the company shares listed as shareholdings. The fair value of company shares is determined using the dividend discount model, provided that the company pays dividends on a sustained basis. Other company shares are measured on the basis of the net asset value approach. There is currently no intention to sell these assets.

Under subordinated liabilities, DekaBank essentially reports positions of a hybrid capital nature which are allocated to level 3 due to the absence of indications of spreads tradable on the market. They are valued using the discounted cash flow model based on an interest rate which is checked at the relevant reporting date.

The fair values of liabilities in relation to issuing business are determined using the present value method. The future cash flows of the liabilities are discounted at a risk-adjusted market rate that is based on DekaBank's credit risk. For the valuation of collateralised issues, the collateral structure is also taken into account. The interest rate for a comparable unsecured issue is adjusted according to the collateralisation category and percentage.

As at 31 December 2019, 100% of bonds and other fixed-income securities allocated to level 3 for which an external rating was available were rated as investment grade.

Performance of financial instruments in fair value hierarchy level 3

The movement in level 3 assets carried at fair value is shown in the table below.

€m	Debt securities, other fixed-interest securities and loan receivables	Interest-rate-related derivatives	Share and other price-related derivatives	Positive market values of derivative hedging instruments	Shareholdings	Total
As at 1 January 2018	**1,977.9**	**1.2**	**14.1**	**–**	**48.2**	**2,041.4**
Additions through purchase	3,623.9	3.6	1.2	–	–	3,628.7
Disposals through sale	1,207.3	–	3.3	–	0.5	1,211.1
Maturity/repayments	292.2	–	1.4	–	–	293.6
Transfers						
To Level 3	461.2	47.0	–	–	–	508.2
From Level 3	289.9	–	0.5	–	–	290.4
Changes arising from measurement/disposal						
Recognised in profit or loss[1]	34.0	9.7	36.2	–	−0.3	79.6
Recognised in other comprehensive income[2]	–	–	–	–	–	–
As at 31 December 2018	**4,307.6**	**61.5**	**46.3**	**–**	**47.4**	**4,462.8**
Movement in unrealised gains or losses in respect of assets in the portfolio at the balance sheet date[3]	**32.8**	**9.7**	**36.2**	**–**	**−0.3**	**78.4**
As at 1 January 2019	**4,307.6**	**61.5**	**46.3**	**–**	**47.4**	**4,462.8**
Additions through purchase	1,199.9	46.4	2.7	–	5.5	1,254.5
Disposals through sale	1,482.1	–	0.6	–	0.4	1,483.1
Maturity/repayments	353.1	0.6	22.4	–	–	376.1
Transfers	–	–	–	–	–	–
To Level 3	118.1	3.1	–	0.2	–	121.4
From Level 3	971.7	–	1.0	–	–	972.7
Change in scope of consolidation	–	–	–	–	−0.3	−0.3
Changes arising from measurement/disposal						
Recognised in profit or loss[1]	11.6	234.9	−8.9	−0.1	9.1	246.6
Recognised in other comprehensive income[2]	–	–	–	–	–	–
As at 31 December 2019	**2,830.3**	**345.3**	**16.1**	**0.1**	**61.3**	**3,253.1**
Movement in unrealised gains or losses in respect of assets in the portfolio at the balance sheet date[3]	**3.5**	**234.9**	**−8.9**	**−0.1**	**9.1**	**238.5**

[1] Gains and losses recognised in profit or loss from the measurement/disposal of level 3 financial instruments are included in net interest income, trading profit or loss, profit or loss on financial instruments mandatorily measured at fair value and profit or loss on financial instruments designated at fair value.

[2] Gains and losses recognised in other comprehensive income from the measurement of level 3 financial instruments are included in the revaluation reserve.

[3] Unrealised profits or losses from level 3 financial instruments are presented within net interest income, trading profit or loss, profit or loss on financial instruments required to be measured at fair value, profit or loss on financial instruments designated at fair value as well as revaluation reserve.

The movement in level 3 liabilities carried at fair value is shown in the table below This is based on fair values without accrued interest.

€m	Securities short portfolios	Interest-rate-related derivatives	Share and other price-related derivatives	Issues	Total
As at 1 January 2018	**–**	**22.3**	**7.5**	**947.2**	**977.0**
Additions through purchase	17.0	49.8	38.2	59.6	164.6
Disposals through sale	16.3	1.0	3.0	–	20.3
Additions through issues	–	–	–	1,715.4	1,715.4
Maturity/repayments	–	0.4	0.1	330.1	330.6
Transfers					
To Level 3	–	45.9	–	286.7	332.6
From Level 3	–	0.2	–	109.0	109.2
Changes arising from measurement/disposal					
Recognised in profit or loss[1]	0.1	–42.6	12.9	235.4	205.8
Recognised in other comprehensive income[2]	–	–	–	–	–
As at 31 December 2018	**0.6**	**159.0**	**29.7**	**2,334.4**	**2,523.7**
Movement in unrealised gains or losses in respect of liabilities in the portfolio at the balance sheet date[3]	**–**	**–42.6**	**12.9**	**227.3**	**197.6**
As at 1 January 2019	**0.6**	**159.0**	**29.7**	**2,334.4**	**2,523.7**
Additions through purchase	1.2	11.2	6.4	28.0	46.8
Disposals through sale	1.5	0.1	0.7	–	2.3
Additions through issues	–	–	–	13,982.0	13,982.0
Maturity/repayments	–	2.9	2.0	12,251.2	12,256.1
Transfers					
To Level 3	–	–	2.3	–	2.3
From Level 3	0.3	1.1	2.3	14.0	17.7
Changes arising from measurement/disposal					
Recognised in profit or loss[1]	–	–110.6	–65.9	–97.8	–274.3
Recognised in other comprehensive income[2]	–	–	–	–	–
As at 31 December 2019	**–**	**276.7**	**99.3**	**4,177.0**	**4,553.0**
Movement in unrealised gains or losses in respect of liabilities in the portfolio at the balance sheet date[3]	**–**	**–110.6**	**–65.9**	**–71.5**	**–248.0**

[1] Gains and losses recognised in profit or loss from the measurement/disposal of level 3 financial instruments are included in net interest income, trading profit or loss, profit or loss on financial instruments mandatorily measured at fair value and profit or loss on financial instruments designated at fair value.
[2] Gains and losses recognised in other comprehensive income from the measurement of level 3 financial instruments are included in the revaluation reserve.
[3] Unrealised profits or losses from level 3 financial instruments are presented within net interest income, trading profit or loss, profit or loss on financial instruments required to be measured at fair value, profit or loss on financial instruments designated at fair value as well as revaluation reserve.

During the reporting period, positive market values of debt securities, other fixed-interest securities and loan receivables amounting to €971.7m and negative market values of issues/trading issues in the amount of €14.0m were transferred from level 3. Furthermore, positive market values of debt securities, other fixed-interest securities and loan receivables amounting to €118.1m were migrated to level 3. This was due to a more detailed analysis of the market data used for valuation.

Measurement processes for financial instruments in fair value hierarchy level 3

For all transactions in the trading book and the banking book, DekaBank generally performs a daily valuation independent of trading operations, which provides the basis for the calculation of results. Responsibility for the valuation process lies with Risk Control, the different tasks being assigned to various specialist teams as part of the valuation process. The models used for theoretical valuation of transactions must undergo validation and initial acceptance before they can be employed in the valuation process. Adequacy checks are carried out on a regular basis as part of normal operations. The main steps in the process are the provision of market data that is independent of trading activities, parametrisation, performance of the valuation and quality assurance. Each of these steps and processes has a team responsible for design and implementation.

Finance and Risk Control analyse and provide commentary on any notable changes in the valuation carried out independently of trading activities. The economic profits and losses determined on the basis of this independent valuation are made available to the trading units on a daily basis for the trading book and on at least a weekly basis for the banking book. To support the process, a committee has been established within Risk Control which plans and coordinates the medium to long-term development of the valuation process.

Valuation models are always used where no reliable external prices are available. External price quotations are obtained from established providers such as stock exchanges and brokers. Every price is subject to a monitoring process which assesses its quality and establishes whether it is appropriate for use in the valuation process. Unless the level of quality is assessed as inadequate, a theoretical valuation is carried out.

For financial instruments whose present value is determined using a valuation model, the prices needed to calibrate the model are either found directly, independently of trading, or are checked via an independent price verification process (IPV) to ensure they are consistent with the market, and are corrected if necessary. The valuation models used are either validated by Risk Control or implemented in Risk Control independently of trading. The appropriateness of the models is examined by Risk Control on a regular basis, and at least once a year. The results of the examination form the basis for a joint recommendation agreed between Risk Control, Finance and the trading units on whether the valuation models should continue to be used or require further development.

When new financial instruments are introduced, existing valuation processes are examined to determine whether they can be applied to the new instrument and modified or expanded if necessary. Valuation processes may be expanded to include new price sources or to apply new valuation models. Where new models are introduced, Risk Control checks for model risks as part of the implementation and validation process.

69 Offsetting financial assets and liabilities

The following table contains disclosures concerning the effects of offsetting on the Deka Group's consolidated balance sheet. Offsetting is currently only carried out for receivables and liabilities from genuine securities repurchase agreements and derivative transactions (see note [13] "Genuine repurchase agreements and securities lending transactions" and note [71] "Derivative transactions").

				Associated amounts not offset in the statement of financial position		
€m	Financial assets/ liabilities (gross)	Offset financial assets/ liabilities	Amount disclosed in the statement of financial position (net)	Collateral – securities	Cash – collateral	Net amount
Assets						
Receivables arising from securities repurchase agreements (eligible for offsetting)	4,136.6	3,667.8	468.8	468.8	–	–
Receivables arising from securities repurchase agreements (not eligible for offsetting)	14,861.9	–	14,861.9	14,861.9	–	–
Derivatives (eligible for offsetting)	19,024.4	18,985.0	39.4	–	1.6	37.8
Derivatives (not eligible for offsetting)	6,651.5	–	6,651.5	222.8	1,954.4	4,474.3
Total	**44,674.4**	**22,652.8**	**22,021.6**	**15,553.5**	**1,956.0**	**4,512.1**
Liabilities						
Liabilities arising from securities repurchase agreements (eligible for offsetting)	3,774.8	3,667.8	107.0	107.0	–	–
Liabilities arising from securities repurchase agreements (not eligible for offsetting)	3,506.6	–	3,506.6	3,506.6	–	–
Derivatives (eligible for offsetting)	19,769.3	19,733.6	35.7	35.7	–	–
Derivatives (not eligible for offsetting)	6,333.1	–	6,333.1	185.6	3,015.5	3,132.0
Total	**33,383.8**	**23,401.4**	**9,982.4**	**3,834.9**	**3,015.5**	**3,132.0**

31 Dec 2018				Associated amounts not offset in the statement of financial position		
€m	Financial assets/ liabilities (gross)	Offset financial assets/ liabilities	Amount disclosed in the statement of financial position (net)	Collateral – securities	Cash – collateral	Net amount
Assets						
Receivables arising from securities repurchase agreements (eligible for offsetting)	9,943.2	5,882.7	4,060.5	4,060.5	–	–
Receivables arising from securities repurchase agreements (not eligible for offsetting)	16,224.6	–	16,224.6	16,224.6	–	–
Derivatives (eligible for offsetting)	7,871.3	7,836.6	34.7	–	34.7	–
Derivatives (not eligible for offsetting)	4,961.5	–	4,961.5	205.8	1,422.1	3,333.6
Total	**39,000.6**	**13,719.3**	**25,281.3**	**20,490.9**	**1,456.8**	**3,333.6**
Liabilities						
Liabilities arising from securities repurchase agreements (eligible for offsetting)	7,877.9	5,882.7	1,995.2	1,995.2	–	–
Liabilities arising from securities repurchase agreements (not eligible for offsetting)	5,194.8	–	5,194.8	5,194.8	–	–
Derivatives (eligible for offsetting)	7,600.3	7,567.3	33.0	33.0	–	–
Derivatives (not eligible for offsetting)	5,789.3	–	5,789.3	133.0	1,996.9	3,659.4
Total	**26,462.3**	**13,450.0**	**13,012.3**	**7,356.0**	**1,996.9**	**3,659.4**

In principle, the Deka Group enters into securities repurchase agreements and derivative transactions eligible for offsetting on the basis of standardised framework contracts with central counterparties. Offsetting is carried out provided the offsetting agreements defined in the contracts are in accordance with the offsetting criteria under IAS 32.42. In principle, the contractual arrangements provide for the right to offset receivables and liabilities both in the course of ordinary business activities and in case of default.

Depending on the fair value of the underlying derivative, collateral (variation margins) is provided or received, and thus accounted for either as a receivable or as a liability. The fair values and associated receivables or liabilities from variation margins are used in offsetting.

Transactions that are subject to offsetting agreements but which do not meet the offsetting criteria under IAS 32.42, or which are carried out on a gross basis as part of normal business activities, are reported gross. In such cases, all claims and obligations are essentially only offset and settled on a net basis if the counterparty does not meet its payment obligations (liquidation netting).

70 Information on the quality of financial assets

Non-performing exposures

The Deka Group uses the definition of non-performing exposures introduced by the EBA for regulatory reporting (FINREP). This relates to exposures that are more than 90 days overdue or for which the Bank expects that the borrower will not satisfy its loan obligations in full. It is also mandatory to classify exposures as non-performing where the CRR regulations (Article 178) require them to be classified as in default or where they have been allocated to stage 3 of the general impairment model pursuant to IFRS 9. In addition, exposures subject to successful restructuring measures may only be classified as performing after a recovery period of at least one year has elapsed.

The following table shows the breakdown of non-performing exposures by risk segment.

€m	Transport and export finance	Energy and utility infra-structure	Property risks	Other	Total 31 Dec 2019	Total 31 Dec 2018
Non-performing exposures[1]	181.0	47.6	13.0	1.1	242.7	216.4
Collateral[2]	105.3	–	–	–	105.3	85.9
Provisions for loan losses/credit rating-related changes in fair value	75.3	5.9	6.1	0.0	87.3	70.1

[1] The figures shown represent the cross carrying value of the credit risk-bearing financial asset classified as non-performing.
[2] Recognition of measurable collateral. Indication of market or fair value not exceeding the underlying exposure.

The collateral which the Deka Group considers to reduce credit risk is stated. The carrying amount of the physical collateral corresponds, in general, to the market or fair value. The amounts stated for guarantees or sureties are primarily based on the creditworthiness of the party providing the collateral. The table shows the maximum collateral or guarantee amount eligible for consideration, i.e. the maximum collateral stated is the carrying amount, taking into account any risk provisions that have already been set up. In the case of non-performing exposures measured at fair value, collateral is reported at a maximum of the fair value of the underlying exposure (reporting date: €34.9m, previous year: €39.7m).

As a result of the consolidation of the structured company Treasury Two Shipping Limited, loan receivables of €27.4m (gross carrying value) with risk provisions of €20.8m are not reported under non-performing and forborne exposures as at the reporting date.

Exposures with forbearance measures

The Deka Group concludes extension or restructuring agreements with borrowers experiencing financial difficulties if there is a prospect of recovery. Responsibility for the monitoring and management of such deferred or restructured exposures rests with the Monitoring Committee/Risk Provisioning Committee, in accordance with the general rules on default monitoring (see the risk report). Furthermore, creditworthiness-related restructuring measures or deferral agreements represent objective evidence of an impairment. Relevant exposures are tested individually for impairment, and where necessary specific provisions are recognised (see note [17] "Risk provisions in the lending and securities business"). Restructuring involving substantial contractual modifications is reported in the balance sheet as the disposal of the original asset and the addition of a new asset. If there is a difference between the carrying value of the asset to be disposed of and the fair value of the asset acquired, the difference is posted directly to profit or loss.

Exposures are no longer classified as forborne if all of the following conditions are met:

- More than two years (probation period) have elapsed since the exposure ceased to be classified as non-performing.
- Regular payments for a significant amount of the interest and principal due have been made during the probation period.
- None of the exposures is more than 30 days overdue.

The following table shows the breakdown of forborne exposures by risk segment. The vast majority of forborne exposures have already been classified as non-performing exposures and are therefore also shown in the table of non-performing exposures by risk segment.

€m	Transport and export finance	Energy and utility infra-structure	Property risks	Total 31 Dec 2019	Total 31 Dec 2018
Forborne exposures[1]	185.9	47.6	15.2	248.7	275.8
thereof: Performing	76.0	–	15.2	91.2	77.1
thereof: Non-Performing	109.9	47.6	–	157.5	198.7
Collateral[2]	120.7	–	15.1	135.8	145.3
Provisions for loan losses/credit rating-related changes in fair value	64.8	5.9	0.0	70.7	71.0

[1] The figures shown represent the cross carrying value of the credit risk-bearing financial asset classified as forborne.
[2] Recognition of measurable collateral. Indication of market or fair value not exceeding the underlying exposure.

Key ratios for non-performing and forborne exposures

%	31 Dec 2019	31 Dec 2018
NPE ratio at the reporting date		
(Ratio of non-performing exposures to maximum credit risk)	0,25	0,21
NPE coverage ratio, including collateral, at the reporting date		
(Ratio of risk provisions, including collateral, to non-performing exposures)	79,36	72,13
NPE coverage ratio, excluding collateral, at the reporting date		
(Ratio of risk provisions, excluding collateral, to non-performing exposures)	35,96	32,42
Forborne exposures ratio at the reporting date		
(Ratio of forborne exposures to maximum credit risk)	0,26	0,27

The maximum credit risk underlying the ratio of non-performing and forborne exposures is determined based on IFRS 7.35K(a)/IFRS 7.36(a) using credit risk-bearing financial assets and the corresponding off-balance sheet liabilities. Financial instruments measured at amortised cost are stated at gross carrying value, credit-risk-bearing financial instruments measured at fair value are stated at fair value, irrevocable lending commitments are stated at the respective amount of the commitment and sureties and guarantees are stated at nominal value. On this basis, as at the reporting date the maximum credit risk was €96.0bn (previous year: €101.3bn).

71 Derivative transactions

The Deka Group uses derivative financial instruments for trading purposes and to hedge interest rate risks, currency risks, and share and other price risks. The following table shows the portfolio of derivative financial instruments by type of risk hedged and by contract type:

	Nominal value		Positive fair values[1]		Negative fair values[1]	
€m	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**
Interest rate risks						
OTC products						
Interest rate swaps	839,415.1	606,862.2	23,729.0	11,223.8	23,245.3	10,528.7
Forward rate agreements	63,868.0	32,981.0	7.5	2.1	7.6	2.5
Interest rate options						
Purchases	22,917.9	19,850.3	410.8	149.1	171.8	123.4
Sales	26,202.3	22,993.1	333.4	220.1	748.2	388.5
Caps, floors	21,831.6	18,808.1	67.4	55.1	44.4	41.4
Other interest rate contracts	6,485.4	2,392.3	105.2	4.9	97.4	66.6
Exchange traded products						
Interest rate futures/options	14,904.9	13,683.9	5.7	6.2	2.6	4.4
Sub-total	**995,625.2**	**717,570.9**	**24,659.0**	**11,661.3**	**24,317.3**	**11,155.5**
Currency risks						
OTC products						
Foreign exchange future contracts	21,558.2	17,822.1	200.0	119.7	172.1	114.0
(Interest rate) currency swaps	14,770.7	13,603.1	207.2	481.5	474.0	507.7
Currency options						
Purchases	–	0.2	–	0.0	–	–
Sales	–	0.2	–	–	–	0.0
Sub-total	**36,328.9**	**31,425.6**	**407.2**	**601.2**	**646.1**	**621.7**
Share and other price risks						
OTC products						
Share options						
Purchases	328.4	437.2	6.9	25.0	–	–
Sales	6,032.5	6,039.7	–	–	1.2	3.6
Credit derivatives	11,291.7	11,599.4	127.5	92.6	133.7	62.4
Other forward contracts	6,233.7	2,655.7	17.4	46.8	105.2	93.6
Exchange traded products						
Share options	20,579.9	21,518.6	463.5	412.0	901.6	1,457.2
Share futures	1,426.2	1,522.9	4.2	85.0	4.2	9.8
Sub-total	**45,892.4**	**43,773.5**	**619.5**	**661.4**	**1,145.9**	**1,626.6**
Total	**1,077,846.5**	**792,770.0**	**25,685.7**	**12,923.9**	**26,109.3**	**13,403.8**
Net amount disclosed in the statement of financial position			**6,690.9**	**4,996.2**	**6,368.8**	**5,822.3**

[1] Fair values are shown before offsetting against variation margin paid or received

The lower amount carried in the balance sheet compared with fair values is due to allowance for the variation margin from transactions with central counterparties. Within assets, the variation margin received reduced the fair values by a total of around €19.0bn (previous year: €7.9bn). Conversely, the variation margin paid reduced fair values within liabilities by a total of around €19.7bn (previous year: €7.6bn).

The following table shows nominal values and positive and negative fair values for derivative transactions by counterparty:

	Nominal value		Positive fair values[1]		Negative fair values[1]	
€m	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**
Banks in the OECD	855,056.8	351,691.7	19,487.5	5,037.2	20,134.1	6,229.5
Public sector entities in the OECD	12,550.5	12,387.5	1,560.5	996.1	263.8	162.6
Other counterparties	210,239.2	428,690.8	4,637.7	6,890.6	5,711.4	7,011.7
Total	**1,077,846.5**	**792,770.0**	**25,685.7**	**12,923.9**	**26,109.3**	**13,403.8**

[1] Fair values are shown before offsetting against variation margin paid or received

72 Breakdown by remaining maturity

Remaining maturity is the time between the reporting date and the contractually agreed maturity of the receivable or liability or the time at which part-payments fall due. Financial assets and liabilities measured at fair value are generally taken into account based on their contractual maturity, whereas financial instruments in the "trading portfolio" sub-category are included with a maximum remaining life of one year (with the exception of economic hedging derivatives). Equity instruments were allocated to the "due on demand and indefinite term" maturity range. Financial investments (shareholdings) that serve business operations on an ongoing basis as part of ordinary business activity but do not have a contractually agreed maturity are not included in this breakdown.

€m	31 Dec 2019	31 Dec 2018	Change
Asset items			
Due from banks			
Due on demand and indefinite term	5,046.1	3,257.6	1,788.5
Up to 3 months	4,876.5	8,185.2	–3,308.7
Between 3 months and 1 year	3,517.0	5,115.5	–1,598.5
Between 1 year and 5 years	8,553.5	6,405.3	2,148.2
More than 5 years	588.1	1,009.0	–420.9
Due from customers			
Due on demand and indefinite term	1,646.5	1,871.2	–224.7
Up to 3 months	2,620.7	2,413.9	206.8
Between 3 months and 1 year	3,773.7	3,018.3	755.4
Between 1 year and 5 years	11,256.8	10,561.7	695.1
More than 5 years	9,070.8	6,554.8	2,516.0
Financial assets at fair value			
Thereof: non-derivative assets			
Due on demand and indefinite term	5,096.2	2,939.4	2,156.8
Up to 3 months	1,230.4	998.9	231.5
Between 3 months and 1 year	14,003.7	9,382.7	4,621.0
Between 1 year and 5 years	3,061.3	5,918.2	–2,856.9
More than 5 years	492.4	823.5	–331.1
Thereof: Derivative assets			
Due on demand and indefinite term	10.9	–	10.9
Up to 3 months	501.2	472.7	28.5
Between 3 months and 1 year	6,025.8	4,198.4	1,827.4
Between 1 year and 5 years	17.3	275.0	–257.7
More than 5 years	3.0	36.6	–33.6
Positive market values of derivative hedging instruments			
Due on demand and indefinite term	–	–	–
Up to 3 months	7.5	0.6	6.9
Between 3 months and 1 year	35.4	0.0	35.4
Between 1 year and 5 years	74.8	1.9	72.9
More than 5 years	15.0	11.0	4.0
Financial investments			
Due on demand and indefinite term	–	–	–
Up to 3 months	550.9	273.3	277.6
Between 3 months and 1 year	617.4	842.5	–225.1
Between 1 year and 5 years	7,014.2	6,111.7	902.5
More than 5 years	2,548.7	3,551.1	–1,002.4

€m	31 Dec 2019	31 Dec 2018	Change
Liability items			
Due to banks			
Due on demand and indefinite term	3,677.1	5,593.9	–1,916.8
Up to 3 months	5,435.6	7,000.4	–1,564.8
Between 3 months and 1 year	3,053.0	6,022.7	–2,969.7
Between 1 year and 5 years	4,412.0	3,735.6	676.4
More than 5 years	971.1	597.2	373.9
Due to customers			
Due on demand and indefinite term	14,251.0	16,886.1	–2,635.1
Up to 3 months	2,776.4	1,873.9	902.5
Between 3 months and 1 year	2,640.4	3,002.5	–362.1
Between 1 year and 5 years	2,777.7	2,584.9	192.8
More than 5 years	1,254.1	1,375.8	–121.7
Securitised liabilities			
Due on demand and indefinite term	–	–	–
Up to 3 months	8,680.2	7,951.5	728.7
Between 3 months and 1 year	3,724.9	2,567.6	1,157.3
Between 1 year and 5 years	2,649.9	3,516.9	–867.0
More than 5 years	2,697.1	754.7	1,942.4
Financial liabilities at fair value			
Thereof: non-derivative liabilities			
Due on demand and indefinite term	419.6	213.7	205.9
Up to 3 months	1,069.3	1,089.2	–19.9
Between 3 months and 1 year	21,664.8	21,222.4	442.4
Between 1 year and 5 years	532.4	721.6	–189.2
More than 5 years	216.5	277.0	–60.5
Thereof: Derivative financial liabilities			
Due on demand and indefinite term	0.6	–	0.6
Up to 3 months	3,392.3	2,547.7	844.6
Between 3 months and 1 year	2,553.4	2,981.8	–428.4
Between 1 year and 5 years	35.5	148.2	–112.7
More than 5 years	18.5	105.3	–86.8
Negative market values of derivative hedging instruments			
Due on demand and indefinite term	–	–	–
Up to 3 months	28.8	1.6	27.2
Between 3 months and 1 year	12.3	0.0	12.3
Between 1 year and 5 years	183.8	7.8	176.0
More than 5 years	143.6	29.9	113.7
Subordinated capital			
Due on demand and indefinite term	–	–	–
Up to 3 months	18.4	21.0	–2.6
Between 3 months and 1 year	–	75.6	–75.6
Between 1 year and 5 years	143.4	25.0	118.4
More than 5 years	662.5	777.8	–115.3

73 Further information on hedge accounting

The interest rate swaps from interest rate fair value hedges and the cross-currency swaps from currency fair value hedges have the following structure.

	31 Dec 2019			31 Dec 2018		
	Up to 1 year	Between 1 year and 5 years	More than 5 years	Up to 1 year	Between 1 year and 5 years	More than 5 years
Interest rate fair value hedges of financial assets						
Interest rate swaps (CAD)						
Nominal (C$m)	–	346.7	800.9	–	287.0	424.6
Nominal (€m)[1]	–	237.5	548.6	–	183.9	272.1
Average fixed rate (%)	–	2.5	1.9	–	2.1	2.1
Interest rate swaps (EUR)						
Nominal (€m)	1,070.1	4,005.0	2,387.3	496.2	3,639.7	2,165.2
Average fixed rate (%)	0.6	0.4	1.0	0.4	0.4	0.9
Interest rate swaps (GBP)						
Nominal (£m)	–	1,103.9	366.0	–	774.8	288.0
Nominal (€m)[1]	–	1,297.5	430.2	–	866.1	322.0
Average fixed rate (%)	–	0.9	1.2	–	1.0	1.4
Interest rate swaps (JPY)						
Nominal (¥m)	–	9,000.0	–	–	4,337.0	–
Nominal (€m)[1]	–	73.8	–	–	34.5	–
Average fixed rate (%)	–	−0.2	–	–	0.2	–
Interest rate swaps (USD)						
Nominal ($m)	232.9	763.4	2,169.5	83.1	499.0	1,862.6
Nominal (€m)[1]	207.3	679.6	1,931.2	72.6	435.8	1,626.7
Average fixed rate (%)	1.8	2.2	2.5	1.7	2.1	2.4
Interest rate swaps (Other currencies)						
Nominal (€m)[1]	–	65.2	76.5	–	44.4	76.8
Interest rate fair value hedges of financial liabilities						
Interest rate swaps (EUR)						
Nominal (€m)	257.1	228.9	1,005.0	175.0	549.5	125.0
Average fixed rate (%)	0.9	0.4	0.3	4.0	0.6	0.9

[1] The conversion is made at the exchange rate on the balance sheet date.

	31 Dec 2019			31 Dec 2018		
	Up to 1 year	Between 1 year and 5 years	More than 5 years	Up to 1 year	Between 1 year and 5 years	More than 5 years
Currency fair value hedges of financial assets						
Cross-currency base swaps (CAD/EUR)						
Nominal (C$m)	110.0	312.0	740.3	N/A	N/A	N/A
Nominal (€m)[1]	75.4	213.7	507.1	N/A	N/A	N/A
Average contract rate (EUR/CAD)[2]	1.34	1.50	1.49	N/A	N/A	N/A
Cross-currency base swaps (CHF/EUR)						
Nominal (CHFm)	–	55.0	82.8	N/A	N/A	N/A
Nominal (€m)[1]	–	50.7	76.2	N/A	N/A	N/A
Average contract rate (EUR/CHF)[2]	–	1.10	1.15	N/A	N/A	N/A
Cross-currency base swaps (GBP/EUR)						
Nominal (£m)	288.0	1,836.4	375.0	N/A	N/A	N/A
Nominal (€m)[1]	338.5	2,158.4	440.7	N/A	N/A	N/A
Average contract rate (EUR/GBP)[2]	0.77	0.85	0.89	N/A	N/A	N/A
Cross-currency base swaps (JPY/EUR)						
Nominal (¥m)	5,337.0	9,000.0	–	N/A	N/A	N/A
Nominal (€m)[1]	43.8	73.8	–	N/A	N/A	N/A
Average contract rate (EUR/JPY)[2]	129.87	118.47	–	N/A	N/A	N/A
Cross-currency base swaps (USD/EUR)						
Nominal ($m)	443.5	4,585.8	3,368.5	N/A	N/A	N/A
Nominal (€m)[1]	394.8	4,082.1	2,998.4	N/A	N/A	N/A
Average contract rate (EUR/USD)[2]	1.13	1.15	1.14	N/A	N/A	N/A
Cross-currency base swaps (other currencies)						
Nominal (€m)[1]	–	72.1	33.7	N/A	N/A	N/A

[1] The conversion is made at the exchange rate on the balance sheet date.
[2] The conversation rate is quoted in quantity. If several swaps are included in a maturity band, a weighted nominal is used to determine the average price.

The carrying value adjustments are broken down according to the hedged underlying transactions as follows:

€m	31 Dec 2019			31 Dec 2018		
	Carrying amount of the hedged items	Accumulated valuation result of the hedged items[1)2)]	Valuation result of the hedged items for the reporting period[3)]	Carrying amount of the hedged items	Accumulated valuation result of the hedged items[1)2)]	Valuation result of the hedged items for the reporting period[3)]
Interest rate fair value hedges						
Financial assets measured at amortised cost						
Due from banks	1,685.5	28.3	22.5	1,405.9	6.6	12.5
Due from customers	7,158.3	116.3	126.2	5,049.0	–9.6	18.0
Financial investments	1,134.1	38.3	29.2	782.2	8.9	8.9
Financial assets measured at fair value through other comprehensive income						
Financial investments	3,194.6	29.0	11.1	3,001.1	18.6	18.6
Financial liabilities measured at amortised cost						
Due to banks	285.8	–0.9	1.5	165.4	1.2	0.6
Due to customers	39.6	–0.2	0.2	199.0	4.6	6.4
Securitised liabilities	1,000.7	–5.9	6.4	375.2	0.6	–1.7
Subordinated capital	165.3	–0.3	0.3	136.1	3.6	–1.1
Currency fair value hedges						
Bottom layer financial assets	11,400.7	–	–142.6	N/A	N/A	N/A
Total	**26,064.6**	**204.6**	**54.8**	**11,113.9**	**34.5**	**62.2**

1) The accumulated hedge adjustment is the accumulated amount included in the carrying amount of the hedged item of interest rate related adjustments from current hedging relationships.
2) Amounts with a positive leading sign represent an increase of value and amounts with a negative leading sign a decrease of value.
3) Includes the change in value of the hedged items used to measure ineffectiveness during the reporting period. In the case of interest rate fair value hedges, these are interest-related changes in value, and in the case of currency fair value hedges, these are spot exchange rate differences in relation to the nominal value of the hedged item.

In the case of currency fair value hedges, the designation of the layer component first of all involves specifying the group of underlying transactions as a whole from which the layer component is defined. This means that existing financial assets which are of the same type in terms of the hedged risk are identified along with their nominal amounts. At the Deka Group, the hedged layer component is a defined bottom layer of this defined nominal amount.

The following table shows the composition of the bottom layer for currency fair value hedges on the balance sheet date:

€m	2019	2018	Change
Financial assets measured at amortised cost			
Due from banks	45.0	N/A	N/A
Due from customers	10,243.9	N/A	N/A
Financial investments	1,111.8	N/A	N/A
Financial assets measured at fair value through other comprehensive income			
Financial investments	–	N/A	N/A

Other disclosures

74 Equity management

The objectives of equity management are to ensure adequate capital to carry out the business strategy determined by the Board of Management, to achieve an appropriate return on equity and to comply with regulatory capital requirements (for more information, see note [75] "Regulatory capital (own funds)").

In the economic perspective, internal capital in the risk-bearing capacity analysis means the risk capacity as defined in the risk strategy. In principle, the Deka Group determines the overall risk across all significant risk types that impact income and also includes those risks not taken into consideration for regulatory purposes, for example business risk. Total risk is measured as the amount of capital that is highly likely to be sufficient to cover losses from all main risk exposures in a one-year period at any time. The Deka Group uses the value-at-risk approach (VaR) in order to quantify individual risks on a uniform basis and to aggregate them as an indicator for overall risk.

To assess risk-bearing capacity on a differentiated basis, the Deka Group distinguishes between the risk capacity and the risk appetite. In the risk-bearing capacity analysis, the risk capacity consists mainly of equity capital in accordance with IFRS and earnings components, adjusted using amounts to correct for specific capital components, such as intangible assets or risks arising from pension obligations. This risk capacity is available – in the sense of a formal total risk limit – to safeguard risk-bearing capacity as a whole. Risk appetite is the primary control parameter. The maximum permissible risk appetite is equal to risk capacity less a management buffer.

In the normative perspective, the Common Equity Tier 1 capital ratio is the key management indicator. The Common Equity Tier 1 capital ratio is defined as the ratio of Common Equity Tier 1 capital to risk-weighted assets (RWAs) for all relevant credit, market and operational risk positions plus the credit valuation adjustment (CVA) risk. Other key figures that are relevant for management purposes include own funds, risk-weighted assets and leverage ratio exposure along with the corresponding capital ratios, the MREL ratio and the utilisation of the large exposure limit. Risk-weighted assets are managed in line with the Deka Group's strategy, the targeted balance sheet structure and the capital market environment.

The regulatory ratios are calculated on a monthly or quarterly basis and are reported to the Board of Management and the Administrative Board. Compliance with the internal thresholds is ensured by means of an ongoing monitoring process. This also includes a monthly comparison between the target and the actual figures and a forecast process.

In normative risk and capital planning, the regulatory ratios are calculated for each budget year. In the course of the annual planning process, the guidelines for the next three years are defined for the Group, the individual business divisions and the Treasury corporate centre. Within the framework of this overall plan, in principle the business divisions and the Treasury corporate centre must not exceed the target RWAs specified in the medium-term planning. In the event that the target is exceeded, measures to reduce the RWAs are examined.

When managing regulatory capital requirements, particular attention is also paid to assessing future regulatory developments. This includes analysing current recommendations from supervisory committees and proposed legislation on an ongoing basis, and assessing the impact of such proposals on capital adequacy. The findings are incorporated into the annual planning process.

75 Regulatory capital (own funds)

Since 1 January 2014 regulatory capital and capital adequacy have been calculated in accordance with the regulation on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation – CRR) and pursuant to the directive on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (Capital Requirements Directive IV – CRD IV).

The figures presented below are shown in accordance with the transitional provisions set out in CRR/CRD IV as well as pursuant to full application of the new regulations. Equity is calculated based on the figures from the IFRS consolidated financial statements. The composition of capital and reserves is shown in the following table:

	31 Dec 2019		31 Dec 2018	
€m	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**
Subscribed capital	286	286	286	286
Less repurchased Common Equity Tier 1 items	95	95	95	95
Open reserves	4,795	4,795	4,646	4,646
Other comprehensive income	112	112	79	79
Prudential filters	47	47	63	63
Deductions from Common Equity Tier 1 items	247	247	236	236
Common Equity Tier 1 (CET 1) capital	**4,579**	**4,579**	**4,460**	**4,460**
Additional Tier 1 capital instruments	474	489	474	474
Silent capital contributions	–	16	–	21
Deductions from Additional Tier 1 items	–	–	–	–
Additional Tier 1 (AT 1) capital	**474**	**489**	**474**	**495**
Tier 1 capital	**5,053**	**5,069**	**4,933**	**4,954**
Subordinated liabilities	775	775	807	807
Deductions from Tier 2 items	–	–	–	–
Tier 2 (T2) capital	**775**	**775**	**807**	**807**
Own funds	**5,828**	**5,844**	**5,741**	**5,762**

The increase in Tier 1 capital is mainly due to the reinvestment of profits from the 2018 financial year. The reduction in relation to Tier 2 capital is attributable to regulatory amortisation in accordance with Article 64 of the CRR.

The credit risk is essentially determined according to the IRB approach based on internal ratings. The capital charges for specific market risk and CVA risk are determined using standard methods. General market risk is determined using an internal model. Operational risk is measured using the advanced measurement approach (AMA). Each of the aforementioned risk factors must be backed by own funds. The items subject to a capital charge are shown in the following table:

	31 Dec 2019		31 Dec 2018	
€m	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**
Credit risk	19,147	19,147	18,744	18,744
Market risk	9,269	9,269	6,348	6,348
Operational risk	3,243	3,243	3,365	3,365
CVA risk	570	570	565	565
Risk-weighted assets	**32,229**	**32,229**	**29,021**	**29,021**

The adequacy of the capital and reserves is to be calculated by expressing Common Equity Tier 1 capital ratio, Tier 1 capital (Tier 1 capital ratio) and own funds (Total capital ratio) as a percentage of the total risk exposure amount. The table below shows the key ratios for the Deka Group:

	31 Dec 2019		31 Dec 2018	
%	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**	**CRR/CRD IV (without transitional provisions)**	**CRR/CRD IV (with transitional provisions)**
Common Equity Tier 1 capital ratio	14.2	14.2	15.4	15.4
Tier 1 capital ratio	15.7	15.7	17.0	17.1
Total capital ratio	18.1	18.1	19.8	19.9

Regulatory own funds requirements were met at all times during the reporting period. The ratios for the Deka Group are considerably higher than the statutory minimum requirements.

76 Contingent liabilities and other obligations

The off-balance sheet commitments of the Deka Group essentially consist of potential future liabilities.

€m	**31 Dec 2019**	**31 Dec 2018**	Change
Irrevocable lending commitments	2,065.4	2,124.1	–58.7
Other liabilities	104.9	86.5	18.4
Total	**2,170.3**	**2,210.6**	–40.3

Irrevocable lending commitments refer to credit lines granted but not drawn down and term credit lines. The amounts stated reflect the potential liabilities if the credit lines granted were to be used in full. The risk provision reported on the balance sheet for off-balance sheet commitments has been deducted from the respective amounts.

As in the previous year, other financial liabilities include payment obligations of €0.1m and subsequent funding obligations of €5.1m (previous year: €5.1m) to unconsolidated companies or companies outside the Group. There is an additional funding obligation for the deposit guarantee scheme of the *Landesbanken* and *Girozentralen* of €84.0m (previous year: €62.4m). By 2024, the assets held in the guarantee scheme must be built up to the statutory target level of 0.8% of the covered deposits held by members of the guarantee scheme. Each year the guarantee scheme collects contributions from its members for this purpose.

The bank guarantees provided by DekaBank are financial guarantees under IFRS and are stated net in accordance with IFRS 9. The nominal amount of the guarantees in place as at the reporting date was €0.1bn (previous year: €0.1bn).

In a circular dated 17 July 2017, the Federal Ministry of Finance (BMF) presented rules for the tax treatment of share trades around the dividend record date, and noted, *inter alia*, that certain transaction types may fall under the scope of section 42 of the German Tax Code (*Abgabenordnung* – AO). The tax audit has addressed corresponding share trades in relation to the years 2013 to 2015, and amended tax assessments are expected in the first half of 2020. However, DekaBank sees no convincing reason to believe that share trades it transacted around the dividend record date will fall under the scope of section 42 of the German Tax Code and therefore considers it unlikely that a final claim will be made in this regard. Consequently, there are no grounds to create provisions for financial burdens arising from the refusal by tax authorities to allow relief from capital yields tax (*Kapitalertragsteuer*). Since a degree of uncertainty remains as to how the tax authorities and fiscal courts will ultimately assess the share trades concerned, it cannot be wholly ruled out that an adverse financial impact of €15.7m may arise in this regard.

77 Assets transferred as collateral

Assets transferred as collateral for the Group’s liabilities are shown in the following table:

€m	31 Dec 2019	31 Dec 2018	Change
Carrying value of transferred collateral			
Under Pfandbrief Act	4,591.1	3,923.6	667.5
For refinancing purposes with Deutsche Bundesbank	1,412.0	961.4	450.6
From transactions on German and foreign futures exchanges	328.5	83.1	245.4
From repurchase agreements	958.1	633.8	324.3
From securities lending agreements	7,889.1	6,012.8	1,876.3
From tri-party transactions	3,378.1	2,798.0	580.1
From other transactions	379.8	282.8	97.0
Loan and securities collateral	**18,936.7**	**14,695.6**	4,241.1
Cash collateral relating to securities lending and repurchase agreements	62.4	61.0	1.4
Cash collateral relating to derivative transactions	4,067.7	2,188.2	1,879.5
Cash collateral	**4,130.1**	**2,249.3**	1,880.8
Total	**23,066.8**	**16,944.9**	6,121.9

78 Assets received as collateral

In the Deka Group, collateral is accepted to reduce default risks resulting from lending and trading transactions.

In the Deka Group’s lending business, the collateral currently used includes, depending on the type of financing, the following in particular: guarantees and sureties from domestic local authorities or recognised export credit insurers, charges on commercial and residential property and registered liens on ships and aircraft, as well as assignments of receivables and cash collateral. Valuation of collateral and of any discounts applied is primarily based on the creditworthiness of the party providing the guarantee, or in the case of physical collateral, on the market value, fair value or lending value of the financed property. The collateral received in the lending business is tested for impairment on a regular basis, at least once a year. Each type of collateral is subject to a risk-oriented review cycle, in both formal and substantive terms. Internally, deductions are generally made to take account of fluctuations in value and realisation risks. Credit balances maintained in the Deka Group are counted in full.

Credit derivatives and netting agreements for derivatives and repo lending transactions are used in the Deka Group to reduce credit risks. In addition, financial collateral in the form of securities (shares and bonds) and/or cash collateral is received for derivatives and repo lending transactions. The securities collateral permitted in repo lending transactions is defined in a DekaBank-specific Collateral Policy. Compliance is monitored daily by the Risk Control unit. In order to reduce the risks resulting from fluctuations in the market price of the collateral accepted, collateral discounts or overcollateralisation and a daily additional contribution obligation to maintain the overcollateralisation are agreed with the counterparty.

Collateral received for repurchase agreements, securities lending transactions and other securities transactions that may be re-pledged or resold even if the party providing the collateral does not default amounted to €58.5bn (previous year: €70.1bn). Of this total, €33.0bn (previous year: €48.7bn) was resold or re-pledged.

79 Financial instruments transferred but not derecognised

The Deka Group transfers financial assets while retaining the material risks and rewards arising from these assets. Such transfers take place mainly in the context of genuine securities repurchase and securities lending transactions. The assets continue to be reported in the consolidated balance sheet.

	Carrying amount of financial assets not derecognised		Carrying amount of the associated financial liabilities		Net position	
€m	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**
Genuine repurchase agreements						
thereof: financial assets measured at amortised cost	231.5	271.6	229.7	268.8	1.8	2.8
thereof: financial assets measured at fair value through other comprehensive income	17.5	13.2	17.4	13.1	0.1	0.1
thereof: financial assets measured at fair value through profit or loss	586.6	335.5	583.9	333.5	2.7	2.0
Securities lending transactions						
thereof: financial assets measured at amortised cost	27.5	88.4	–	–	27.5	88.4
thereof: financial assets measured at fair value through other comprehensive income	13.2	19.3	–	–	13.2	19.3
thereof: financial assets measured at fair value through profit or loss	2,892.2	589.5	6.6	1.8	2,885.6	587.7
Other transfers not constituting economical disposal						
thereof: financial assets measured at amortised cost	709.1	867.9	712.7	867.2	–3.6	0.7
thereof: financial assets measured at fair value through other comprehensive income	4.7	8.3	4.7	8.3	–	–
thereof: financial assets measured at fair value through profit or loss	245.8	27.4	245.6	27.3	0.2	0.1
Total	**4,728.1**	**2,221.1**	**1,800.6**	**1,520.0**	**2,927.5**	**701.1**

80 Letter of comfort

Except in the case of political risk, DekaBank shall ensure that DekaBank Deutsche Girozentrale Luxembourg S.A. can meet its obligations. DekaBank Deutsche Girozentrale Luxembourg S.A. has in turn issued letters of comfort in favour of

- Deka International S.A., Luxembourg and
- International Fund Management S.A., Luxembourg.

81 Information on holdings in subsidiaries

Composition of the Deka Group

In addition to DekaBank as the parent company, the consolidated financial statements include a total of 11 (previous year: 11) domestic companies and 6 (previous year: 6) foreign affiliated companies in which DekaBank directly or indirectly holds the majority of the voting rights. The scope of consolidation also includes 5 (previous year: 10) structured entities that are controlled by the Deka Group.

A total of 10 (previous year: 11) affiliated companies controlled by the Deka Group were not consolidated, because they are of minor significance for the presentation of the financial position and financial performance of the Group. The interests held in these subsidiaries are reported under financial assets at fair value (see note [48] "Financial assets at fair value"). Where they are of minor significance to the consolidated financial statements, structured entities are also not consolidated (see note [83] "List of shareholdings"). To determine their significance for the presentation of the financial position and financial performance of the Group, investment funds are assessed using both qualitative and quantitative criteria. Units in unconsolidated investment funds are recognised at fair value through profit or loss. These are shown on the balance sheet under financial assets at fair value (see note [48] "Financial assets at fair value").

Significant restrictions

Significant restrictions on the Group's ability to access or use assets and settle liabilities arise in particular as a result of the contractual, legal and regulatory requirements that apply to financial institutions (see note [75] "Regulatory capital (own funds)" and note [77] "Assets transferred as collateral" with regard to restrictions associated with the pledging of cash, loans or securities as collateral to cover Group liabilities under, for example, genuine repurchase agreements, securities lending transactions and over-the-counter derivatives transactions.

Banks are also obliged to maintain mandatory deposits in accounts held with their national central banks (minimum reserve requirement). The extent of the mandatory minimum reserve is determined by the central banks (see note [44] "Cash reserves").

Interests in joint arrangements and associates

DekaBank still has interests in three jointly controlled entities and one associated company. Equity investments in S-PensionsManagement GmbH and Dealis Fund Operations GmbH i.L. (joint ventures) are accounted for in the consolidated financial statements using the equity method. Two affiliated companies were not consolidated despite the fact that DekaBank exercises significant influence over them, because they are of minor significance for the presentation of the financial position and financial performance of the Group.

Joint ventures and associates which have been accounted for using the equity method can be found in the list of shareholdings (see note [83]).

The table below presents an overview of the summarised financial information for all joint ventures that are considered to be individually immaterial and that are accounted for using the equity method. The amounts shown relate to the Group's holdings in these companies. In principle, the equity method is applied on the basis of the last available financial statements of the investee, provided that these are not more than three months old.

	Joint ventures[1]	
€m	**31 Dec 2019**	**31 Dec 2018**
Carrying value of equity participation	**16.4**	**16.4**
Profit or loss after tax from discontinued business operations	–0.0	0.5
Other comprehensive income	–	–
Comprehensive income	**–0.0**	**0.5**

[1] At the time of the preparation of DekaBank's consolidated financial statements, no consolidated financial statements were available for S-PensionsManagement GmbH for 2019. For this reason, measurement under the equity method was performed on the basis of forecast results which take account of impact of any significant transactions and other events that have arisen since the last reporting date of S-PensionsManagement GmbH, or are expected to occur.

82 Information on holdings in unconsolidated structured entities

According to the definition in IFRS 12, an entity is classified as structured if it has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity.

The Deka Group engages in business relationships with structured entities as part of its ordinary business activities. Structured entities are often characterised by their restricted activities and a narrow and well-defined business objective. Furthermore, a structured entity may also be characterised by the absence of sufficient equity to finance its activities without subordinated financial support.

The Deka Group is deemed to have an interest in an unconsolidated structured entity if companies in the Deka Group are exposed to variable returns from a structured entity's activities as a result of either contractual or non-contractual involvement with that entity, but where the entity concerned does not require consolidation under the provisions of IFRS 10. An interest can be evidenced by the holding of debt or equity instruments, liquidity arrangements, guarantees and various derivative financial instruments via which the Bank takes on risks arising from the structured entity. For the purposes of IFRS 12, an interest in an unconsolidated structured entity does not generally exist solely because of a typical customer-supplier relationship between Deka Group companies and a structured entity.

The Deka Group has relationships with entities that were classified as unconsolidated structured entities based on the definition under IFRS 12 and according to criteria set internally by the Group. Unconsolidated structured entities involved in the following business activities were identified:

Investment funds

Part of the Deka Group's core business involves providing securities and real estate investments to private and institutional investors. As a result, companies in the Deka Group play a role, directly or indirectly, in setting up fund structures as part of their ordinary business activities, and are involved in determining the purpose and design of such structures. In addition, the Group's activities cover the whole of the usual value chain for fund business. In return, the Group receives appropriate commission, for example in the form of management and custodial fees. The Group also invests in holdings in investment funds owned by the Group in the context of start-up financing, thereby providing those funds with liquidity. Investment funds are therefore considered to be structured entities within the meaning of IFRS 12. Funds are primarily financed by issuing unit certificates (equity). To a limited extent, funds can also take up loans. Borrowings are generally secured against the assets held within the fund. Fund assets held in Group-owned and external investment funds amount to €354.4bn (previous year: €345.6bn). This amount includes all fund assets and also the fund assets of third parties in which the Deka Group has an interest within the meaning of IFRS 12, irrespective of the percentage of the Deka Group's unit holding. Fund assets calculated exclusively for the purposes of the IFRS 12 disclosures do not correspond to the key indicator total customer assets used for management purposes.

Securitisation companies (structured capital market credit products)

The Group has investments in a number of securitisation companies. These include non-strategic securitisation products acquired by the Bank in the former Liquid Credits portfolio, which is being wound down while safeguarding assets. The issuing companies are generally financed by issuing tradable securities whose value is dependent on the performance of the vehicle's assets or which are collateralised using the vehicle's assets. For all securitisations held by DekaBank, funding at matching maturities is in place for the assets held by the securitisation company. Securitisation products are reported under financial assets at fair value on the balance sheet within the Deka Group; this means that the earnings performance of these securitisations is recognised in full through profit or loss in the Group's consolidated financial statements.

The table below provides an overview of the maximum risk of loss to which the Deka Group is exposed from the securitisation positions it holds, shown by type of securitisation transaction and by seniority of the tranche held. In addition, the table includes potential losses to be absorbed by other creditors who rank above Deka Group. The total volume of issued securities from the securitisation entities classified as structured amounts to €0.8bn (previous year: €1.3bn).

	Subordinated interest		Mezzanine interest		Senior interest		Most Senior interest	
€m	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018
CLO								
Maximum exposure to credit risk	–	–	1.4	12.8	–	2.3	–	–
Potential losses of prior-ranking creditors[1]	–	–	10.7	60.0	–	–	–	–
RMBS								
Maximum exposure to credit risk	–	–	59.2	68.7	1.3	1.6	6.3	8.7
Potential losses of prior-ranking creditors[1]	17.4	18.6	15.3	112.8	–	–	–	–

[1] Nominal values

Lending business

According to the definition, if a company is founded specifically to finance or operate the assets for which a loan is made, and the design of that company is such that it is not controlled by means of voting or similar rights, then this constitutes a structured entity for DekaBank. A holding in a structured entity may also exist if rights that are contractually agreed as part of the loan agreement (for example intellectual property or trademark rights) are converted into co-determination rights in the event of deteriorating creditworthiness. An operating company can, for example, become a structured entity if relevant business activities start to be governed predominantly by the provisions of the loan agreement. As part of the classification performed in accordance with IFRS 12, structured entities were identified within the transport and export finance, energy and utility infrastructure, real estate and retail portfolio risk segments. The financing concerned is generally collateralised by charges on property, aircraft mortgages, ship mortgages, and sureties and guarantees. In addition, there was an unsecured financing arrangement in the form of a promissory note loan in the reporting year, some of which was also assigned to third parties. To secure the claims, the financed asset (consumer loan portfolio) was transferred by a structured entity to a security trustee.

When determining the size of the financing classified as structured, the total assets shown in the current available financial statements or the market value of the financed asset were used. This figure amounts to €2.3bn (previous year: €1.9bn).

The table below shows the carrying values of assets and liabilities recognised on the balance sheet that are related to interests in unconsolidated structured entities. The table also includes the maximum possible exposure to loss associated with these interests.

	Investment funds		Lending business[1]		Securitisation entities	
€m	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**
Asset items						
Due from customers	3,040.4	2,377.0	618.7	643.5	–	–
Financial assets at fair value	2,503.9	2,361.2	307.8	648.9	68.2	94.1
Financial investments	–	–	–	4.0	–	–
Other assets	0.5	0.0	–	–	–	–
Total asset items	**5,544.8**	**4,738.2**	**926.5**	**1,296.4**	**68.2**	**94.1**
Liability items						
Due to customers	12,069.0	12,399.6	0.0	0.0	–	–
Financial liabilities at fair value	98.5	118.3	–	–	–	–
Other liabilities	7.9	1.2	–	–	–	–
Total liability items	**12,175.4**	**12,519.1**	**0.0**	**0.0**	**–**	**–**
Contingent liabilities and other obligations						
Irrevocable lending commitments	–	–	0.7	0.7	–	–
Other liabilities	–	–	6.5	5.6	–	–
Total contingent liabilities and other obligations	**–**	**–**	**7.2**	**6.3**	**–**	**–**
Maximum exposure to loss	**5,544.8**	**4,738.2**	**933.7**	**1,302.7**	**68.2**	**94.1**

[1] Including risk provisions

The maximum exposure to loss sets out the highest possible loss that the Bank could sustain in connection with its interests in unconsolidated structured entities. The figure presented does not take into account the probability of such a loss being incurred.

- The maximum possible exposure to loss from interests in unconsolidated structured entities that arise as a result of on-balance-sheet transactions corresponds to the carrying value or fair value of the respective balance sheet item.
- According to the definition, the maximum possible exposure to loss from interests in unconsolidated structured entities that arise from off-balance-sheet transactions, for example from guarantees or lending commitments, corresponds to the maximum guaranteed amount, or the amount of the potential liability that would arise if the credit line that is extended were to be fully utilised.

In addition, provisions are established for investment funds with formal guarantees and targeted returns (see note [61] "Other provisions").

The maximum exposure to loss is a gross figure, i.e. it does not take into account the effects of collateral received or hedging transactions.

In connection with interests in unconsolidated structured entities, the Deka Group received interest income, commission income and income from the revaluation and disposal of interests in unconsolidated structured entities during the year under review.

Sponsored unconsolidated structured entities

All circumstances must be considered when determining whether a company from the Deka Group should be categorised as the sponsor of a structured entity. An unconsolidated structured entity in which the Bank has no interest as defined by IFRS 12 is regarded as sponsored if it was established for the benefit of a company in the Deka Group, and the Group has played an active role in determining the purpose and design of the unconsolidated structured entity. The Group is also considered to be a sponsor if a name used by the unconsolidated structured entity – for example its company name or the name of a product – is connected to a company in the Deka Group.

No relationships with sponsored unconsolidated structured entities existed during the year under review. As at 31 December 2019, there were no sponsored unconsolidated entities.

83 List of shareholdings

The following information on shareholdings is a supplementary disclosure required under section 315e of the German Commercial Code. No comparative information is therefore presented in respect of the previous period.

Consolidated subsidiaries (affiliated companies):

Name, registered office	Share of equity % 31 Dec 2019
bevestor GmbH, Frankfurt/Main	100.00
Deka Beteiligungs GmbH, Frankfurt/Main	100.00
Deka Far East Pte. Ltd., Singapore	100.00
Deka Immobilien Investment GmbH, Frankfurt/Main	100.00
Deka Immobilien Luxembourg S.A., Luxembourg	100.00
Deka International S.A., Luxembourg	100.00
Deka Investment GmbH, Frankfurt/Main	100.00
Deka Real Estate International GmbH, Frankfurt/Main	100.00
Deka Real Estate Services USA Inc., New York	100.00
Deka Vermögensmanagement GmbH, Frankfurt/Main	100.00
Deka Vermögensverwaltungs GmbH, Frankfurt/Main	100.00
DekaBank Deutsche Girozentrale Luxembourg S.A., Luxembourg	100.00
International Fund Management S.A., Luxembourg	100.00
S Broker Management AG, Wiesbaden	100.00
S Broker AG & Co. KG, Wiesbaden	100.00
WestInvest Gesellschaft für Investmentfonds mbH, Düsseldorf	99.74[1)]
WIV GmbH & Co. Beteiligungs KG, Frankfurt/Main	94.90

[1)] 5.1% is held by WIV GmbH & Co. Beteiligungs KG.

Consolidated subsidiaries (structured entities):

Name, registered office	Share in fund assets % 31 Dec 2019
Investment funds	
A-DGZ 2-FONDS, Frankfurt/Main	100.00
A-DGZ 5-FONDS, Frankfurt/Main	100.00
DDDD-FONDS, Frankfurt/Main	100.00
S Broker 1 Fonds, Frankfurt/Main	100.00
Lending business	
Treasury Two Shipping Limited, Majuro (Marshall Islands)	

Joint ventures and associated companies consolidated at equity:

Name, registered office	Share of equity % 31 Dec 2019	Equity €'000 31 Dec 2019[1]	Total of profit or loss €'000 31 Dec 2019[1]
Joint ventures			
S-PensionsManagement GmbH, Cologne	50.00	26,824.9	147.9
Dealis Fund Operations GmbH i.L., Frankfurt/Main	50.00	32,914.5	903.0

[1] Amounts reported in financial statements for the year ended 31 December 2018

Joint ventures and associated companies not consolidated at equity:

Name, registered office	Share of equity % 31 Dec 2019
Joint ventures	
Deka-Neuburger Institut für wirtschaftsmathematische Beratung GmbH, Frankfurt/Main	50.00
Associated companies	
DPG Deutsche Performancemessungs-Gesellschaft für Wertpapierportfolios mbH, Frankfurt/Main	22.20

Unconsolidated subsidiaries (affiliated companies):

Name, registered office	Share of equity % 31 Dec 2019
Deka Investors Spezial InvAG m.v.K. und TGV, Frankfurt/Main	
Teilgesellschaftsvermögen Deka Investors Unternehmensaktien, Frankfurt/Main	100.00
Deka Treuhand Erwerbsgesellschaft mbH, Frankfurt/Main	100.00
Deka Treuhand GmbH, Frankfurt/Main	100.00
Deka Verwaltungs GmbH, Frankfurt/Main	100.00
Deka Vorratsgesellschaft 03 mbH, Frankfurt/Main	100.00
Deka Vorratsgesellschaft 04 mbH, Frankfurt/Main	100.00
Deka Vorratsgesellschaft 05 mbH, Frankfurt/Main	100.00
LBG Leasing Beteiligungs-GmbH, Frankfurt/Main	100.00
Privates Institut für quantitative Kapitalmarktforschung der DekaBank GmbH, Frankfurt/Main	100.00
WIV Verwaltungs GmbH, Frankfurt/Main	94.90

Unconsolidated structured entities:

Name, registered office	Fund assets €m 31 Dec 2019	Share of equity/fund assets % 31 Dec 2019
Deka-ImmobilienMetropolen, Frankfurt/ Main	105.0	100.00
Deka-Liquid Alternative Strategies, Luxembourg	49.9	100.00
Deka-Institutionell Absolute Return Dynamisch, Frankfurt/Main	51.4	100.00
Deka Investors Spezial InvAG m.v.K. und TGV, Frankfurt/Main		
Teilgesellschaftsvermögen Deka Darlehen, Frankfurt/Main	51.5	100.00
Mix-Fonds Index: moderat, Luxembourg	5.0	99.50
Mix-Fonds Index: offensiv, Luxembourg	5.6	98.20
Mix-Fonds Index: ausgewogen, Luxembourg	5.3	96.84
Mix-Fonds Index: dynamisch, Luxembourg	5.5	96.75
Deka-Immobilien PremiumPlus-Private Banking, Luxembourg	1.2	94.51
Deka-MultiFactor Global Corporates, Luxembourg	38.0	91.25
Deka-RentSpezial EM 9/2025, Frankfurt/Main	33.7	89.57
Deka Germany 30 UCITS ETF, Frankfurt/Main	37.8	88.08
Deka-RentSpezial High Income 9/2025, Frankfurt/Main	37.7	80.34
Deka-Institutionell Absolute Return Defensiv, Frankfurt/Main	20.3	80.32
Deka-Multi Strategie Global PB, Frankfurt/Main	30.1	76.55
Deka-PortfolioSelect moderat, Frankfurt/Main	6.7	75.59
Deka Euro Corporates 0-3 Liquid UCITS ETF, Frankfurt/Main	74.9	72.47
Deka-MultiFactor Global Corporates HY, Luxembourg	34.4	70.08
Deka US Treasury 7-10 UCITS ETF, Frankfurt/Main	38.7	69.43
Deka-MultiFactor Emerging Markets Corporates, Luxembourg	28.8	66.84
Deka-MultiFactor Global Government Bonds, Luxembourg	21.9	66.77
Deka-PortfolioSelect ausgewogen, Frankfurt/Main	8.0	65.23
Deka-BasisStrategie Aktien, Frankfurt/Main	21.3	61.47
Deka Portfolio Nachhaltigkeit Globale Aktien, Luxembourg	18.2	55.14
Deka-PortfolioSelect dynamisch, Frankfurt/Main	9.9	53.70
Deka MSCI Europe ex EMU UCITS ETF, Frankfurt/Main	41.5	53.47
Deka-Relax 50, Frankfurt/Main	1.1	48.86
Deka-Relax 70, Frankfurt/Main	1.3	45.87
Deka-EuroFlex Plus, Luxembourg	120.1	45.79
Deka-Relax 30, Frankfurt/Main	1.3	42.30
Deka-RentSpezial HighYield 9/2025, Frankfurt/Main	64.5	39.21
Deka Eurozone Rendite Plus 1-10 UCITS ETF, Frankfurt/Main	49.5	36.03
Deka MSCI Japan UCITS ETF, Frankfurt/Main	121.3	35.68
Deka Investors Spezial InvAG m.v.K. und TGV, Frankfurt/Main		
Teilgesellschaftsvermögen Mittelstandskreditfonds I, Frankfurt/Main	49.3	23.00

84 Related party disclosures

The Deka Group has business dealings with related parties. These include DekaBank's shareholders, subsidiaries that are not consolidated on materiality grounds, joint ventures, associates and their respective subsidiaries, individuals in key positions and their relatives, and companies controlled by these individuals. For the purposes of this disclosure, unconsolidated own mutual funds and special funds where the Deka Group's holding exceeds 10.0% as at the reporting date are shown as subsidiaries, associates or other related parties in accordance with their equity holding.

Natural persons in key positions deemed to be related parties under IAS 24 are the members of the Board of Management and Administrative Board of DekaBank as the parent company. Personnel expenses in respect of the persons concerned are shown in the table below:

	Board of Management		Administrative Board	
€m	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**
Short-term benefits	3.7	3.3	0.8	0.7
Post-employment benefits	1.9	2.0	–	–
Other long-term benefits	2.4	2.5	–	–
Total	**8.0**	**7.8**	**0.8**	**0.7**

Remuneration to employees' representatives on the Administrative Board made separately from their Administrative Board activities was at current market terms.

Transactions are carried out with related parties under normal market terms and conditions as part of the ordinary business activities of the Deka Group. These relate, inter alia, to loans, call money, time deposits and derivatives. The non-consolidated subsidiaries receive services from the Deka Group free of charge as part of general day-to-day business. This also applies to three subsidiaries included in the consolidated financial statements that do not have any employees of their own. The liabilities of the Deka Group to mutual funds and special funds essentially comprise bank balances from the temporary investment of liquid funds. The tables below show the extent of these transactions.

Business dealings with shareholders of DekaBank and unconsolidated subsidiaries:

	Shareholders		Subsidiaries	
€m	**31 Dec 2019**	**31 Dec 2018**	**31 Dec 2019**	**31 Dec 2018**
Asset items				
Due from customers	–	–	0.4	0.1
Financial assets at fair value	–	–	3.1	3.1
Other assets	–	–	16.5	0.3
Total asset items	**–**	**–**	**20.0**	**3.5**
Liability items				
Due to customers	63.4	41.1	59.7	63.6
Financial liabilities at fair value	–	–	0.5	0.3
Other liabilities	–	–	0.0	0.0
Total liability items	**63.4**	**41.1**	**60.2**	**63.9**

Business dealings with joint ventures, associated companies and other related parties:

€m	Joint ventures/ associated companies 31 Dec 2019	Joint ventures/ associated companies 31 Dec 2018	Other related parties 31 Dec 2019	Other related parties 31 Dec 2018
Asset items				
Due from customers	0.0	0.0	–	0.0
Financial assets at fair value	1.3	1.5	0.0	–
Other assets	0.1	0.4	0.6	0.7
Total asset items	**1.4**	**1.9**	**0.6**	**0.7**
Liability items				
Due to customers	11.9	425.5	103.2	313.0
Financial liabilities at fair value	57.7	53.2	–	0.0
Total liability items	**69.6**	**478.7**	**103.2**	**313.0**

85 Average number of staff

	2019			2018		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
Full-time employees	2,553	1,069	3,622	2,543	1,063	3,606
Part-time and temporary employees	213	761	974	198	721	919
Total	**2,766**	**1,830**	**4,596**	**2,741**	**1,784**	**4,525**

86 Remuneration of Board members

€	31 Dec 2019	31 Dec 2018
Total remuneration of active Board members		
Board of Management	6,207,945	5,516,325
Administrative Board	780,000	711,333
Total remuneration of former Board members and their surviving dependents		
Board of Management	3,921,802	4,369,136
Provisions for pensions for former Board members and their dependents	65,312,543	59,905,883

The emoluments to active members of the Board of Management presented above include all remuneration and benefits in kind paid in the respective financial year, including variable components that are attributable to previous years and are thus dependent on business performance in earlier periods.

No loans or advances were granted to members of the Board of Management or Administrative Board. No guarantees or other commitments were entered into in favour of such persons.

In the 2019 financial year, variable remuneration elements that are dependent on future performance amounting to €2.5m (previous year: €2.2m) were committed to current members of the Board of Management.

Half of the variable remuneration components to which an entitlement does not already arise in the year of commitment and which are paid out at a later date (deferred variable remuneration components) are granted in cash, with the other half being granted in the form of instruments. All deferred variable remuneration components are subject to a waiting period of up to five years, during which they can be reduced or forfeited altogether in accordance with the statutory provisions in the event of failure to meet targets at individual, company or Group level.

The value of the instruments depends on the sustainable performance of the Deka Group. The instruments are subject to a one-year holding period after the end of the waiting period, and are paid out after that period has elapsed. In the event of serious misconduct or breaches of duty, variable remuneration components that have already been paid out can still be clawed back for a period of up to two years following the end of the last waiting period for the financial year in question.

Total emoluments include deferred variable remuneration components from previous years payable to active members of the Board of Management amounting to €2.4m and to former members of the Board of Management amounting to €0.4m. The entitlement of active board members comprises €0.5m for the 2018 financial year, €0.6m for the 2017 financial year, €0.4m for the 2016 financial year, €0.4m for the 2015 financial year, €0.3m for the 2014 financial year and €0.2m for the 2013 financial year.

87 Auditor’s fees

The following fees for the auditors of the consolidated financial statements were recorded as expenses in the reporting year:

€m	2019	2018	Change
Fees for			
Year-end audit services	4.5	3.9	0.6
Non-audit services			
Other assurance services	0.8	0.9	–0.1
Tax advisory services	0.0	0.0	–
Other services	–	–	–
Total	**5.3**	**4.8**	0.5

88 Additional miscellaneous information

Post balance sheet events (Supplement)

No material events of particular significance occurred between the reporting date and the date of the first audit of the financial statements (2 March 2020). The further development of the COVID-19/coronavirus crisis, particularly from the beginning of March 2020 onwards, is putting sustained pressure on the economy and the capital market alike. The impact on DekaBank’s economic result and other key management indicators could result in the figures for 2020 being significantly lower than in 2019. As a result, the forecast report included in the Group management report has also been supplemented accordingly.

Recommendation regarding appropriation of net profit

The proposed appropriation of the net profit for the 2019 financial year of €55,218,050.08 is as follows:

- Distribution of a dividend amounting to €55,218,050.08, i.e. 28.8% on existing shares in the Bank’s subscribed capital (€191,729,340.56) that are entitled to dividends as at 31 December 2019.

The consolidated financial statements were approved for publication on 28 February 2020 by the Board of Management of DekaBank, with the supplement being approved on 24 March 2020.

Assurance of the Board of Management

We declare that, to the best of our knowledge, the consolidated financial statements prepared in accordance with the applicable reporting standards convey a true and fair view of the financial position and financial performance of the Group and that the management report conveys a true and fair view of the business performance including the business results and position of the Group and suitably presents the material risks and opportunities and likely development of the Group.

Frankfurt/Main, 28 February 2020

Supplement to the notes to the consolidated financial statements and the Group management report to include information on significant events after the reporting date:

These events relate to the effects of the further development of the COVID-19/coronavirus crisis in the form of sustained pressure on the economy and the capital market, and a potential impact on DekaBank's key management indicators.

Frankfurt/Main, 24 March 2020

DekaBank
Deutsche Girozentrale

The Board of Management

Dr. Stocker Better

Dr. Danne Kapffer Müller

Note: This is a translation of the German original. Solely the original text in German language is authoritative.

Independent Auditors's Report

To DekaBank Deutsche Girozentrale AöR, Berlin/Frankfurt am Main

Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

Opinions

We have audited the consolidated financial statements of DekaBank Deutsche Girozentrale AöR, Berlin/Frankfurt am Main,and its subsidiaries (the Group), which comprise the statement of profit or loss and other comprehensive income for the financial year from January 1 to December 31, 2019, the balance sheet as of December 31, 2019, and the statement of changes in equity and the statement of cash flows for the financial year from January 1 to December 31, 2019 and notes to the consolidated financial statements. In addition, we have audited the group management report of DekaBank Deutsche Girozentrale AöR for the financial year from January 1 to December 31, 2019 In accordance with German legal requirements we have not audited the content of those components of the group management report specified in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2019, and of its financial performance for the financial year from January 1 to December 31, 2019 and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of those components of the group management report specified in the "Other Information" section of the auditor´s report.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW).Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2019 These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Measurement of financial assets valued at fair value

For the accounting policies applied, please refer to notes 8 and 9 in the notes to the consolidated financial statements.

THE CONSOLIDATED FINANCIAL STATEMENT RISK

As of December 31, 2019, the Deka Group recognized "financial assets valued at fair value" totaling EUR 30.4 billion. At 31.3% of total assets this represents a significant item on the assets side for DekaBank and contains securities and derivatives, for which there is a quoted price on an active market and those for which a valuation method was used based on observable and/or unobservable market data (this corresponds to the fair value categories 1 to 3 of IFRS 13).

The financial statement risk could arise through inappropriate market prices, valuation methods and models or valuation parameters incorporated therein being used when measuring the fair values in accordance with IFRS 13.

OUR AUDIT APPROACH

Based on our risk assessment and evaluation of the risks of material misstatement, we developed an audit approach, which encompasses both controls testing as well as substantive audit procedures. We therefore performed the following audit procedures, among others:

For our assessment, we inspected documentation and conducted surveys, and also tested the functionality of key controls. In particular we evaluated the key processes and controls of DekaBank regarding

- the procurement and validation or independent verification of quoted prices as well as observable and non-observable market data,
- the validation of the valuation methods and models as well as
- the fair value measurement of securities and derivatives

in respect of their adequacy and effectiveness. In addition, we also audited the effectiveness of the general IT controls in the IT systems that are used.

We carried out, inter alia, substantive audit procedures for portfolios of securities and derivatives selected based on a risk-oriented approach:

- Carrying out an independent price verification if a quoted price on an active market exists.
- Where there are no quoted prices on an active market, we performed a sample re-valuation using independent valuation methods, parameters and models.
- Assessment of the determination and recognition of value adjustments to measure fair value.

OUR OBSERVATIONS

The classification of financial assets measured at fair value and the market prices, valuation methods and models used for their measurement at DekaBank are appropriate. The parameters incorporated were properly derived.

Measurement of financial liabilities from the issuance of certificates measured at fair value
For the accounting policies applied, please refer to notes 8 and 9 in the notes to the consolidated financial statements.

THE CONSOLIDATED FINANCIAL STATEMENT RISK

The item "financial liabilities measured at fair value" represents 30.7 % (EUR 29.9 billion) of the Deka Group's total equity and liabilities and includes certificate issuance measured on the basis of observable and non-observable input parameters.

The financial statement risk could lie in particular in there being no proper valuation methods and models or valuation parameters incorporated therein used when measuring the fair values.

OUR AUDIT APPROACH

Based on our risk assessment and evaluation of the risks of material misstatement, we developed an audit approach, which encompasses both controls testing as well as substantive audit procedures. We therefore performed the following audit procedures, among others:

For our assessment, we inspected documentation and conducted surveys, and also tested the functionality of key controls. In particular we evaluated the key processes and controls of DekaBank regarding

- the procurement and validation or independent verification of quoted prices as well as observable and non-observable market data,
- the validation of the valuation methods and models,
- the fair value measurement of certificates

in respect of their adequacy and effectiveness. In addition, we also audited the effectiveness of the general IT controls in the IT systems that are used.

We carried out, inter alia, the following substantive audit procedures for certificates selected based on a risk-oriented approach as of December 31, 2019:

- Sample re-valuation using independent valuation methods, parameters and models. In this process, we covered the material product-model combinations of the Bank.
- Assessment of the discount curves used for the valuation of certificates.

OUR OBSERVATIONS

The measurement methods and models used by DekaBank for the fair value measurement of financial liabilities from the issuance of certificates measured at fair value are appropriate. The parameters incorporated were properly derived.

The determination and recognition of net commission income from the fund business
For the accounting policies used, please refer to notes 15 and 35 in the notes to the consolidated financial statements.

THE CONSOLIDATED FINANCIAL STATEMENT RISK

The net commission income from the Deka Group's fund business is, in terms of amount, a key component of both the overall net commission income as well as the net income of the DekaBank Group. In the notes to the consolidated financial statements for the 2019 financial year the Deka Group recognized commission income from the fund business of EUR 2.4 billion and commission expenses from the fund business of EUR 1.2 billion.

The Deka Group generates commission income from the administration and/or sale of investment fund units when the preconditions pursuant to IFRS 15 are met. Accordingly, commission expenses, which mainly arise from remuneration to sales partners, are recognized with the commission income with which they are associated.

The invoicing system and posting logic for commission income and expenses from the fund business of the Deka Group is multi-faceted. This multi-faceted nature is reflected in particular in the different types of commission in the fund business as well as the settlement of acquisition, issuance, invoicing and payment transactions between funds, the asset management companies of the Deka Group and DekaBank as well as the savings banks (Sparkassen).

The consolidated financial statement risk could arise due to net commission income from the fund business not being properly presented in the consolidated financial statements due to the inappropriate determination and recognition of the corresponding commission income and expenses.

OUR AUDIT APPROACH

Based on our risk assessment and evaluation of the risks of material misstatement, we developed an audit approach, which encompasses both controls testing as well as substantive audit procedures. We therefore performed the following audit procedures, among others:

In order to audit the net commission income from the fund business we evaluated the key internal accounting-related processes and controls pertaining to

- the proper order entry
- the recognition and maintenance of fund and custodial account master data and
- the presentation for accounting purposes of commission income and expenses from the fund business

in respect of their adequacy and effectiveness. In addition, we also audited the effectiveness of the general IT controls in the IT systems that in use.

In the course of our substantive audit procedures we verified the proper entry into the accounts of commission income and expenses by reconciling the invoices with the underlying documents, which represent the basis for the determination and recognition of commission income and expenses, for individual transactions.

In addition, we also carried out plausibility assessments of ratios and industry trends in the course of our analytical audit procedures.

OUR OBSERVATIONS

Based on the results of the controls testing and substantive audit procedures we conclude that the commission income and expenses from the fund business have been properly determined and recognized.

Other Information

The Board of Management and/or the Administrative Board is responsible for the other information. The other information comprises the non-financial statement the group management report refers to. The other Information also includes the remaining parts of the annual report.

The other Information does not include the consolidated financial statements, the group management report extraneous to management reports and our auditor's report thereon.Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Board of Management and the Administrative Board for the Consolidated Financial Statements and the Group Management Report

The Board of Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the Board of Management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the Board of Management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the Board of Management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Administrative Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the Board of Management and the reasonableness of estimates made by the Board of Management and related disclosures.
- Conclude on the appropriateness of the Board of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the Board of Management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the Board of Management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on April 4, 2019. We were engaged by the Administrative Board on June 19, 2019. We have been the group auditor of the DekaBank without interruption since the financial year 2013.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

In addition to the financial statement audit, we have provided to DekaBank or subsidiaries of DekaBank the following services that are not disclosed in the consolidated financial statements or in the group management report:

We performed an audit review of the interim (half-year) financial report. Furthermore, we also performed other assurance services, including custody account audits/audits pursuant to the German Securities Trading Act [WpHG], an assurance engagement pursuant to ISAE 3402, issuing of letters of comfort as well as other assurance services required by supervisory law and tax advisory services for Asset Management, which were approved by the Audit Committee.

Information on the Supplementary Audit

We issue this auditor's report on the amended consolidated financial statements and amended group management report on the basis of our statutory audit completed on March 2, 2020 and our supplementary audit completed on March 25, 2020, which concerned the amendment to disclosures in the notes to the consolidated financial statements and the group management report due to the updated forecast reporting taking into account new information on the effects of the spread of coronavirus. Please refer to the presentation of the amendment by the executive directors in Note 88 entitled "Additional miscellaneous information" in the amended notes to the consolidated financial statements and in the section entitled "Forecast report" in the amended group management report.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Thomas Beier.

Frankfurt am Main, 2 March 2020/limited to the amendment referred to in the Information on the Supplementary Audit: 25 March 2020

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Pukropski

Wirtschaftsprüfer
[German Public Auditor]

Beier

Wirtschaftsprüfer
[German Public Auditor]

Other information

Shareholders, subsidiaries and associated companies

Shareholders of DekaBank *(as of 1 March 2020)*

DSGV ö. K.[1)]	**50 %**
thereof:	
Sparkassenverband Baden-Württemberg	7.71 %
Rheinischer Sparkassen- und Giroverband	6.56 %
Sparkassenverband Niedersachsen	6.46 %
Sparkassenverband Bayern	6.32 %
Sparkassenverband Westfalen-Lippe	6.18 %
Sparkassen- und Giroverband Hessen-Thüringen	5.81 %
Sparkassenverband Rheinland-Pfalz	3.21 %
Sparkassenverband Berlin / Landesbank Berlin	1.90 %
Ostdeutscher Sparkassenverband	1.83 %
Sparkassen- und Giroverband für Schleswig-Holstein	1.78 %
Sparkassenverband Saar	1.37 %
Hanseatischer Sparkassen- und Giroverband	0.91 %
Deka Erwerbsgesellschaft mbH & Co. KG	**50 %**
thereof:	
Sparkassenverband Bayern	8.40 %
Sparkassenverband Baden-Württemberg	8.14 %
Ostdeutscher Sparkassenverband	8.00 %
Rheinischer Sparkassen- und Giroverband	7.66 %
Sparkassen- und Giroverband Hessen-Thüringen	5.47 %
Sparkassenverband Westfalen-Lippe	3.69 %
Sparkassenverband Niedersachsen	2.04 %
Sparkassenverband Rheinland-Pfalz	1.87 %
Sparkassenverband Berlin / Landesbank Berlin	1.57 %
Sparkassen- und Giroverband für Schleswig-Holstein	1.48 %
Hanseatischer Sparkassen- und Giroverband	1.27 %
Sparkassenverband Saar	0.43 %

[1)] in relation to voting stake (subject to rounding differences)

Subsidiaries and associated companies of DekaBank[2] *(as of 1 March 2020)*

Asset Management Securities business division	
Deka Investment GmbH, Frankfurt/Main	100.0 %
DekaBank Deutsche Girozentrale Luxembourg S.A., Luxembourg	100.0 %
Deka International S.A., Luxembourg	100.0 %
International Fund Management S.A., Luxembourg	100.0 %
DekaTreuhand GmbH, Frankfurt/Main	100.0 %
Privates Institut für quantitative Kapitalmarktforschung der DekaBank GmbH, Frankfurt/Main	100.0 %
Deka Vermögensmanagement GmbH, Frankfurt/Main (formerly: Landesbank Berlin Investment GmbH, Berlin)	100.0 %
S-Pensionsmanagement GmbH, Cologne	50.0 %
Sparkassen Pensionsfonds AG, Cologne	50.0 %
Sparkassen Pensionskasse AG, Cologne	50.0 %
Deka Neuburger Institut für wirtschaftsmathematische Beratung GmbH, Frankfurt/Main	50.0 %
Dealis Fund Operations GmbH i.L., Frankfurt/Main	50.0 %
Heubeck AG, Cologne	30.0 %
DPG Deutsche Performancemessungs-Gesellschaft für Wertpapierportfolios mbH, Frankfurt/Main	22.2 %
Erste Asset Management GmbH, Vienna	1.65 %
Asset Management Services business division	
bevestor GmbH, Frankfurt/Main	100.0 %
S Broker AG & Co. KG, Wiesbaden	100.0 %
S Broker Management AG, Wiesbaden	100.0 %
Asset Management Real Estate business division	
Deka Immobilien Investment GmbH, Frankfurt/Main	100.0 %
Deka Immobilien GmbH, Frankfurt/Main	100.0 %
Deka Immobilien Luxembourg S.A., Luxembourg	100.0 %
Deka Vermögensverwaltungs GmbH, Frankfurt/Main	100.0 %
Deka Verwaltungs GmbH, Frankfurt/Main	100.0 %
Deka Real Estate International GmbH (formerly: Deka Immobilien Beteiligungsgesellschaft mbH, Frankfurt/Main)	100.0 %
Deka Investors Spezialinvestmentaktiengesellschaft mit veränderlichem Kapital und Teilgesellschaftsvermögen, Frankfurt/Main	100.0 %
WestInvest Gesellschaft für Investmentfonds mbH, Düsseldorf	99.7 %
WIV GmbH & Co. Beteiligungs KG, Frankfurt/Main	94.9 %
Architrave GmbH, Berlin	12.0 %
Deka-S-PropertyFund No. 1 Beteiligungs GmbH & Co. KG, Frankfurt/Main	11.6 %
Financing business division	
Global Format GmbH & Co. KG, Munich	18.8 %
HELICON Verwaltungsgesellschaft mbH & Co. Immobilien KG, Pullach	8.3 %
RSU Rating Service Unit GmbH & Co. KG, Munich	6.5 %
SIZ GmbH, Bonn	5.0 %
True Sale International GmbH, Frankfurt/Main	7.7 %
Corporate Centre Corporate Development	
Deka Beteiligungs GmbH, Frankfurt/Main	100.0 %
Deka Treuhand Erwerbsgesellschaft mbH, Frankfurt/Main	100.0 %

[2] Held directly or indirectly. The Group has further holdings which are, however, of minor significance.

Administrative Board and Board of Management of DekaBank

(as of 1 March 2020)

Administrative Board

Helmut Schleweis
Chairman
President of the German Savings Banks and Giro Association e. V., Berlin,
President of the German Savings Banks and Giro Association – public law entity, Berlin
Chairman of the General and Nominating Committee
Chairman of the Remuneration Supervision Committee

Walter Strohmaier
First Deputy Chairman
Chairman of the Management Board of Sparkasse Niederbayern-Mitte, Straubing
First Deputy Chairman of the General and Nominating Committee
First Deputy Chairman of the Remuneration Supervision Committee
Member of the Audit Committee

Thomas Mang
Second Deputy Chairman
President of the Savings Banks Association Lower Saxony, Hanover
Chairman of the Risk and Credit Committee
Second Deputy Chairman of the General and Nominating Committee
Second Deputy Chairman of the Remuneration Supervision Committee

Further representatives selected by the Shareholders' Meeting

Michael Bräuer
Chairman of the Management Board of Sparkasse Oberlausitz-Niederschlesien, Zittau
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Michael Breuer
President of the Rhineland Savings Banks and Giro Association, Düsseldorf
Chairman of the Audit Committee
Chairman of the General und Nominating Committee

Ingo Buchholz
Chairman of the Management Board of Kasseler Sparkasse, Kassel

Prof. Dr. Liane Buchholz
President of the Savings Banks Association Westfalen-Lippe, Münster
Member of the Audit Committee
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Dr. Michael Ermrich
Managing President of the East German Savings Banks Association, Berlin

Dr. Johannes Evers
(until 31 December 2019)
Chairman of the Management Board of Berliner Sparkasse and President of the Savings Banks Association Berlin, Berlin
Deputy Chairman of the Risk and Credit Committee

Andreas Fohrmann
Chairman of the Management Board of Sparkasse Südholstein, Münster

Ralf Fleischer
Chairman of the Management Board of Stadtsparkasse München, Munich

Gerhard Grandke
Managing President of the Savings Banks and Giro Association Hesse-Thuringia, Frankfurt/Main
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Dr. Christoph Krämer
Chairman of the Management Board of Sparkasse Iserlohn, Iserlohn
Member of the Risk and Credit Committee (until 31 December 2019)
Deputy Chairman of the Risk and Credit Committee (since 1 January 2020)

Beate Läsch-Weber
President of the Savings Banks Association Rhineland-Palatinate, Mainz

Ludwig Momann
Chairman of the Management Board of Sparkasse Emsland, Meppen
Member of the Risk and Credit Committee

Tanja Müller-Ziegler
(since 1 January 2020)
Member of the Management Board of Berliner Sparkasse, Berlin
Member of the Risk and Credit Committee

Dr. Ulrich Netzer
President of the Savings Banks Association Bavaria, Munich
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee
Member of the Audit Committee

Frank Saar
Member of the Management Board of Sparkasse Saarbrücken, Saarbrücken
Member of the Risk and Credit Committee

Peter Schneider
President of the Savings Banks Association Baden-Wuerttemberg, Stuttgart
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Dr. jur. Harald Vogelsang
Spokesman of the Management Board of Hamburger Sparkasse AG, Hamburg
President of the Hanseatic Savings Banks and Giro Association, Hamburg

Burkhard Wittmacher
Chairman of the Management Board of Sparkasse Esslingen-Nürtingen, Esslingen
Member of the Audit Committee

Alexander Wüerst
Chairman of the Management Board of Kreissparkasse Köln, Cologne
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Employee Representatives appointed by the Staff Committee:

Michael Dörr
Chairman of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

Erika Ringel
Member of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

Representatives appointed by the Federal Organisation of Central Municipal Organisations (in an advisory capacity):

Helmut Dedy
Chief Executive Officer of the German Association of Cities, Berlin

Prof. Dr. Hans-Günter Henneke
Managing Member of the Presiding Board of the German County Association, Berlin
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Roland Schäfer
Mayor of the City of Bergkamen and President of the German Association of Towns and Municipalities, Berlin

Board of Management

Dr. Georg Stocker
CEO
(since 1 January 2020)
Deputy CEO
(until 31 December 2019)

Michael Rüdiger
CEO
(until 31 December 2019)

Manuela Better
Member of the Board of Management
(until 31 May 2020)

Dr. Matthias Danne
Member of the Board of Management

Daniel Kapffer
Member of the Board of Management
(since 1 May 2019)

Martin K. Müller
Member of the Board of Management

Executive Managers

Daniel Kapffer
(until 30 April 2019)

Manfred Karg

Torsten Knapmeyer
(since 1 January 2020)

Seats on supervisory bodies

Michael Rüdiger
CEO
until 31 December 2019
Deka Investment GmbH, Frankfurt/Main:
Chairman of the Supervisory Board
until 31 December 2019
Deka Vermögensmanagement GmbH, Frankfurt/Main:
Chairman of the Supervisory Board
until 31 December 2019
Evonik Industries AG, Essen:
Member of the Supervisory Board
Deka Immobilien GmbH, Frankfurt/Main:
Member of the Supervisory Board
until 16 September 2019

Dr. Georg Stocker
Deputy CEO
until 31 December 2019
CEO
since 1 January 2020
S Broker AG & Co. KG, Wiesbaden:
Chairman of the Supervisory Board
S Broker Management AG, Wiesbaden:
Chairman of the Supervisory Board

Manuela Better
Member of the Board of Management
until 31 May 2020
Deka Investment GmbH, Frankfurt/Main:
Deputy Chairwoman of the Supervisory Board
Deka Vermögensmanagement GmbH, Frankfurt/Main:
Deputy Chairwoman of the Supervisory Board
Deka Immobilien Investment GmbH, Frankfurt/Main:
Deputy Chairwoman of the Supervisory Board
until 3 February 2020
Member of the Supervisory Board
4 February until 29 February 2020
WestInvest Gesellschaft für Investmentfonds mbH, Düsseldorf:
Deputy Chairwoman of the Supervisory Board
until 29 February 2020
Deka Immobilien GmbH, Frankfurt/Main:
Deputy Chairwoman of the Supervisory Board
until 16 September 2019
S Broker AG & Co. KG, Wiesbaden:
Deputy Chairwoman of the Supervisory Board
S Broker Management AG, Wiesbaden:
Member of the Supervisory Board
DekaBank Deutsche Girozentrale Luxembourg S.A., Luxembourg:
Member of the Administrative Board
Deutsche EuroShop AG, Hamburg:
Member of the Supervisory Board
until 12 June 2019

Dr. Matthias Danne
Member of the Board of Management
Deka Investment GmbH, Frankfurt/Main:
Member of the Supervisory Board
since 1 January 2020
Chairman of the Supervisory Board
since 15 January 2020
Deka Vermögensmanagement GmbH, Frankfurt/Main:
Member of the Supervisory Board
since 1 January 2020
Chairman of the Supervisory Board
since 15 January 2020
Deka Immobilien Investment GmbH, Frankfurt/Main:
Deputy Chairman of the Supervisory Board
WestInvest Gesellschaft für Investmentfonds mbH, Düsseldorf:
Chairman of the Supervisory Board
Deka Immobilien GmbH, Frankfurt/Main:
Chairman of the Supervisory Board
until 16 September 2019
DekaBank Deutsche Girozentrale Luxembourg S.A., Luxembourg:
Deputy Chairman of the Administrative Board
S-PensionsManagement GmbH, Cologne:
Deputy Chairman of the Supervisory Board
Sparkassen Pensionskasse AG, Cologne:
Deputy Chairman of the Supervisory Board
Sparkassen Pensionsfonds AG, Cologne:
Chairman of the Supervisory Board
Deka Treuhand Erwerbsgesellschaft mbH, Frankfurt/Main:
Managing Diector

Daniel Kapffer
Member of the Board of Management
since 1 May 2019
bevestor GmbH, Frankfurt/Main:
Deputy Chairman of the Supervisory Board
S Broker AG & Co. KG, Wiesbaden:
Member of the Supervisory Board
DekaBank Deutsche Griozentrale Luxembourg S.A., Luxembourg:
Member of the Administrative Board
since 21 June 2019

Martin K. Müller
Member of the Board of Management
DekaBank Deutsche Girozentrale Luxembourg S.A., Luxembourg:
Chairman of the Administrative Board
Sparkassen Rating und Risikosysteme GmbH, Berlin:
Member of the Supervisory Board
Deka Treuhand Erwerbsgesellschaft mbH, Frankfurt/Main:
Managing Director

Fund-related committees

Asset Management Securities business division

Advisory Board Retail
(as of 1 March 2020)

Chairman

Dr. Harald Langenfeld
Chairman of the Management Board of Stadt- und Kreissparkasse Leipzig, Leipzig

Deputy Chairman

Matthias Nester
Chairman of the Management Board of Sparkasse Koblenz, Koblenz

Members

Jochen Brachs
Chairman of the Management Board of Sparkasse Hochschwarzwald, Titisee-Neustadt

Gerhard Döpkens
(until 31 August 2019)
Chairman of the Management Board of Sparkasse Gifhorn-Wolfsburg, Gifhorn

Wilfried Groos
Chairman of the Management Board of Sparkasse Siegen, Siegen

Markus Groß
Chairman of the Management Board of Sparkasse Neunkirchen, Neunkirchen

Arendt Gruben
Chairman of the Management Board of Sparkasse Schwarzwald-Baar, Villingen-Schwenningen

Stefan Grunwald
Chairman of the Management Board of Stadt-Sparkasse Solingen, Solingen

Michael Horn
Deputy Chairman of the Management
Board of Landesbank Baden-Württemberg, Stuttgart

Wolfgang Kirschbaum
Chairman of the Management Board of Sparkasse Minden-Lübbecke, Minden

Oliver Klink
Chairman of the Management Board of Taunus-Sparkasse, Bad Homburg v.d.H.

Marlies Mirbeth
Member of the Management Board of Stadtsparkasse München, Munich

Tanja Müller-Ziegler
Member of the Management Board of Berliner Sparkasse, Berlin

Walter Paulus-Rohmer
Member of the Management Board of Stadt- und Kreissparkasse Erlangen Höchstadt Herzogenaurach, Erlangen

Bettina Poullain
Member of the Management Board of Hamburger Sparkasse AG, Hamburg

Hubert Rist
Chairman of the Management Board of Sparkasse Pfullendorf-Meßkirch, Pfullendorf

Oliver Saggau
Member of the Management Board of Sparkasse zu Lübeck AG, Lübeck

Michael Thanheiser
(since 1 September 2019)
Chairman of the Management Board of Landessparkasse zu Oldenburg, Oldenburg

Hartmut Wnuck
Chairman of the Management Board of Stadtsparkasse Mönchengladbach, Mönchengladbach

Advisory Board Institutional
(as of 1 March 2020)

Chairman

Joachim Hoof
Chairman of the Management Board of Ostsächsische Sparkasse Dresden, Dresden

Deputy Chairman

Michael Bott
Chairman of the Management Board of Sparkasse Waldeck-Frankenberg, Korbach

Members

Felix Angermann
Chairman of the Management Board of Sparkasse Zwickau, Zwickau

Peter Becker
Chairman of the Management Board of Sparkasse Herford, Herford

Christian Bonnen
Member of the Management Board of Kreissparkasse Köln, Cologne

Frank Brockmann
Deputy Spokesman of the Management Board of Hamburger Sparkasse AG, Hamburg

Andreas Götz
Chairman of the Management Board of Kreissparkasse Ostalb, Cham

Stefan Lukai
Member of the Management Board of Sparkasse Essen, Essen

Thomas Lützelberger
Chairman of the Management Board of Sparkasse Schwäbisch Hall-Crailsheim, Schwäbisch Hall

Heiko Nebel
Chairman of the Management Board of Stadtsparkasse Burgdorf, Burgdorf

Frank Opitz
Member of the Management Board of Sparkasse Fürstenfeldbruck, Fürstenfeldbruck

Peter Orth
Member of the Management Board of Sparkasse Dortmund, Dortmund

Hubert Riese
Member of the Management Board of Kreissparkasse Eichsfeld, Worbiss

Stephan Scholl
Chairman of the Management Board of Sparkasse Pforzheim Calw, Pforzheim

Christoph Schulz
Chairman of the Management Board of Braunschweigische Landes-sparkasse, Brunswick

Rolf Settelmeier
Chairman of the Management Board of Stadtsparkasse Augsburg, Augsburg

Franz Wittmann
Chairman of the Management Board of Landkreis Cham, Cham

Corporate Bodies of Subsidiaries – Asset Management Securities business division

Deka Investment GmbH

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Matthias Danne
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Manuela Better
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Dr. Fritz Becker
Wehrheim

Joachim Hoof
Chairman of the Management Board of Ostsächsischen Sparkasse Dresden, Dresden

Jörg Münning
Chairman of the Management Board of LBS Westdeutsche Landesbausparkasse, Münster

Peter Scherkamp
Munich

Board of Management

Chairman

Stefan Keitel

Deputy Chairman

Dr. Ulrich Neugebauer

Members

Jörg Boysen
Thomas Ketter
Thomas Schneider

Deka Vermögensmanagement GmbH

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Matthias Danne
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Manuela Better
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Serge Demolière
Berlin

Stefan Keitel
Chairman of the Board of Directors Deka Investment GmbH, Frankfurt/Main

Steffen Matthias
Berlin

Victor Moftakhar
Member of the Management Board of the Foundation „Fonds zur Finanzierung der kerntechnischen Entsorgung“, Berlin

Board of Management

Chairman

Dirk Degenhardt

Members

Dirk Heuser
Thomas Ketter
Thomas Schneider
Holger Wern

S Broker AG & Co. KG

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Georg Stocker
CEO of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairmen

Manuela Better
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Dr. Olaf Heinrich
Head of Digital Multichannel Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Daniel Kapffer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Dr. Hans-Jürgen Plewan
Head of IT, DekaBank Deutsche Girozentrale, Frankfurt/Main

Board of Management

S Broker Management AG

S Broker Management AG

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Georg Stocker
CEO of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairman

Dr. Olaf Heinrich
Head of Digital Multichannel Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Member

Manuela Better
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Board of Management

Spokesman

Gregor Surges

Member

Marcus Brinker

bevestor GmbH

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Olaf Heinrich
Head of Digital Multichannel Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairman

Daniel Kapffer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Member

Dirk Degenhardt
Chairman of the Board of Directors of Deka Vermögensmanagement GmbH, Frankfurt/Main

Board of Management

Members

Marco Lorenz
Carsten Kroeber
Björn Schmuck

DekaBank Deutsche Girozentrale Luxembourg S.A.

Members of the Administrative Board
(as of 1 March 2020)

Chairman

Martin K. Müller
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Manuela Better
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Wolfgang Dürr
Executive Member of the Administrative Board of DekaBank Deutsche Girozentrale Luxembourg S.A., Luxembourg

Dr. Stefan Grabowsky
Trier

Hans-Ulrich Hügli
Luxembourg

Daniel Kapffer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Board of Management

Members

Wolfgang Dürr
Tobias Gansäuer

Asset Management Real Estate business division

Advisory Board Real Estate
(as of 1 March 2020)

Chairman

Johannes Hüser
(until 31 March 2020)
Chairman of the Management Board of Kreissparkasse Wiedenbrück, Rheda-Wiedenbrück

Deputy Chairman

Dirk Köhler
Chairman of the Management Board of Sparkasse Uelzen Lüchow-Dannenberg, Uelzen

Members

Andrea Binkowski
Chairwoman of the Management Board of Sparkasse Mecklenburg-Strelitz, Neustrelitz

Wolfgang Busch
(until 31 July 2019)
Deputy Chairman of the Management Board of Sparkasse Hilden-Ratingen-Velbert, Velbert

Toni Domani
Member of the Management Board of Sparkasse Regen-Viechtach, Regen

Peter Dudenhöffer
Deputy Chairman of the Management Board of Sparkasse Germersheim-Kandel, Kandel

Dr. Alexander Endlich
(since 1 August 2019)
Chairman of the Management Board of Sparkasse Hegau-Bodensee, Singen

Heinz Feldmann
Chairman of the Management Board of Sparkasse LeerWittmund, Leer

Dr. Jürgen Fox
(since 1 July 2019)
Chairman of the Management Board of Saalesparkasse, Halle (Saale)

Norbert Grießhaber
(until 30 April 2019)
Chairman of the Management Board of Sparkasse Kraichgau, Bruchsal

Ulrich Kistner
(since 1 May 2019)
Chairman of the Management Board of Sparkasse Rastatt-Gernsbach, Rastatt

Udo Klopfer
(until 31 July 2019)
Chairman of the Management Board of Sparkasse Hegau-Bodensee, Singen

Heinrich-Georg Krumme
Chairman of the Management Board of Sparkasse Westmünsterland, Dülmen

Karl-Manfred Lochner
Member of the Management Board of Landesbank Baden-Württemberg, Stuttgart

Dr. Ewald Maier
Chairman of the Management Board of Sparkasse Forchheim, Forchheim

Mike Stieler
Chairman of the Management Board of Sparkasse Sonneberg, Sonneberg

Dr. Hariolf Teufel
Chairman of the Management Board of Kreissparkasse Göppingen, Göppingen

Jürgen Thomas
Deputy Chairman of the Management Board of Stadt- und Kreissparkasse Darmstadt, Darmstadt

Ulrich Voigt
Chairman of the Management Board of Sparkasse KölnBonn, Cologne

Jürgen Wagenländer
Member of the Management Board of Sparkasse Mainfranken Würzburg, Würzburg

Hans Ulrich Weiss
(until 30 June 2019)
Chairman of the Management Board of Sparkasse Mansfeld-Südharz, Lutherstadt Eisleben

Bernd Zibell
(since 1 August 2019)
Member of the Management Board of Sparkasse am Niederrhein, Moers

Corporate Bodies of Subsidiaries – Asset Management Real Estate business division

Deka Immobilien Investment GmbH

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Matthias Danne
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairman

n.n.

Members

Dr. Frank Pörschke
Assessor of law/fully qualified lawyer, Hamburg

Prof. Dr. Wolfgang Schäfers
C4 Professor of University of Regensburg, Chair of Real Estate Management, Bad Abbach

Dirk Schleif
Fund management officer DekaImmobilien Domus Fonds of Deka Immobilien Investment GmbH, Frankfurt/Main

Magnus Schmidt
Real estate fund reporting advisor of Deka Immobilien Investment GmbH, Düsseldorf

Board of Management

Members

Ulrich Bäcker
Burkhard Dallosch
Esteban de Lope Fend
Victor Stoltenburg

WestInvest Gesellschaft für Investmentfonds mbH

Members of the Supervisory Board
(as of 1 March 2020)

Chairman

Dr. Matthias Danne
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairman

n.n.

Members

Dr. Frank Pörschke
Assessor of law/fully qualified lawyer, Hamburg

Prof. Dr. Wolfgang Schäfers
C4 Professor of University of Regensburg, Chair of Real Estate Management, Bad Abbach

Dirk Schleif
Fund management officer DekaImmobilien Domus Fonds of Deka Immobilien Investment GmbH, Frankfurt/Main

Magnus Schmidt
Real estate fund reporting advisor of Deka Immobilien Investment GmbH, Düsseldorf

Board of Management

Members

Ulrich Bäcker
Burkhard Dallosch
Esteban de Lope Fend
Victor Stoltenburg

Glossary

Additional Tier-1 bond (AT1 bond)
Non-cumulative, fixed-interest bearer bond issued by DekaBank as Additional Tier 1 capital with subsequent adjustment of its interest rate and an unlimited term. If the Common Equity Tier 1 capital ratio falls below a set minimum, the nominal and redemption values of the bearer bond may be reduced in specific circumstances. DekaBank's issued AT1 bonds are fully eligible as core capital and thus help improve the leverage ratio.

Advisory-/management mandate
External funds which are managed by a Deka Group investment management company (Kapitalverwaltungsgesellschaft – KVG). For advisory mandates, the Deka Group company acts only as an adviser, i.e. it is up to the external management company to verify compliance with investment regulations before placing orders. For management mandates, by contrast, investment decisions are taken, reviewed and carried out by a Deka Group investment management company.

Assets under Custody
All assets held in custody by the Deka Group as depositary.

Cost/income ratio (CIR)
In the Deka-Group, this indicator is calculated from the ratio of total expenses (excluding restructuring expenses) to total income (excluding risk provisions in the lending and securities business) in the financial year.

Economic perspective
The economic perspective is one of two approaches on which the internal capital and liquidity adequacy assessment processes (ICAAP and ILAAP) are based: In the context of the ICAAP, the economic perspective is implemented via the concept of risk-bearing capacity. It serves to secure the capital of the Deka Group in the long term, thus making a key contribution to ensuring the institution's survival. The aim is also to protect creditors against losses from an economic view. In the context of the integrated view, management and monitoring of liquidity risk (ILAAP), the key risk measure in the economic perspective is the "combined stress scenario" funding matrix defined by the Board of Management as being relevant for management purposes.

Economic Result
As a key management indicator, together with the risk in the economic and normative perspective, the economic result forms the basis for risk/return management in the Deka Group and is, in principle, determined in accordance with accounting and measurement policies of IFRS. As well as the total of profit or loss before tax, the economic result also includes changes in the revaluation reserve before tax as well as the interest rate and currency related valuation result from financial instruments recognised at amortised cost, which are not recognised in the income statement under IFRS but are relevant for assessing financial performance. The interest expense in respect of AT1 bonds (Additional Tier 1 capital), which is recognised directly in equity, is also included in the economic result. Furthermore, the economic result takes into account potential future charges that are considered possible in the future but that are not yet permitted to be recognised under IFRS due to the fact that accurate details are not yet available. The economic result is therefore a control variable on an accrual basis whose high level of transparency enables recipients of the external financial reporting to consider the company from the management perspective.

Fully loaded
Full application of CRR/CRD IV rules, i.e. disregarding the phase-in provisions.

Fund assets (according to BVI)
Fund assets according to BVI comprise the fund assets of the mutual and special funds and asset management funds as well as the master fund. Direct investments in cooperation partner funds, the proportion of products for fund-based asset management attributable to cooperation partners, third party funds and liquidity as well as the advisory/management and asset management mandates are not included.

Net funds inflow (according to BVI)
Difference between the funds inflow from the sale of units and the outflow from the redemption of units. Unlike net sales, this figure does not include the funds of cooperation partners or advisory/management and asset management mandates. However, net volumes in relation to proprietary investments are taken into account in the net funds inflow.

Net sales
Key management indicator of sales success in asset management and certificate sales. This figure essentially consists of total direct sales of mutual and special funds, fund-based asset management, funds of cooperation partners, master funds and advisory/management mandates, ETFs and certificates. Net sales in investment fund business corresponds to gross sales less redemptions and maturities. Sales generated through proprietary investment activities are not taken into account. Redemptions and maturities are not taken into account for certificates, because in the certificates business the impact on earnings primarily occurs at the time of issue.

Normative perspective
The normative perspective is one of two approaches on which the internal capital and liquidity adequacy assessment processes (ICAAP and ILAAP) are based: in the context of the ICAAP, the normative perspective includes all internal instruments, regulations, controls and processes

aimed at ensuring that regulatory and supervisory capital requirements are met on an ongoing basis, i.e. also prospectively, over the next few years. This means that it directly pursues the objective of ensuring that the institution can continue as a going concern. In the context of the integrated quantification, management and monitoring of liquidity risk (ILAAP), the key risk measure in the normative perspective is the LCR in accordance with the CRR in conjunction with Commission Delegated Regulation (EU) 2015/61.

Number of (active) employees
The number of employees is the effective number of active full-time employees at the reporting date, with parttimers being counted in proportion to their working hours. Active employees means staff members who are actively involved in DekaBank's work processes. This includes the Board of Management, other managers, core staff members, contract staff and temporary staff. Vocational and other trainees, interns and employees on long-term leave are not included.

Payments to the alliance partners
Payments made to the alliance partners (savings banks and Landesbanks) by the Asset Management divisions are made up of the partners' portions of investment fund entry charges, sales commissions, sales performance fees, asset management fees and other payments from asset management. Reporting is focused mainly on payments made to the savings banks, as our shareholders. The payments to alliance partners have also included commissions on certificates.

Phase in
Application of CRR/CRD IV rules inclusive of the transitional provisions.

Return on equity (RoE)
Return on equity at the Deka Group is calculated as the return on balance sheet equity. It corresponds to the annualised economic result relative to the average balance sheet equity including atypical silent capital contributions, without additional Common Equity Tier 1 capital (AT1) and adjusted for intangible assets. Average balance sheet equity is calculated using the figures for the end of the previous year and the most recent quarterly financial statements (accumulated profit in the course of the year taken into account).

Risk appetite
Risk appetite refers to the overall aggregate risk of individual risk types that the Deka Group is prepared to enter into, within the limits of its risk capacity, in order to achieve its strategic objectives and business plan. In the economic perspective, the risk appetite for risks affecting profit and loss is defined in the risk-bearing capacity analysis as the allocated risk capital (allocation) for overall risk at Group level. The maximum permissible risk appetite is equal to risk capacity less a management buffer. With regard to liquidity risk, the Deka Group has defined its risk appetite in the economic perspective as the scenario that gives it an indefinite survival period in an extreme hypothetical stress scenario involving a simultaneous institution-specific and market-wide stress event. This hypothetical stress scenario is illustrated in the "combined stress scenario" funding matrix. Permanent solvency and an unlimited survival horizon are achieved by setting a limit of 0 on the liquidity balances of all maturity bands.

Risk-bearing capacity
The aim of the risk-bearing capacity analysis is to ensure the adequacy of capital resources from an economic view. Sufficient assets must be available to cover risk events, even those which materialise extremely rarely. This involves combining all risk types with a holding period of one year and a correspondingly high confidence level of 99.9%, which is consistent with DekaBank's target rating. The overall risk is then compared against the internal capital derived from the balance sheet, taking corresponding deductible items into account.

Total customer assets
The key management indicator total customer assets mainly includes the income-relevant volume of mutual and special fund products (including ETFs), direct investments in the funds of cooperation partners, the portion of fund-based asset management activities attributable to cooperation partner funds, third party funds and liquidity, master funds and advisory/management mandates and certificates.

Wertpapierhaus
The Deka Group is the securities service provider (Wertpapierhaus) for the savings banks. Through its asset management and banking activities, it acts as a service provider for the investment, administration and management of assets, supporting savings banks, their customers and institutional investors at every stage in the investment process within the securities business. It also offers comprehensive advice and solutions both to the savings banks and to institutional customers outside the Sparkassen-Finanzgruppe on investing, liquidity and risk management, and refinancing.

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The specialist terms used are explained in the interactive online version of this report, which you can view in English or German on our website at www.dekabank.de under "Investor Relations/ Reports". Previous versions of our annual and interim reports are also available for download here.

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Gender clause
In this annual report, words in the masculine include words in the feminine; in parts of the report, the masculine form has solely been used to make the document easier to read.

Disclaimer
The interim management report as well as the Interim Report in other respects contain forward-looking statements as well as expectations and forecasts. These are based on the information available to us at this time, which we have deemed to be reliable after careful consideration. We do not assume an obligation to update based on new information and future events after the publication of this information. We have derived our estimations and conclusions from these forward-looking statements, expectations and forecasts. We expressly point out that all of our future-oriented statements are associated with known or unknown risks or imponderables and are based on conclusions relating to future events, which depend on risks, uncertainties and other factors that are outside of our area of influence. Such developments can result from, among other things, a change in the general economic situation, the competitive situation, the development of the capital markets, changes in the tax law and legal framework as well as from other risks. The events actually occurring in the future may thus turn out to be considerably different from our forward-looking statements, expectations, forecasts and conclusions. We can therefore assume no liability for their correctness and completeness or for the actual occurrence of the information provided. The English translation of the Interim Report is provided for convenience only. The German original is definitive.

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