Deka-Group
Annual Report 2021

2021

Finanzgruppe

Deka Group at a glance

BUSINESS DEVELOPMENT INDICATORS		31 Dec 2021	31 Dec 2020	Change (%)
Total assets	€m	88,865	85,509	3.9
Total customer assets	€m	395,148	339,160	16.5
Retail customers	€m	196,485	167,159	17.5
Institutional customers	€m	198,662	172,001	15.5
Number of securities accounts	thousand	5,215	4,973	4.9
		2021	**2020**	
Net sales	€m	35,735	32,148	11.2
Retail customers	€m	25,032	12,600	98.7
Institutional customers	€m	10,703	19,548	–45.2
PERFORMANCE INDICATORS				
Total income	€m	2,019.5	1,387.9	45.5
Total expenses	€m	1,171.8	1,118.5	4.8
Economic result	€m	847.8	269.4	214.7
Total of profit or loss before tax	€m	791.4	385.5	105.3
Balance sheet based return on equity (before tax)	%	16.5	5.5	11.0%-Points
Cost/income ratio	%	58.6	70.2	–11.6%-Points
RISK INDICATORS – NORMATIVE PERSPECTIVE		**31 Dec 2021**	**31 Dec 2020**	
Own funds (fully loaded)	€m	6,075	5,753	5.6
Risk-weighted assets	€m	30,944	31,307	–1.2
Total capital ratio (fully loaded)	%	19.6	18.4	1.2%-Points
Common Equity Tier 1 capital ratio	%	15.2	14.2	1.1%-Points
Leverage ratio (fully loaded)	%	6.2	5.6	0.7%-Points
MREL Ratio (risk-weighted assets based)	%	59.7	N/A	N/A
MREL Ratio (leverage ratio exposure based)	%	21.7	N/A	N/A
Subordinated MREL requirements (risk-weighted assets based)	%	42.4	N/A	N/A
Subordinated MREL requirements (leverage ratio exposure based)	%	16.4	N/A	N/A
Net Stable Funding Ratio (NSFR)	%	118.9	106.1	12.8%-Points
Liquidity Coverage Ratio (LCR)	%	160.3	185.6	–25.3%-Points
RISK INDICATORS – ECONOMIC PERSPECTIVE				
Risk appetite	€m	4,000	4,000	0.0
Total risk	€m	1,731	2,821	–38.6
Utilisation of risk appetite	%	43.3	70.5	–27.2%-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 ESG		AA	AA	
ISS ESG		C+ (Prime)	C+ (Prime)	
Sustainalytics		17.4 Low Risk	17.8 Low Risk	
Imug V.E		55% Robust	41% Limited	
KEY EMPLOYEE FIGURES				
Number of employees		4,854	4,711	3.0
Number of active employees		4,243	4,131	2.7

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

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Foreword by the Board of Management

Dear Shareholders and Investors,

The war in Ukraine and its awful consequences mark a historical turning point. We have immediately implemented the requirements of the economic sanctions agreed. In early March of this year, we also put together an initial €500,000 emergency aid package to help the people affected by the war.

The impacts of the war in Ukraine on the financial sector, on economic growth and on investment strategies are already being significantly felt and will continue beyond 2022. In this context, looking back at 2021 almost feels like looking back on another era.

The 2021 financial year was dominated by the coronavirus pandemic. Despite all the uncertainty, it was a year that saw stock markets hit record highs. This also benefited the Deka Group: We trebled our economic result year-on-year to almost €850m. Total net sales reached a new record of over €35bn, with Deka's securities products in high demand particularly from private investors, who signed up to over a million (net figure) new investment savings plans. Sales in the retail business more than doubled compared with the already high prior-year figure to almost €18bn, and Deka now manages nearly seven million contracts. Institutional business contributed sales of almost €11bn.

Despite the difficult circumstances of the coronavirus pandemic, Deka was again able to successfully position its business model for the future in 2021.

We reaffirmed our pioneering role in the digital transformation in the reporting year, building on our work to improve the savings banks' digital sales channels to their customers in the securities business. We are also set to offer the savings banks a comprehensive platform for the securities business in the form of S-Invest Manager. On the product side, we were early to recognise the importance of digital assets and have built a blockchain-based transaction platform known as SWIAT (Secure Worldwide Interbank Asset Transfer). Thanks to SWIAT, Deka was the first bank in Germany to issue crypto securities, achieving another milestone on our way to being the digital Wertpapierhaus in the Sparkassen-Finanzgruppe (Savings Banks Association). Finally, we also drove ahead with systematic use of cloud technology for both infrastructure and applications.

Along with digitalisation, sustainability is another cornerstone in Deka's strategy for the future. We are blazing a trail for more sustainability in the Sparkassen-Finanzgruppe, reaching important milestones in areas such as business operations, risk management and real estate investment. The progress on sustainability in our product range is also reflected in the positive assessments of rating agencies. In addition to renewed excellent ratings for our entire product range, our Deka-Nachhaltigkeit Impact (Deka Sustainability Impact) shares achieved the "Financial Product of the Year" accolade from the German Institute for Service Quality (DISQ).

The cultural change in the Deka Group is also progressing. With our "Deka Way", we are combining agile and traditional ways of working. New buildings at our main location in Frankfurt will give us a state-of-the-art working environment, allowing us to combine the benefits of these working methods with a hybrid approach, in which employees will work partly from the office and partly from home. The end of 2021 saw the completion our new building in Frankfurt-Niederrad, which will accommodate some 3,000 employees. The combination of modern and attractive workspaces with significant environmental benefits will help make us an attractive employer for the future.

New ways of working, sustainability, digitalisation and now the effects of a devastating war in the heart of Europe: our economy and society will undergo significant change in this decade. At Deka, our job is to protect and grow our customers' savings and help them navigate these uncertain times. Our business model is in rude health, and our approach continues to be guided by prudent, proactive risk management. That means that we at Deka, our shareholders the savings banks, and our shared customers can all be confident that we are well equipped to face the uncertainty ahead.

Sincerely,

Georg Stocker

Dr. Georg Stocker

Danne

Dr. Matthias Danne

Birgit Dietl-Benzin

Daniel Kapffer

Torsten Knapmeyer

Martin K. Müller

Report of the Administrative Board for the 2021 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. Due to the pandemic, all meetings of the Administrative Board and its committees were held as video/web conferences.

Key issues of Administrative Board meetings
A total of four ordinary meetings took place in 2021, 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 meetings in 2021 focused in particular on the dissolution of the atypical silent partnership and transfer of the atypical silent capital contributions to the capital reserve, on DekaBank's approval for the reforms to the Institutional Protection Scheme of the Sparkassen-Finanzgruppe and on the appointment of the auditor from financial year 2023 onwards given the change of auditor required by the German Audit Reform Act (Abschlussprüferreformgesetz). The Administrative Board also issued relevant recommendations to the Shareholders' Meeting.

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 medium-term plan for the years 2022 to 2024 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 2020 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. In addition, the Administrative Board was informed about the impacts on the Deka Group of the coronavirus pandemic and the related lockdown restrictions, and on the measures and decisions taken by the Board of Management in this context. The Administrative Board looked at the progress of current projects, particularly the implementation of the Management Agenda 2025 strategic programme, and at regulatory issues. Another key topic was the passing of resolutions on matters relating to the Board of Management and on the expansion of the Audit Committee and the Risk and Credit Committee to seven members each.

The Administrative Board also held three extraordinary meetings in 2021. In February 2021, it discussed the proposed appropriation of accumulated profit for the 2020 financial year, taking into account the European Central Bank's recommendations of 15 December 2020 on the payment of dividends. This discussion laid the ground for the draft resolution to be presented to the Shareholders' Meeting, which was decided at the Administrative Board meeting on 24 March 2021. At two extraordinary meetings in October 2021, the Administrative Board assisted the Board of Management with participation in the tendering process for the sale of Berlin Hyp AG and the submission of a purchase offer. Individual members of the Administrative Board who had declared a potential conflict of interest did not participate in these discussions and did not receive information on this matter.

The Administrative Board also held a training event in 2021 on the topic of "Digitalising the customer interface".

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 held four ordinary meetings in 2021, focusing primarily on the business model and the strategic development of the Deka Group. Another focus of its work again in 2021 was on matters relating to the Board of Management, including the allocation of work on the Board of Management and contractual and remuneration arrangements. The committee also issued recommendations for the election of new Administrative Board members. At a further extraordinary meeting in January 2021, it also looked at the proposed appropriation of the net profit for the 2020 financial year.

The Remuneration Supervision Committee met four times in the reporting year. It discussed the remuneration report and the remuneration supervision report for 2020, gave consideration to whether the remuneration systems for the Board of Management and employees were set up appropriately and prepared resolutions on Board of Management members' remuneration and targets.

The Audit Committee held four ordinary meetings in 2021. It conducted a detailed review of the financial statements and consolidated financial statements. It 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. It also dealt with preparations for the tendering process for audits from financial year 2023 onwards. At an extraordinary meeting in April 2021, it listened to presentations by potential auditors and gave a recommendation to the Administrative Board on this basis.

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 discussed the report on the internal control system (ICS), the annual reports of the Data Protection and Information Security Officers and the Sustainability Report, which constitutes the separate non-financial report pursuant to section 289b 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 DekaBank.

The members of the Risk and Credit Committee met four times during the reporting year. At its meetings, the committee held in-depth discussions on DekaBank's risk situation, particularly in relation to the impacts of the coronavirus pandemic. 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 areas discussed by the Risk and Credit Committee were the risk strategies, the plans to implement the committee's expectations on climate and environmental risks, the update to the recovery plan and other preliminary work on the resolution plan to be prepared by the relevant resolution authorities.

The committee took the relevant decisions as a credit approval body and took stock of the risk situation in the lending business. In the context of potential default risks resulting from the coronavirus pandemic, it received detailed reports and explanations on the development of loan portfolios, particularly in relation to aircraft financing, as well as on the estimated risks for relevant exposures and selected counterparties in the capital markets business and the risk provisioning measures taken. The Risk and Credit Committee also held discussions with the Board of Management covering the business policy for lending business.

The committees' chairs or deputy chairs regularly reported to the Administrative Board on the results of the discussions held by the respective committee.

Audit and approval of the annual financial statements and consolidated financial statements for 2021

The Shareholders' Meeting of DekaBank appointed KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG) as the auditors for financial year 2021. KPMG audited DekaBank's 2021 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 2021 financial statements and submitted a proposal to the Shareholders' Meeting regarding the appropriation of accumulated profit. The Administrative Board additionally approved the consolidated financial statements for 2021.

The Administrative Board also discussed the Group's separate non-financial report for the 2021 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

Following approval from the ECB, Mr Torsten Knapmeyer joined the Board of Management with effect from 1 April 2021 as the member responsible for sales.

At its meeting on 16 September 2021, the Administrative Board reappointed Dr. Georg Stocker as member and Chairman of the Board of Management for another five years. His reappointment will take effect on 1 August 2022.

Mr Michael Dörr, Dr. Michael Ermrich, Mr Andreas Fohrmann and Mr Gerhard Grandke left the Administrative Board in the course of 2021. Ms Barbara Wörfel, Second Deputy Chairwoman of the Staff Committee of DekaBank, Dr. Stefan Kram, Chairman of the Management Board of Kreissparkasse Duchy of Lauenburg, Mr Stefan Reuß, Managing President of the Savings Banks and Giro Association Hesse-Thuringia, and Mr Ludger Weskamp, Managing President of the East German Savings Banks Association, were appointed or elected by the Shareholders' Meeting as their successors.

The Administrative Board would like to thank all the members who have left the Board for their valuable work and the constructive support they provided to DekaBank and its Board of Management.

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

The Deka Group performed well in the 2021 financial year, despite the continued impact of the coronavirus pandemic, and proved the stability of its business model even in this difficult market environment. This reflects the successful work of the Board of Management and of the Deka Group's employees. The Administrative Board would like to express its thanks and appreciation for the great personal commitment they have demonstrated.

Frankfurt/Main, 31 March 2022

The Administrative Board

Helmut Schleweis
Chairman of the Administrative Board

GROUP MANAGEMENT REPORT

As the Wertpapierhaus for the savings banks, the Deka Group is a key part of the Sparkassen-Finanzgruppe (Savings Banks Association). The Deka Group improved net sales by a total of €3.6bn to €35.7bn year-on-year in the 2021 reporting period. Total customer assets grew by €56.0bn to €395.1bn. The Deka Group is looking back on a very successful financial year. With an economic result of €847.8m, it significantly improved upon the previous year's figure of €269.4m. The Deka Group's financial position remains sound. DekaBank also has one of the best capital market ratings among its peer group of German commercial banks.

Group management report

At a glance

As the *Wertpapierhaus* for the savings banks, the Deka Group is a key part of the *Sparkassen-Finanzgruppe* (Savings Banks Association). The Management Agenda 2025, which was launched in 2020, sets the strategic and operational direction to make the Deka Group an even more customer-focused, innovative and sustainable Wertpapierhaus. This agenda is focusing, among other things, on innovative processes and platforms for sales, products and distribution channels as well as the broader themes of digitalisation and sustainability.

The coronavirus pandemic continued to affect global economic development in 2021. The economy was hit particularly at the beginning and end of the year by lockdown measures in response to high infection rates. There were also indirect impacts from supply chain and transport disruption and significantly increased inflation rates. Looking at 2021 as a whole, however, the economic recovery process from the previous year's pandemic-induced recession essentially continued. The continued expansionary measures by the central banks made a noticeable contribution to this.

The Deka Group improved net sales by a total of €3.6bn to €35.7bn year-on-year in the 2021 reporting period. The Group increased net sales in the retail customer segment by €12.4bn compared with 2020 to €25.0bn. Retail fund sales rose significantly from €8.0bn to €17.9bn, with equity funds (€7.8bn), bond funds (€2.8bn), real estate funds (€2.5bn) and mixed funds (€2.3bn) accounting for a particularly significant share of this figure in the reporting period. Sales of certificates to retail customers totalled €7.1bn (2020: €4.6bn). Net sales to institutional customers came to €10.7bn as against €19.5bn in the previous year. The lower figure was due to a major master funds client changing investment management company in the second quarter. As a result, the institutional investment fund business accounted for net sales of €8.8bn (2020: €17.4bn). Certificate sales to institutional customers came to €1.9bn (2020: €2.2bn).

Net sales, coupled with positive performance and the integration of the total customer assets of IQAM Invest GmbH (around €7bn), fuelled an increase in total customer assets of €56.0bn to €395.1bn (year-end 2020 €339.2bn).

See also: Business development and profit performance in the Deka Group: page 36 ff.

The Deka Group is looking back on a very successful financial year. With an economic result of €847.8m, it significantly improved upon the previous year's figure of €269.4m.

Income increased to €2,019.5m (2020: €1,387.9m). A strong increase in net commission income and an almost evenly balanced risk provisioning result made a substantial contribution to this. There were also high actuarial gains on pension provisions due to the prevailing market conditions. Net commission income remains the primary component of income, accounting for 80%.

Expenses increased by 4.8% to €1,171.8m and thus rose only slightly compared with 2020 (€1,118.5m) despite a moderate increase in personnel and other administrative expenses and a noticeably higher bank levy.

The cost/income ratio was 58.6% (2020: 70.2%). The balance sheet based return on equity (before tax) was 16.5% (2020: 5.5%). The Deka Group's financial position remains sound. DekaBank also has one of the best capital market ratings among its peer group of German commercial banks.

At year-end, the Common Equity Tier 1 capital ratio stood at 15.2% (year-end 2020: 14.2%). The risk-bearing capacity analysis showed a utilisation of risk appetite of 43.3% (year-end 2020: 70.5%).

Information about the Deka Group

Deka Group profile and strategy

Millions of people in Germany save using investment funds, ETFs and certificates. The Deka Group managed approximately €395bn of customer assets at the reporting date, making it one of the largest providers in Germany. The Deka Group is the securities service provider (the *Wertpapierhaus*) for the savings banks. It brings together banking and fund business under one roof.

Legal structure

DekaBank Deutsche Girozentrale (DekaBank) is a German federal institution incorporated under public law with registered offices in Frankfurt am 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 (*Deutscher Sparkassen- und Giroverband* – DSGV ö.K.). The Deka Group is thus a key part of the *Sparkassen-Finanzgruppe*.

DekaBank is a member of the deposit guarantee scheme of the *Landesbanken* and *Girozentralen*.

Organisational structure

The Deka Group divides its business into five business divisions that bring together similar activities. Asset management activities are handled by the Asset Management Securities and Asset Management Real Estate business 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 head office is in Frankfurt am Main. Frankfurt is also home to investment management companies such as Deka Investment GmbH, Deka Immobilien Investment GmbH, Deka Vermögensmanagement GmbH and the robo-advisor company bevestor GmbH. A further investment management company – WestInvest GmbH – is based in Düsseldorf. S Broker AG & Co. KG has its registered office in Wiesbaden, while S-PensionsManagement GmbH (in which DekaBank has a 50% shareholding) is headquartered in Cologne.

The Deka Group is represented in Luxembourg by DekaBank DeutscheGirozentrale Niederlassung Luxemburg and the investment management companies Deka International S.A., Deka Immobilien Luxembourg S.A., Deka Vermögensmanagement GmbH (Luxembourg branch) and Deka Verwaltungsgesellschaft Luxembourg S.A. Deka acquired the Salzburg-headquartered Austrian fund manufacturer IQAM Invest GmbH with effect from 1 January 2021.

Corporate management and supervision

As an institution incorporated under public law, the Deka Group 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 guidelines for the management and supervision of the Group ensure that the responsibilities of boards and committees are clearly defined and enable 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. Both the company's own Code of Ethics and the risk culture framework are based on this commitment. 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.

Overall responsibility lies with the Board of Management, which takes a holistic approach, always considering the entirety of the Deka Group and the strategic direction and risks. The Board is divided into divisions, each under the responsibility of a designated member. This ensures a clear distribution of roles and core competencies in the Board of Management.

At the reporting date, the Board of Management consists of six members. The individual members are assigned the following responsibilities:

- CEO: Dr. Georg Stocker
- Deputy CEO & Asset Management: Dr. Matthias Danne
- Risk (CRO): Birgit Dietl-Benzin
- Finance (CFO) & Operations (COO): Daniel Kapffer
- Sales: Torsten Knapmeyer
- Banking business: Martin K. Müller

At its meeting in September 2021, DekaBank's Administrative Board extended the appointment of the CEO, Dr. Georg Stocker, for a further five years to July 2027. Torsten Knapmeyer started in his role as Chief Sales Officer on 1 April 2021.

The Board of Management is supported by in-house management committees in an advisory capacity. DekaBank actively incorporates its sales partners' market proximity and expertise via three specialist advisory boards, which advise the Board of Management, and six regional sales committees (securities committees of the regional savings banks).

The Administrative Board oversees the Board of Management and thus performs a supervisory role. It comprises shareholder and employee representatives as well as representatives from the *Bundesvereinigung der kommunalen Spitzenverbände* (German Federal Association of Central Municipal Organisations), who act in an advisory capacity. The work of the Administrative Board 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. With the exception of the employee representatives and representatives from the *Bundesvereinigung der kommunalen Spitzenverbände*, the members of the Administrative Board are appointed by the Shareholders' Meeting.

The responsibilities of the boards and committees are assigned by the Bank's statues. The Administrative Board has adopted rules of procedure and also has a separate fit & proper policy along with guidelines on the handling of conflicts of interest, independence, the induction and training of new members and the promotion of diversity on the Administrative Board and DekaBank Board of Management. There are additional rules of procedure for the Board of Management and for the specialist advisory boards and sales committees.

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

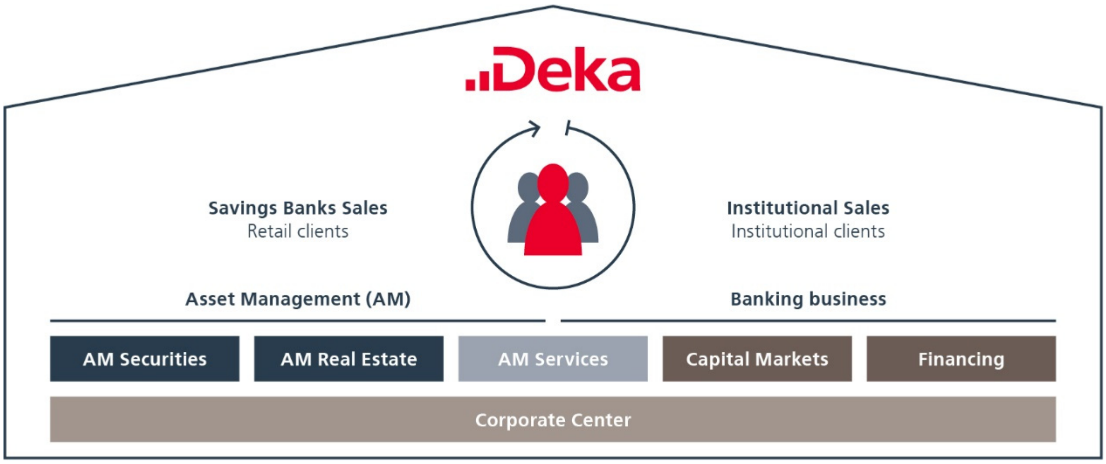
Business model as the *Wertpapierhaus* for the savings banks

The Deka Group is the securities service provider (the *Wertpapierhaus*) for the savings banks. It is made up of DekaBank and its subsidiaries. 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 and advisory 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.

The Deka Group sees itself as an all-round solution provider, meeting the needs of savings banks and their customers. This philosophy drives the development of its complete range of asset management and banking services to meet the securities business needs of savings banks and their customers and the targeted sales support it provides as a partner.

The Group's integrated business model, combining asset management and banking business, ensures stability and competitiveness. The Deka Group divides its business into five business divisions.

Deka Group – The *Wertpapierhaus* for the savings banks at a glance *(Fig. 1)*



All business divisions aim their products and services at the needs of savings banks and their customers, at the interests of the institutional investors acquired and served in partnership with the savings banks and at institutional customers outside the *Sparkassen-Finanzgruppe*.

- The Asset Management Securities and Asset Management Real Estate business divisions focus particularly on fund-based products and services.
- As a banking division, Asset Management Services encompasses banking services for asset management, such as the depositary and custody account business as well as digital multichannel management.
- The banking business divisions – Capital Markets and Financing – support the integrated model by offering additional investment products and enabling the necessary access to the money and capital markets and to financing. Capital Markets also acts as a service provider for asset management.

In business involving securities funds and real estate funds, the Deka Group primarily earns commission income from 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 comes from banking transactions, including capital market activities, which also generate net financial income from the trading book. Interest income is obtained primarily from lending business as well as from securities in the banking book.

Customers
The Deka Group puts its primary customers – German savings banks and their customers – at the heart of its activities. This includes the private and individual clients, private banking and business customer segments. To ensure that its products and solutions meets the needs of these customers, it is in regular dialogue with the savings banks. The products in demand from primary customers are also sold to institutional customers. These particularly include insurance companies, pension funds, family offices, foundations, corporates and the German public sector. 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.

Product and solution provider
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 and infrastructure services – 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.

Sales and all-round advice
The Deka Group's services are generally sold by Savings Banks Sales and Institutional Customer Sales.

Deka takes an all-round approach to helping savings banks sell asset management products and services. An example of this is the close support given to the investment and advisory process within the savings banks. This includes incorporating the product and service offering into customer advice, joint customer-focused activities and in-depth support for savings banks and local advisers. The Deka Group's sales support is fully aligned with the *Sparkassen-Finanzkonzept* – the financial planning strategy offered by the savings banks – and aims to support the savings banks throughout the investment and advisory process.

Position and mission in the *Sparkassen-Finanzgruppe*

The Deka Group is a key part of the *Sparkassen-Finanzgruppe* with a stable business model as the *Wertpapierhaus* of the savings banks.

The market position the Deka Group has achieved is being challenged by market and customer trends. We need to respond faster and more accurately to changes in customer requirements and do our utmost to anticipate them. In addition, the Deka Group also needs to address changing markets: negative interest rates, growing competition (including from new market participants) and pressure on margins along with a continued high level of regulation. On top of this, the coronavirus pandemic has accelerated many social and economic trends, such as digital processes, agile working and climate neutrality, which call for intelligent, innovative and sustainable solutions.

The Management Agenda 2025, which was launched in 2020, sets the strategic and operational direction to make the Deka Group an even more customer-focused, innovative and sustainable *Wertpapierhaus*. This agenda is focusing, among other things, on innovative processes and platforms for sales, products and distribution channels as well as the broader themes of digitalisation and sustainability. These last two trends are instrumental in shaping our business model. Creating new benefits and focusing on customers will be the key factors in successfully implementing the Management Agenda.

- Digitalisation and targeted innovation are building blocks for customer utility, and the Deka Group aims to lead and shape such innovation in the *Sparkassen-Finanzgruppe*.
- The Deka Group will continue to be proactive about driving sustainability as a cornerstone of its business model. It recognises the importance of this issue for society and the planet and also sees an opportunity here for growth and future profitability.
- The Deka Group is convinced that it already has the talent it needs to shape the successful evolution of its business model. Systematic professional development for employees will therefore be an important part of driving ahead with its strategic ambitions.

To enable it to respond more quickly and flexibly to the changing requirements of customers and markets, the Deka Group will evolve as a modern and versatile organisation with efficient, customer-oriented processes.

Digitalisation strategy

The Deka Group is becoming the digital *Wertpapierhaus* and the key partner for the savings banks when it comes to all aspects of securities services in the context of digitalisation. For example, it enables savings banks and their customers to offer competitive, digital customer journeys in the securities business, implements innovative products and services and uses digital technologies to improve process quality and efficiency.

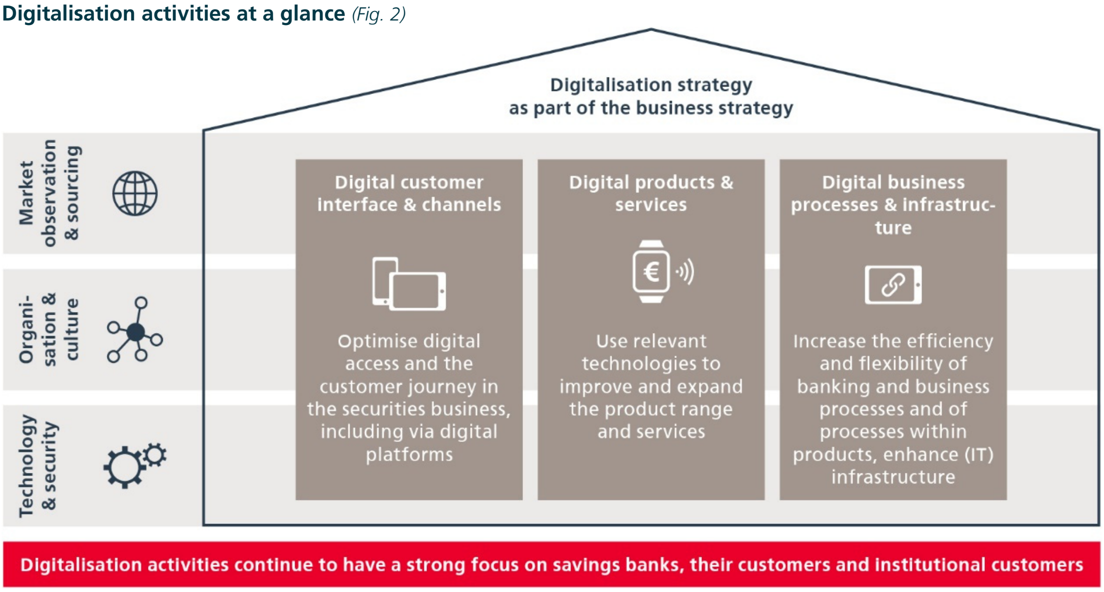
The digitalisation strategy defines three strategic thrusts:

- Digitalising the customer interface and channels: Digital solutions are exploited all along the value chain, beginning with the customer interface, and are thus reflected at every level of the Deka Group. One example is the S-Invest app, which passed the milestone of a million downloads at the end of 2021. The app offers customers a full overview of their securities investments and also allows them to integrate their securities accounts with banks outside the *Sparkassen-Finanzgruppe*. New functions have been constantly added to the S-Invest app since the initial roll-out.

- Digitalising products and services: Another major focus is on digitalising products and developing digital assets. Policymakers have recognised the importance of digitalisation in the financial services sector and created a framework for digital assets in the form of the German Electronic Securities Act (*Gesetz über elektronische Wertpapiere* – eWpG). With finledger and the Digital Collateral Protocol (DCP), DekaBank was quick to implement its first few projects capitalising on the opportunities of these technologies for the Bank and its customers. DCP, a blockchain-based settlement system for securities, enables faster and more efficient national and international securities transactions for conventional securities. The first legally effective lending transactions took place via the DCP in the first half of 2021. In the second half of the year, the options for local securities settlement expanded into further asset classes with the creation of the blockchain-based SWIAT (Secure Worldwide Interbank Asset Transfer) transaction platform. SWIAT's technology can handle all types of securities. The platform will be expanded as a market consortium and aims to replace the industry's fragmented processes with a common standard for international securities settlement. In the fourth quarter of 2021, Deka became the first bank in Germany to issue crypto securities via SWIAT. By maintaining a crypto securities register, it has reached another milestone in its quest to become the digital Wertpapierhaus in the *Sparkassen-Finanzgruppe*. SWIAT GmbH was established as a wholly owned DekaBank subsidiary on 1 February 2022.
- Digitalising business processes: The Deka Group is using all key technologies to digitalise its business processes: Physical documents are being digitalised using optical character recognition (OCR), workflows are being automated via workflow tools and robotics, and artificial intelligence is being used to process unstructured information. One example has been the digitalisation of real estate-related information and its further processing.

In September, DekaBank won the Champions of Digital Transformation Award 2021 in the banking and financial services category. The accolade was awarded by the strategy and management consultancy Infront Consulting with support from the business magazine Capital.

Digitalisation activities at a glance *(Fig. 2)*



Sustainability strategy

In 2015, the international community reached landmark agreements on how to deal with the challenges of climate change and sustainable development: the 2030 Agenda, which includes 17 Sustainable Development Goals (SDGs), and the Paris climate targets. Policymakers and society at large see an increasingly important role for the financial sector in achieving the objectives of these agreements. By actively advising its customers and funding investments in the economic transition to a climate-friendly and resource-efficient way of doing business, the sector should make a substantial contribution to achieving the global goals. This includes offering corresponding investment products.

Since the signing of the Paris Agreement, legislators and regulators have significantly stepped up their efforts to incorporate climate and sustainability criteria into the financial market. This affects banks in two ways: directly, in the form of rules that concern their business activities, product range and risk management, and indirectly, by influencing customer behaviour in the financing and investment business.

With the publication of its "Target vision 2025 – Guidelines on sustainability in savings banks" (*Zielbild 2025 – Leitfaden zur Nachhaltigkeit in Sparkassen*), the *Sparkassen-Finanzgruppe* presented a roadmap for implementing more sustainability as part of its business model. Further steps are set to follow. An initial milestone in this roadmap has been reached with the voluntary commitment by the German savings banks to climate-friendly and sustainable business practices. DekaBank was the first member of the *Sparkassen-Finanzgruppe* to sign the commitment back in 2020.

The Deka Group is facing up to the political, regulatory, social and customer-related challenges associated with climate change and sustainable development. It has made sustainability a cornerstone of its business model and continues to proactively drive forward on this issue in keeping with regulatory requirements. It is focusing on developing a holistic approach in line with the ESG criteria, strengthening governance for sustainability and systematically reviewing and enhancing products and services.

As the *Wertpapierhaus* of the savings banks, the Deka Group recognises its key role and special responsibility when it comes to sustainable and climate-friendly action and promoting sustainable investments. It is helping the *Sparkassen-Finanzgruppe* to get ready for the future, particularly by further expanding its range of sustainable capital market- and real estate-based investment products and sustainable financing solutions.

Via the treasury platform Deka Easy Access (DEA), DekaBank offers savings banks the option to receive support with offsetting their unavoidable greenhouse gas emissions. This involves helping to calculate the savings bank's carbon footprint and covering the carbon offset requirement by brokering the acquisition and retirement of emission allowances that have been verified by DekaBank or an independent expert in advance.

Direct dialogue between shareholders and the companies they own, and the exercise of shareholders' right to speak and vote at annual general meetings, are increasingly important tools for sustainable investment. Deka is using its corporate governance activities at annual general meetings, where sustainability plays a central role, to support this trend.

For the Deka Group, developing a holistic approach also means enhancing internal structures and processes for efficient, Group-wide management of sustainability-related issues. The aim is to turn the guidelines into sustainable corporate governance that also considers risk and HR management.

DekaBank continues to be rated very highly by sustainability rating agencies.

Sustainability ratings at a glance *(Fig. 3)*

Status of sustainability ratings according to annual ESG ratings reports: MSCI: 28 August 2020 (latest interim update: 28 May 2021); ISS-ESG: 22 June 2020; Sustainalytics: 10 August 2021; V.E: May 2021
* Copyright ©2020 MSCI, ** Copyright ©2021 Sustainalytics.

Further information on sustainability is available in the Deka Group's 2021 sustainability report.

Reference to non-financial statement in the sustainability report

The sustainability report, which is published annually and is 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* – CSR-RUG). The declaration sets out, in particular, targets, measures and due diligence processes in the areas that are significant to the Group's business model. Under the CSR-RUG, these include environmental, social and employee concerns as well as the upholding of human rights and the combating of bribery and corruption. The content of the Deka Group's sustainability report also reflects the extensive information interests of sustainability rating agencies and other stakeholders.

See also:
2021 sustainability report

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/our-responsibility/how-we-practice-sustainability/sustainability-reports-and-ratings), where it will remain accessible for at least ten years.

Business divisions, sales units and corporate centres

See also: Segment reporting: page 121 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, reflecting the integrated business model. 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 the following range of products to meet their needs:

- 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, sustainable asset management concepts and individual security-based asset management,
- 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 business division continues to significantly expand its existing range of products and services and is giving greater consideration to sustainability aspects in its processes relating to funds, investment and business risks. With its product and service range for sustainable securities investments, the business division plays an important role among German asset managers and is the leading asset manager within the savings bank association.

Following the acquisition of the fund manufacturer IQAM Invest GmbH in 2021, the range of quantitative asset management products has been expanded and enhanced, particularly for institutional customers.

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. Product and service quality is of particular importance, enabling the division to lead the competition with its high standards and support sustainable growth. Digitalising processes all along the value chain to further improve quality, efficiency and service levels is key to this. Sustainability is also taking centre stage at Asset Management Securities.

Asset Management Real Estate business division
The Asset Management Real Estate business division provides fund products and advisory services relating to real estate or real estate financing for the customer and proprietary business of savings banks and other institutional investors. The division concentrates 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.

The product range comprises:

- open-ended real estate mutual funds,
- open-ended and closed-ended special funds,
- real estate funds of funds,
- credit funds that invest in real estate, infrastructure or transport financing,
- residential property funds offered together with experienced external partners,
- advisory services for investments in real estate products.

Fund products are subject to appropriate cash flow management for the purpose of lasting risk limitation and reduction.

The division's 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. As part of the *Deka Immobilien-Kompass* service, the division offers savings banks and other institutional investors an extensive modular service package aimed at real estate fund investment, positioning itself as a strategic partner to institutional investors.

In order to fully address environmental and social aspects and meet investors' expectations, the Asset Management Real Estate business division is gradually expanding its range of sustainable products and taking sustainability aspects into account in fund and investment processes. An integrated approach that incorporates the producer, production and product level is constantly enhancing this further. Infrastructure funds of funds have been developed for the first time to better meet demand from institutional customers.

The division's mission is to provide the savings banks with lasting, high-quality and sustainable real estate- and real estate financing-based investment products for their customer business and proprietary investments. The aim is to at least maintain 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 with asset management and online brokerage. Its services range from supporting the savings banks with multichannel solutions to managing custody accounts for customers and providing custodial services for investment funds.

The Digital Multichannel Management subdivision develops and implements digital solutions for the savings banks' securities business via all channels including the "internet branch" and for the savings bank apps (e.g. S-App and S-Invest App). The Deka Group provides the savings banks with a multi-platform online securities offering, including stock exchange and securities information tools, enabling multi-channel customers to complete transactions seamlessly using various channels. DekaNet acts as the central information and sales platform, offering automation solutions that enable processes to work efficiently. OSPlus neo – the central software solution for the savings banks – is used to provide and enhance the relevant securities processes. In the retail segment, the subdivision takes legal responsibility for the management of DekaBank custody accounts, in which Deka funds, investment solutions, ETFs and certificates can be held. The S Broker range supplements these services. *S ComfortDepot* offers a solution for savings banks that want S Broker to take legal charge of their retail customer custody accounts. S Broker's *DepotPlus* and *DirektDepot* serve online- or trading-savvy customers with minimal advisory needs.

The digital development platform bevestor is another module of the multichannel approach and is fast and agile at producing innovative solutions for the online securities business. bevestor GmbH acts as the savings banks’ central robo-advisory product for retail customers.

Testing innovative solutions, ideas and trends in the securities business, such as the use of artificial intelligence and data analytics, remains a focus for DekaBank. Seamless, multichannel integration of branch and online sales in the securities business continues to be an important part of this. Innovative online solutions are providing digital customer interfaces to attract new customers and maintain customer loyalty.

The Depositary subdivision offers an extensive range of depositary services. These include the regulatory control function under the German Investment Code (*Kapitalanlagesetzbuch* – KAGB), securities settlement and reporting. The subdivision offers services to investment management companies both inside and outside the Deka Group and to asset managers. Depositary functions are additionally offered to institutional end investors. The Asset Management Services and Capital Markets business divisions work closely together on services such as commission business, collateral management and securities lending.

Crypto securities and asset-referenced tokens are becoming increasingly important, and the subdivision is implementing the resulting requirements. It maintained a crypto securities register for two issues in 2021. Custody of crypto securities is incorporated into the depositary function.

As in previous years, the Depositary subdivision is aiming to maintain a strong competitive position and to constantly grow the volume of assets under custody in 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 certificate issues. Institutional customers are provided with clearing services and support with the efficient fulfilment of regulatory requirements.

The business division is pursuing ongoing digitalisation initiatives to increase customer utility and efficiency. The main product remains the Deka Easy Access (DEA) platform, which helps savings banks to manage their proprietary portfolios effectively. DEA allows the savings banks to trade popular capital market products and offers broad access to information and research. As of the end of 2021, 304 savings banks used this established tool. The finledger platform, created with other market participants to process digital promissory note loans with the help of distributed ledger technology (DLT), was further enhanced in 2021.

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

- 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 certificates issuing business.
- The Commission Business subdivision executes trades in securities and exchange-traded derivatives in its own name on behalf of third parties. These services can be used by business partners inside and outside the *Sparkassen-Finanzgruppe*.

As a product, solution and infrastructure provider, the Capital Markets business 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. The business division's activities are focused on the increased use of DEA and, more broadly, the development of digital business models.

Financing business division

The Financing business division concentrates 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 and renewable energy financing), on aircraft, ship and rail 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. The remainder of the legacy portfolio, which does not conform to the current strategy, was almost completely wound down in 2021. The portfolio was dissolved on 1 January 2022.

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

The Financing business division actively implements the sustainability strategy by specifically providing sustainable financing and contributes to achieving the United Nations Sustainable Development Goals, which are part and parcel of the sustainable corporate governance of the Deka Group.

The Financing business division is aiming its new business activities at defined core segments, a greater depth of products in existing asset classes and increased regional breadth for Deka's financing business. It also aims to strengthen Deka's position in liquid markets and as a sought-after financing partner for the most important international real estate investors. In real estate financing, decisions on business relationships and structuring place special emphasis on ESG aspects. The Deka Group continues to act as a dependable refinancing partner for the savings banks.

Sales

Sales is responsible for the Deka Group's sales activities across all business divisions and the overall customer relationship with savings banks and other investors. It works across business divisions to generate and maintain business. The approach to sales and service provision depends on the end customer. Sales is therefore divided into Savings Banks Sales & Marketing and Institutional Customer Sales.

Savings Banks Sales & Marketing

Savings Banks Sales & Marketing focuses on comprehensive sales support for the savings banks for business with retail and business customers in 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 and business customers. To provide the savings banks with optimal support, the Deka Group offers systematic, in-depth assistance, provided by dedicated contacts, along with a structured product range of solution-focused, customer-friendly investment concepts. 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 and Private Banking & Product Management systematically analyse the needs of customers and savings banks as well as competitor and market developments. Based on their findings, they develop measures to support sales and marketing and a corresponding product range for the savings banks. The product universe encompasses all funds, certificates, asset management solutions, private and company pension solutions, and private banking services throughout the product lifecycle. Among other things, Private Banking offers solutions and services for asset optimisation, generation management, protection against life's risks, pensions and sustainable investment. These are specially tailored to the target group.

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 savings banks associations. As a point of contact for the savings banks' management boards and sales managers, they focus on strategic aspects of the securities business. In addition, the savings banks have access to Deka sales managers to support their operations. Deka specialists assist at local level with marketing and sales activities and offer training and coaching as the topic or occasion requires. Deka's sales directors and managers engage in continuing professional development. In 2021, for example, Deka held its first training course aimed specifically at these Deka employees. This will be repeated annually in future, covering the fundamentals and the latest topics. This training is externally certified, with the trainees taking part in an audit at the end of the process. 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 in Private Banking.

The well-established modular securities concept is a web-based application that helps the savings banks to efficiently expand their securities business in a way that makes full use of their potential. Savings banks can independently perform planning simulations for multi-year periods, giving them transparency around segment planning and earnings, portfolio and sales structures.

The Deka Group offers the savings banks a web-based sales support and information platform in the form of DekaNet. This acts as a central port of call for up-to-date product, sales and marketing information and also provides advisers with various tools and services for the investment and advisory process. In addition to this, DekaNet serves the savings banks as a centralised front end for data retrieval and data entry for customers and securities transactions in DekaBank custody accounts.

Together with the savings banks, Deka aims to be a market leader in terms of its comprehensive coverage of the sustainable securities culture in market and brand communications and to draw attention to the work of the *Sparkassen-Finanzgruppe* in this area. Focusing on ethical investment, sustainability is explored in all its dimensions, looking both at purely environmental aspects and the macroeconomic context. Ethical asset structuring, future-proof securities saving and future trends such as digitalisation are also an important part of this initiative, which can inspire new ideas for sales activities. The overarching aim is to put the securities expertise of Deka Investments front and centre of marketing efforts.

Products and solutions for retail customers are predominantly marketed under the Deka Investments sales brand, while those for high net worth private clients are provided in the form of bespoke solutions under the Deka Private Banking brand.

Institutional Customer Sales

The Institutional Customer Sales unit supports the savings banks with proprietary business and serves institutional investors in Germany and, in a number of cases, abroad. Customer advisers are responsible for the overall relationship with institutional customers and 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. Sustainability, in particular, is an important topic when advising and supporting customers.

In our business with savings banks, the Institutional Customer Sales team is available 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. Support for savings banks and financial institutions is divided into two sales regions. Another team looks after the largest savings banks and financial institutions with special requirements. Employees in the Strategic Proprietary Business & Asset Liability Management team develop methods and applications for interest rate book management and asset allocation for institutional customers – primarily savings banks – and advise them on these topics. There are also dedicated teams for the ETF sales business, the sale of bonds and structured products and direct business with asset managers. These teams work across customer groups.

For the business with institutional investors in Germany, there are three teams, each responsible for a different customer group: insurance companies (investors subject to the German Insurance Supervision Act (*Versicherungsaufsichtsgesetz* – VAG)), public sector/non-profit organisations and corporates & family offices. This specialisation enables Institutional Customer Sales to incorporate the Deka Group's expertise into investment solutions in a way that meets the needs of investors in each target group. The Client Analytics & Solutions team develops methods and solutions for customer-specific analysis of ideal investment opportunities, manages relationships with consultants and handles requests for proposal.

The Deka Group brings together all its solution expertise for institutional customers under the Deka Institutionell brand, reinforcing its clear focus on the needs of the institutional target group.

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 Management, 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 2021) of €161.6bn and a market share of around 12%, 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 2021) of €38.7bn and a market share of 30.9%.

Deka's consistently good performance was confirmed once again in the Capital-Fonds-Kompass 2021 awards organised by the business magazine Capital together with the fund analysis firm Scope Analysis and the service experts at Tetralog Systems. The study by the business magazine saw Deka build on its strong ratings from the previous year and improve its overall ranking by two positions to fifth place out of 100 companies. Among those providers with at least 31 funds distributed in Germany (universalists), Deka made it into the top three.

The German Fund Championship 2021 rewarded the best fund companies for private investors in five categories: equities, bonds, mixed funds, ESG/sustainability and ETFs. Deka was crowned Fund Champion in the mixed funds and bonds categories and Most Improved Player in the mixed funds category.

At the Scope Alternative Investment Awards in November 2021, Deka Immobilien Investment GmbH was again honoured as Best Asset Manager in the Retail Real Estate Europe category. Deka also won in the Institutional Real Estate Europe category, and Deka Investment GmbH was crowned Best Asset Manager in the Bond Fund 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 securities markets impacts upon the certificate issuance 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 specialised 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. According to statistics from the German Derivatives Association (DDV), Deka has confirmed its very good position as an issuer of structured products in Germany, with a 24.5% market share at the end of September 2021.

At the Scope Zertifikate Awards 2021, presented in November 2021, DekaBank was recognised as the best certificate issuer in the primary market for the sixth time.

In addition, at the end of November, DekaBank was voted best certificate issuer of 2020/2021 by the magazine Der ZertifikateBerater together with n-tv, Börse Frankfurt Zertifikate and the Stuttgart Stock Exchange. The expert jury put Deka in second place in the primary market, capital protection certificates and Certificate Issuer of the Year categories. In the Certificate of the Year category, Deka took third place.

DekaBank once again successfully underwent the exacting evaluation process by the rating agency Scope in 2021. A top score of AAA (ZMR) in the Scope Zertifikate Management Ratings recognised DekaBank's excellent quality and expertise as an issuer of investment certificates in the primary market for the fifth time in a row.

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

See also: Economic report: page 30 ff.

Risk and profit management at the Deka Group

The Deka Group has a consistent system of targets at both Group and business division level. At Group level, 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 financial performance indicators relate to the Deka Group's earnings position, capital adequacy and liquidity adequacy.

The economic result is the key in-house management indicator within the meaning of the provisions of IFRS 8 (Operating Segments) and is based on the IFRS figures. 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. Interest expense for the AT1 (Additional Tier 1 Capital) bond, which is recognised directly in equity, is also taken into account 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. A reconciliation of the economic result to the total profit or loss before tax under IFRS can be found in 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 121 ff.

See also: Capital adequacy: page 83 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, Tier 1 capital, risk-weighted assets and the leverage ratio exposure, along with the corresponding capital ratios, the (RWA- and LRE-based) MREL ratios, the (RWA- and LRE-based) subordinated MREL requirements 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 86 ff.

The Internal Liquidity Adequacy Assessment Process (ILAAP) is also based on two perspectives. From the normative perspective, the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) serve as the relevant indicators. 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 cooperation partners, third-party funds and liquidity, advisory/management mandates, master funds 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 36 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. For the Capital Markets business division, they are reported by customer segment.

Economic report

Economic environment

Macroeconomic conditions

The coronavirus pandemic continued to have a material economic impact in 2021. The end of lockdowns resulted in very high demand over the summer months, which businesses had not planned sufficient capacity to meet. This overwhelmed production chains and meant that companies increasingly faced the issue of supply shortages and shipping problems. While some expectations about the pandemic were met in 2021, such as the development of effective vaccines and an end to the lockdowns, the difficult public health situation has continued globally. The significant rise in infection rates starting in autumn 2021, and concerns about the Omicron variant of the virus, have increasingly unsettled market participants again. Despite this, there was a significant year-on-year rise of 6.0% in global gross domestic product over 2021 as a whole, marking a continuation of the economic recovery process following the pandemic-induced recession in 2020.

Inflation trends attracted the focus of market participants from the start of 2021. Prices of commodities and intermediate goods in particular rose considerably more sharply than had been expected at the start of the year. With supply unable to keep pace with demand, there was upward pressure on prices. Energy commodities and industrial metals saw particularly high inflation rates on the back of the deep recession in spring 2020. Companies also saw themselves in a position to pass significant price increases on to customers again. This drove consumer price inflation for 2021 to an annual average of 2.6% in the eurozone and 3.2% in Germany. Macroeconomic growth also improved the situation on the labour market, reducing the number of people on short-time working (the German version of furlough) and the unemployment rate. The US economy grew more strongly than the eurozone, leading investors to anticipate a divergence in monetary policy between the US Federal Reserve (the Fed) and the European Central Bank (ECB). This resulted in a noticeable depreciation of the euro against the US dollar in the second half of the year.

Higher inflation rates presented major challenges for central bank monetary policy. The major central banks were largely confident that mainly temporary causes were behind the faster-than-expected inflation. They expected upward pressure on prices to ease again in the medium term and were therefore prepared to accept higher inflation rates in the interim. ECB communications continued to emphasise the need to support the economic recovery from the pandemic. To ensure sufficiently favourable financing conditions for the real economy, the ECB stepped up the pace of its asset purchases under the Pandemic Emergency Purchase Programme (PEPP) in March, confirming this decision again in June. The US central bank, the Fed, also continued apace with its asset purchases in the first half of the year, judging particularly the recovery on the labour market to be insufficient. By late autumn 2021, both central banks were nevertheless signalling a reduction in their monetary stimulus over the medium term. The Fed reduced its monthly bond-buying programme in its interest rate decision in November. The following month, it announced a faster wind-down of the programme starting in January 2022. The Bank of England went even further, implementing an initial interest rate hike in December.

Economic environment for asset management

As in the previous year, developments in the capital markets were heavily influenced by the wholesale intervention of major central banks. Historically low key interest rates, but above all the enormous asset purchase programmes of the ECB and Fed, kept bond yields at very low levels. With negative yields all along the Bund curve at times, as well as for other eurozone sovereign bonds and high-quality corporate bonds, investors switched to riskier asset classes, especially equities. The shift in capital from bonds to equities was also fuelled by companies' strong fundamentals given the swift economic recovery from the slump of 2020. So fast and significant was the rise in sales and corporate profits that they even considerably outperformed pre-crisis levels. The majority of European indices responded with noticeable gains. The DAX and STOXX Europe 600 reached new historic highs. US indices also hit record levels, driven primarily by gains for major technology companies. Even severe supply chain disruption and shortages of materials, particularly computer chips, had no more than a temporary effect on stock markets. The same applied to the fast-rising inflation rates.

Bond markets were more volatile from late summer due to higher inflation rates and, above all, higher inflation expectations. Market participants also increasingly anticipated the likelihood of a turnaround in interest rates by major central banks. In the US, two-year Treasury yields climbed noticeably higher, while yields on longer maturities saw only a moderate rise. In the eurozone, meanwhile, the ECB was able to convince market participants that much of the recent rise in inflation would be temporary and that no rate hikes were on the cards. However, there was a noticeable increase in yields on longer-term Bunds for a time following the ECB's announcement that it would be ending its Pandemic Emergency Purchase Programme (PEPP) in March 2022. Bond yields in the eurozone periphery were even more heavily affected, as these countries had been particular beneficiaries of asset purchases by the central bank. Amid significantly increased infection rates in the autumn and concerns about the Omicron variant of the virus, however, market participants took the view that the ECB would continue large-scale bond purchases. Bund yields at the long end of the curve therefore fell considerably again, though they remained above the level seen at the end of 2020.

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 them 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. The effects of the coronavirus pandemic put continued pressure on the real estate markets in 2021. Low vacancy rates enabled markets for office space to weather the crisis relatively well, with only isolated rent reductions. Retail and hotels recovered in the second half of the year after lockdowns ended. However, they were hit again by rising infection rates towards the end of the year as a new wave of the coronavirus led to further restrictions. The logistics market, by contrast, benefited from the growing trend towards online shopping and increased demand for space, which was needed to safeguard supply chains. On the investment market, turnover increased significantly year-on-year. The global transaction volume in 2021 was substantially up on the previous year's level.

Private household wealth in Germany increased in 2021. Households increased their financial assets to €7,399bn (30 September 2021), up almost €426bn from the end of 2020, due to high new inflows and growth in value. The high level of uncertainty due to the coronavirus pandemic continued to drive households towards liquid assets such as currency and deposits. Investments in equities and investment funds also contributed to increased wealth. Compared against year-end 2020, the share of these investments in the total financial assets of private households increased by around two percentage points to approximately 19%.

The market performance seen in 2021 was also reflected in the investment statistics of the German Investment Funds Association BVI. Net assets in open-ended mutual funds amounted to €1,471.3bn as at 31 December 2021 (year-end 2020: €1,179.9bn), while the net assets of open-ended special funds stood at €2,187.5bn (year-end 2020: €1,990.6bn). At €118.3bn, net inflows into open-ended mutual funds significantly exceeded the previous year's figure (€43.2bn). Equity funds and mixed funds made a particular contribution to this increase. At €131.3bn, the sales figure for open-ended special funds for institutional investors was significantly up on the comparative figure for the previous year (€78.6bn).

Economic environment for the banking business

Excess liquidity in the banking system increased further in the first half of 2021 through the ECB's extensive asset purchases and strong demand for its longer-term refinancing operations. The resulting downward pressure on short-term interest rates thus also continued to grow. Nevertheless, longer-term money market rates in particular moved slightly upwards. At the long end of the yield curve, yields on ten-year German government bonds remained in negative territory all year and saw only a slight, fluctuating increase.

In the credit markets, rising government bond yields had only a minor impact. Financial institutions reaped very considerable benefits from the generous support provided by the ECB, which had a significant impact on new covered bond issues in particular. As was already the case in the previous year, only a very small number of covered bonds were placed on the freely tradable market, noticeably reducing risk premiums on outstanding covered bonds. The corporate bond market was substantially bolstered again by continued high levels of central bank purchases in 2021. The strong economic recovery also gave a major boost to corporate profits, which contributed to increased operating cash flows. This led businesses, having raised extensive liquidity on the capital market in the previous year, to slightly reduce new issues. Companies' improved liquidity situation meant that the majority of rating changes in 2021 were positive in a reversal of the previous year's ratings trend.

Capital market business was hit by the continued expansionary monetary policy of central banks. As expected, the Commission Business unit came under pressure in terms of the margins achievable under the market conditions. It failed to match its prior-year result, which had been driven by high market volatility. The third-party issues business generated stable turnover in the context of rising indebtedness, particularly in the public sector. Sales of structured issues developed very positively in 2021 given the low interest rates.

The coronavirus pandemic continued to dominate market activity in the financing business in the reporting year. Due to the market environment in the context of the coronavirus pandemic, real estate financing remained characterised by subdued investment volumes, which were also reflected in a relatively small number of completed purchases and sales. The effects of the crisis were also evident in the declining portfolio volume and the continued slow volume of new business in transport financing. The hotel and retail segments of the portfolio, which were particularly hard hit by the coronavirus pandemic, saw their position improve for a time in 2021 but were affected at the end of the year by the worsening pandemic situation.

Regulatory environment

Changes to regulations, both those already initiated and those in the pipeline, influenced the business model and profitability of the Deka Group during the 2021 financial year as in the preceding year. Higher capital requirements for banks could emerge from supervisory interpretations of existing legal standards and 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 makes major demands on costs and resources. These are the key regulatory issues for the Deka Group.

Regulatory topics

In response to the coronavirus crisis, supervisory authorities and regulators enacted the following relief measures, among others. However, DekaBank has opted not to apply them.

- In 2020, the ECB permitted the institutions under its supervision to temporarily operate below the capital level defined by the capital conservation buffer, the Pillar 2 Guidance (P2G) and the liquidity coverage ratio (LCR). DekaBank has not adjusted its relevant internal thresholds for capital and liquidity management.
- The Capital Requirements Regulation (CRR) has been amended in European law (CRR quick fix). This allows banks to temporarily adjust their regulatory capital for the effects of increased risk provisioning. Other relief measures relate to the measurement of unrealised losses on banks' holdings of public debt and to the capital deduction for capitalised software. Even if applied, the measures in the CRR quick fix would still not offer significant relief for DekaBank at the current time.
- The ECB announced in June 2021 that central bank deposits could be excluded from the leverage ratio exposure. The relief applies for a limited period until 31 March 2022.

In the EU, the reform of Capital Requirements Regulation II (CRR II) and Capital Requirements Directive V (CRD V) was published in June 2019. From Deka's perspective, the key new rules under the CRR related primarily to the leverage ratio (LR), the net stable funding ratio (NSFR), the standardised approach for counterparty credit risk exposure (SA-CCR), and the requirements that apply to large exposures, the trading book and the treatment of credit risks resulting from guarantee funds and Riester products. DekaBank was required to apply these starting on 28 June 2021.

As part of the reform of CRR II, the rules on applying credit risk mitigation techniques in the large exposure regime were also revised. Among other things, collateral recognised in the solvency regime must also be recognised in the large exposure regime when using credit risk mitigation techniques. The collateralised exposure is counted towards the large exposure limits for the collateral provider or issuer of the financial collateral (collateral substitution). More detail on the scope of collateral substitution was published in an EBA Q&A on 21 January 2022. This indicates that collateral substitution must continue to be implemented with master netting agreements, including for repo/lending transactions. The implications for the affected business processes will be analysed in the coming months.

As the United Kingdom continues to apply the CRR even after leaving the EU, at least until the initial application date of Basel IV of 1 January 2025, the United Kingdom still has an equivalent supervisory regime in this respect. As a result, UK institutions are still considered to be institutions as defined by the CRR for the purposes of calculating RWA.

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 had planned initial application on 1 January 2022 but has now postponed this until 1 January 2023. In October 2021, the European Commission published a draft CRR III to implement Basel IV in the EU. This largely adopted the proposals of the Basel Committee. More specifically, the gradual introduction of an output floor is planned. This will stand at 50% upon introduction at the beginning of 2025 and increase to its final level of 72.5% in 2030. 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. 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, the draft CRR III contains new rules on calculating RWAs for CVA risk and operational risk, which may also increase RWAs. Initial application of the new rules is planned at EU level for the beginning of 2025.

The Fundamental Review of the Trading Book (FRTB) contains amended provisions on the calculation of market risk. The European Commission adopted the final Delegated Regulation in mid-December 2019 and thereby partially integrated the changes under the 2019 Basel standard into CRR II. Further implementation details have been published via EBA regulatory technical standards and guidelines. At EU level, the reporting obligation for the FRTB standardised approach has been in place since 30 September 2021. The draft CRR III contains new regulations on the definition of the trading book. The start of the new market risk capital requirements at EU level was postponed to 2025 with the option of a further two-year postponement via an EBA delegated act.

In the addendum to the ECB guidance to banks on non-performing loans published in March 2018 and updated in August 2019, the ECB details the calculation of the prudential provisioning for loans classified as non-performing exposures (NPEs) from 1 April 2018 onwards. 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. For non-performing exposures originated from 26 April 2019 onwards, the CRR provides for a mandatory deduction from Common Equity Tier 1 capital if a bank's actual provisioning falls short of the minimum supervisory requirement. Article 47c CRR specifies the factors to be used in calculating supervisory provisioning requirements for secured and unsecured parts of new non-performing exposures. A distinction is made based on the type of security and duration of the status as a non-performing exposure. The aim is to ensure that every new non-performing exposure is fully covered by capital within a prescribed time period.

In October 2020, the European Banking Authority (EBA) issued an opinion on the treatment of capital instruments that are no longer eligible as own funds from 2022 onwards ("legacy instruments"). This holds that legacy instruments have the potential to infect other (non-legacy) capital instruments to the extent of disqualifying them. This may be the case if the legacy instruments have certain detrimental features (e.g. equal ranking with the non-legacy capital instrument). At DekaBank, this applied to atypical silent capital contributions, which would have infected the subscribed capital (as a CET1 instrument) including the capital reserve. To avoid infection, the atypical silent capital contributions were dissolved in early November 2021 and transferred to DekaBank. The atypical silent capital contributions were contributed in kind to the capital reserve in conjunction with a cash capital increase.

The European Banking Authority (EBA) conducted a stress test in 2021. As on the previous occasion in 2018, this covered all risk types. The results were published on 30 July 2021. DekaBank was not among the banks taking part in the EBA stress test. As a bank subject to ECB supervision, however, it was subjected to a stress test by the ECB in 2021, which was 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. DekaBank passed the stress test with a satisfactory result; in the adverse stress scenario, DekaBank remains well above the SREP minimum requirements for the Common Equity Tier 1 capital ratio.

Sustainability-related regulatory proposals

Adopted in 2018, the EU Action Plan on Financing Sustainable Growth has three aims: reorienting capital flows toward sustainable investment, managing financial risks stemming, for example, from climate change and fostering transparency in financial and economic activity. The expectations associated with this EU Action Plan have been translated into various legal standards with a material impact on the financial sector. Deka Group engaged intensively with these in 2021.

Reorienting capital flows from private and institutional investors towards sustainable investment can only be achieved if these investors are offered attractive investment products that meet high sustainability standards. This is particularly the case where private investors are concerned. When advising such investors, banks must actively enquire about their preferences in relation to sustainable investment. In the context, the Deka Group once again significantly expanded its range of sustainable investment opportunities in the reporting year.

The Level 1 regulatory requirements set out in the Sustainable Finance Disclosure Regulation (SFDR), which is particularly relevant from an investor perspective, were implemented on time in March 2021. Among other things, a statement about how the adverse impacts of investment decisions on sustainability factors ("principal adverse impacts") are taken into consideration was issued for all companies and published in German on the website. The regulation makes a distinction between legal entity-related and product-related disclosure obligations. Companies must continue to follow through on the work done to implement Level 1 with a view to the upcoming Level 2 requirements in early 2023. As part of this, the consideration of sustainability factors in Deka's sustainable financial investments is further increasing transparency for investors.

From a sustainability perspective, the following regulatory reporting initiatives were relevant for DekaBank in 2021: the future requirement to disclose the taxonomy alignment of new and existing business (in accordance with the EBA proposal on Article 8 of the EU Taxonomy), the associated phased publication of ESG risks, including the disclosure of the Green Asset Ratio in the CRR disclosure report (based on the EBA technical implementation standard on Article 449a CRR), and the fundamental revision of sustainability reporting (Corporate Sustainability Reporting Directive, CSRD).

With regard to the extended disclosure requirements stipulated by the regulator (pursuant to Article 8 of the EU Taxonomy, the EBA standard on Article 449a CRR and the CSRD), changes must be implemented in both non-financial and financial reporting for the years from 2021 to 2023. As a result, the regulator expects to see closer links between financial and non-financial content in the Group management report. Individual aspects of the implementation of Article 8 of the EU Taxonomy already need to be included in the 2021 sustainability report. In particular, these include quantitative and qualitative information on the taxonomy eligibility of business financed by the Deka Group. Provisions also have to be made to meet the requirements of the EBA standard pursuant to Article 449a CRR II for the 2022 reporting year and those of the CSRD for the 2023 reporting year.

In terms of the dynamic prudential expectations regarding the handling of climate-related and environmental risks, the ECB is planning extensive activities for 2022. In particular, these include the ECB climate stress test announced for 2022, which DekaBank has been preparing for since the 2021 reporting year. The climate stress test is planned for the first half of 2022 and aims to examine the extent to which SSM (Single Supervisory Mechanism) banks are affected by climate risks. The results of the stress test are to be taken into account in bank SREP processes.

In addition, the Bank expects an extensive review of the implementation of the ECB guide on climate-related and environmental risks in 2022. The ECB guide comprises 13 expectations relating to the management and disclosure of climate-related and environmental risks and resulted in the reporting year in a two-part survey, which requested a self-assessment of the status quo and information on the measures planned by all SSM banks. For 2022, the ECB has announced another self-assessment and a full supervisory review. In future, this will also be part of the SREP process.

Separately from the ECB assessment, Deka initiated numerous activities to enhance the management of climate-related and environmental risks in 2021. The planning of internal measures was refined in a targeted manner taking account of supervisory feedback.

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.

Business development and profit performance in the Deka Group

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

The coronavirus pandemic continued to affect global economic development in 2021. The economy was hit particularly at the beginning and end of the year by lockdown measures in response to high infection rates. There were also indirect impacts from supply chain and transport disruption and significantly increased inflation rates. Looking at 2021 as a whole, however, the economic recovery process from the previous year’s pandemic-induced recession essentially continued. The continued expansionary measures by the central banks made a noticeable contribution to this.

Deka continued its systematically prudent approach in this environment, always adapting its business operations and management processes to events. The crisis team created by the Board of Management worked with the departments to analyse the situation and formulated cross-divisional measures. The Deka Group remained fully operational at every stage. Employees largely worked remotely from home. Covid measures including social distancing and hygiene rules were in place at all sites. Free FFP2 masks and self-testing kits were provided to employees for every day they worked on our premises. This was in addition to the legal rules requiring proof of vaccination, recent recovery or a negative test to visit workplaces in Germany, which applied from November onwards. The Deka Group also offered the vaccine to employees and their relatives in 2021, with 1,500 vaccinations taking place in the summer alone. This was followed by booster vaccinations at the end of the year.

Supporting the savings banks and institutional customers remained the focus in the second year of the pandemic. Events largely took place in digital or hybrid formats. Giving good advice in times like these has been particularly important, whether face to face or through new technologies. The expert advice offered by the savings banks, both online and in branches, again helped customers to keep investing in 2021.

See also: Information about the Deka Group: page 13 ff.

The Deka Group generated an economic result of €847.8m in the reporting year, significantly improving on the previous year's figure of €269.4m. We are very satisfied with business development and profit performance and are well positioned to turn the Deka Group into an even more customer-focused, innovative and sustainable *Wertpapierhaus* and to invest in key areas for the future, such as digitalisation. This result will also ensure that DekaBank is able to distribute profits and make the reinvestments needed to strengthen its capital.

Income increased significantly to €2,019.5m (2020: €1,387.9m). A strong increase in net commission income and an almost evenly balanced risk provisioning result contributed to this. There were also high actuarial gains on pension provisions due to the prevailing market conditions. Net commission income remains the primary component of income, accounting for 80%.

Expenses increased by 4.8% to €1,171.8m and thus rose only slightly compared with 2020 (€1,118.5m) despite moderate increases in personnel and operating expenses and a noticeably higher bank levy.

The Deka Group improved net sales by a total of €3.6bn year-on-year to €35.7bn in the 2021 reporting period.

The Group increased net sales in the retail customer segment by €12.4bn compared with 2020 to €25.0bn. Retail fund sales rose significantly from €8.0bn to €17.9bn, with equity funds (€7.8bn), bond funds (€2.8bn), real estate funds (€2.5bn) and mixed funds (€2.3bn) accounting for a particularly significant share of this figure in the reporting period. Sales of certificates to retail customers totalled €7.1bn (2020: €4.6bn).

Net sales to institutional customers came to €10.7bn as against €19.5bn in the previous year. The lower figure was due to a major master funds client changing investment management company in the second quarter. As a result, the institutional investment fund business accounted for net sales of €8.8bn (2020: €17.4bn). Certificate sales to institutional customers came to €1.9bn (2020: €2.2bn).

Deka Group net sales *in €m (Fig. 4)*

	2021	**2020**
Net sales	**35,735**	**32,148**
by customer segment		
Retail customers	25,032	12,600
Institutional customers	10,703	19,548
by product category		
Mutual funds and fund-based asset management	18,721	7,905
Special funds and mandates	6,736	16,945
Certificates	9,002	6,743
ETFs	1,277	555

Investors signed up to around 1,063,000 (net figure) new Deka investment savings plans in 2021 (year-end 2020: approximately 776,000), meaning that Deka managed approximately 6.9 million contracts at the end of 2021.

Net sales, coupled with positive performance and the integration of the total customer assets of IQAM Invest GmbH (around €7bn), fuelled an increase in total customer assets of €56.0bn to €395.1bn (year-end 2020 €339.2bn).

Deka Group total customer assets *in €m (Fig. 5)*

	31 Dec 2021	31 Dec 2020	Change	
Total customer assets	**395,148**	**339,160**	55,987	16.5%
by customer segment				
Retail customers	196,485	167,159	29,326	17.5%
Institutional customers	198,662	172,001	26,661	15.5%
by product category				
Mutual funds and fund-based asset management	195,877	161,226	34,650	21.5%
Special funds and mandates	161,553	144,695	16,858	11.7%
Certificates	24,498	23,712	786	3.3%
ETFs	13,220	9,527	3,693	38.8%

See also: Capital adequacy: page 83 ff.

The Common Equity Tier 1 capital ratio at the close of 2021 stood at 15.2% (year-end 2020: 14.2%). The increase compared with the end of 2020 was due to higher Common Equity Tier 1 capital and lower risk-weighted assets (RWAs). The regulatory requirement was exceeded at all times.

Compared with the previous year, Common Equity Tier 1 capital increased by €279m to €4,716m. This rise was due primarily to the inclusion of year-end effects from 2020 (profit retention and inclusion of the risk provisions set up in 2020 in the comparison of provisions) and the increase in capital reserves connected to the transformation of atypical silent capital contributions.

RWAs declined overall by €362 m from the year-end 2020 figure of €31,307m to €30,944m. As expected, credit risk increased by €3,894m as against the end of 2020 to €21,499m, mainly due to the first-time application of CRR II in June 2021. This resulted in higher RWAs for the backing of guarantee products due to the application of the CCF (credit conversion factor) approach. For credit risk, there was also an increase in RWAs from lending business due to changes in creditworthiness and new business. The increased credit risk was offset by a drop in market risk of €3,990m to €5,588m. This was mainly attributable to a decline in general market risk as a result of lower spread volatilities and to a drop in specific market risk resulting from the adjustment to reflect the new interpretation of the use of offsetting options in specific interest rate risk. RWAs from operational risk remained almost unchanged at €3,500m. CVA risk came to €358m (2020: €638m).

At 6.2%, the leverage ratio (fully loaded) exceeded the previous year's figure of 5.6%. The increase was due to higher Tier 1 capital combined with a lower leverage ratio exposure. The minimum leverage ratio of 3.0% applicable from June 2021 onwards was thus adhered to at all times.

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 MREL requirements were changed to an RWA- and LRE-based calculation method in the middle of 2021 in accordance with supervisory requirements. This expresses the total of own funds and MREL-eligible liabilities in relation to RWAs and LRE. As at the reporting date, the MREL ratio in line with the RWA-based approach amounted to 59.7%, while the figure according to the LRE-based approach came to 21.7%. Both ratios were well above the minimum ratios that will apply as of 1 January 2022.

Institutions and entities should meet the MREL with own funds and other subordinated liabilities to the extent necessary to prevent their creditors from incurring greater losses in the event of resolution than they would incur under normal insolvency proceedings (subordinated MREL requirements). The subordinated MREL requirements were changed to an RWA- and LRE-based calculation method in the middle of 2021 in accordance with supervisory requirements. Eligible or total own funds and all subordinated liabilities eligible based on statutory requirements are added together and expressed in relation to RWAs and LRE. As at the reporting date, the subordinated MREL requirements under the RWA-based approach were 42.4%, while the figure under the LRE-based approach came to 16.4%. Both ratios were well above the minimum ratios that will apply as of 1 January 2022.

See also: Liquidity adequacy: page 86 ff.

The Deka Group had ample liquidity, measured using the liquidity balances and liquidity coverage ratio (LCR), throughout 2021. Compared with the end of 2020 (185.6%), the LCR fell by 25.3 percentage points to 160.3%. This was mainly because, in percentage terms, the increase in net cash outflows was greater than that in holdings of high-quality liquid assets. The LCR in the reporting period was always significantly above the minimum limit of 100% applicable in 2021.

The net stable funding ratio (NSFR) came to 118.9% and, at the end of December 2021, was thus significantly above the minimum of 100% to be adhered to from June 2021 onwards. The ratio expresses available stable funding in relation to required stable funding. The NFSR is thus designed to ensure stable long-term funding for assets in relation to their degree of liquidity. A period of one year forms the basis for the assessment.

Economic risk-bearing capacity was at a non-critical level overall as at the end of 2021. The utilisation of risk appetite (43.3%) was down significantly on the end of the previous year (70.5%) due to lower total risk. This was mainly attributable to a significant drop in counterparty, market price and business risk. At 32.6%, utilisation of risk capacity was also below the level seen at the end of 2020 (53.9%).

Comparison of forecast and actual growth

Expectations regarding the Deka Group's key performance indicators in 2021, as set out in the forecast report of the 2020 Group management report and updated in the 2021 interim financial report, were exceeded overall. This was partly due to forecasting uncertainty around potential negative market developments in connection with the global impact of the coronavirus pandemic, which did not materialise as predicted.

Development of key performance indicators in the Deka Group *(Fig. 6)*

		31 Dec 2020	Forecast 2021 in the Annual Report 2020	Forecast 2021 in the Interim Report 2021	31 Dec 2021	Change	
Economic result	€m	269.4	Around 400	20% to 40% above previous forecast	847.8	578.3	214.7%
Total customer assets	€bn	339.2	Moderately above the previous year	Moderately above the previous year	395.1	56.0	16.5%
Net sales	€bn	32.1	Significantly below previous year	Significantly below previous year	35.7	3.6	11.2%
Common Equity Tier 1 capital ratio	%	14.2	Over 13	Over 13	15.2	1.1%-Points	
Utilisation of risk appetite	%	70.5	Slightly above previous year	Remains at non-critical level	43.3	–27.2%-Points	

Profit performance of the Deka Group

The Deka Group generated a very good economic result of €847.8m (previous year: €269.4m). This was significantly up on the previous year, due in particular to a strong increase in net commission income and an almost evenly balanced risk provisioning result. There were also high actuarial gains on pension provisions due to the prevailing market conditions. Income rose by a total of 45.5% to €2,019.5m (2020: €1,387.9m).

Net interest income of €161.8m was generated in the reporting period (2020: €165.0m). The main components of net interest income were earnings from specialised and real estate financing, which were significantly up on the previous year overall. Meanwhile, there was a reduced earnings contribution from strategic investments, mainly due to lower volumes. Measures to optimise portfolios while achieving an appropriate risk/reward ratio were implemented here in the previous year as part of risk management. Net interest income includes refinancing gains totalling €20.1m from the ECB's TLTRO III programme.

Allocations to and reversals of risk provisions in the lending and securities business almost balanced each other out with a risk provisioning result of €0.6m at year-end (2020: €–178.0m). The previous year's figure was hit by the particular impact of the coronavirus pandemic on the transport and real estate financing sectors. Changes in creditworthiness and transfers to other stages led to reversals of provisions in the reporting year. Net allocations to risk provisions of €18.5m were attributable to the lending business (2020: net allocations of €162.1m). The Specialised Financing subdivision recorded a net reversal in the amount of €6.7m in the reporting period, while the Real Estate Financing subdivision accounted for a net allocation of €25.9m. For the securities business, the reversal of provisions that were no longer required led to a positive risk provisioning result of €19.1m (2020: €–15.8m).

Net commission income rose by 24.0% to €1,623.0m (2020: €1,308.9m) and accounted for 80% of income. Commission from the investment fund business increased, in particular due to higher portfolio-related commission as a result of increased average total customer assets. Performance fees and sales-related commission were also both up on the previous year, and higher purchasing and construction fees were collected. Commission from banking business was on a level with 2020. Higher income from securities management virtually compensated for the lower income from commission business. Commission from custody account business was around the same level as in the previous year.

Net financial income came to €139.9m, a significant reduction on the previous year's figure of €164.9m. 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 €266.5m, net financial income from the trading book was significantly higher than in the previous year (€194.9m). A key component was income from the Trading & Structuring unit (€7.1bn compared with €4.6bn in 2020), which increased strongly year-on-year, primarily due to improved certificate sales to retail customers. The contribution from the Collateral Trading & Currency unit was slightly down on the figure for 2020.

Net financial income from the banking book was €–126.6m (2020: €–30.0m). This included a negative valuation result from own issues in the wake of spread movements and an allocation of €105m to the general provision for potential risks. An amount of €40.0m was released from the general provision in the previous year. 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 came to €94.2m (2020: €–72.9m). Actuarial gains of €141.4m on provisions for pensions had a positive effect. These primarily resulted both from the increase in plan assets and from the increase in the actuarial interest rate to 1.15% (year-end 2020: 0.70%). In the previous year, actuarial losses of €50.4m were recognised on provisions for pensions. 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.

Expenses increased by 4.8% to €1,171.8m and thus rose only slightly compared with 2020 (€1,118.5m) despite moderate increases in personnel and other administrative expenses and a noticeably higher bank levy.

Personnel expenses increased slightly in line with expectations to €576.7m (2020: €534.7m), mainly due to the larger workforce resulting from the acquisition of IQAM Invest GmbH and from the improved business performance. At €527.1m, other administrative expenses including depreciation and amortisation were slightly up on the previous year's figure (€491.2m). The rise resulted primarily from higher expenditure for IT information services, higher subscriptions and fees and increased depreciation and amortisation.

The annual contribution to the deposit guarantee scheme of the *Landesbanken* and *Girozentralen* amounted to €18.5m (2020: €20.4m). At €61.0m, the bank levy was €8.7m higher than in the previous year (€52.4m). This was due in particular to an increase in the annual target volume by the Single Resolution Board.

Within restructuring expenses, there was a net reversal of restructuring provisions in the amount of €11.5m. The prior-year figure (€19.9m) was affected by HR measures as part of the strategic cost initiative, which was successfully completed at the end of 2021.

The Deka Group operates in a growing market with the aim of realising potential income with an attractive cost/income ratio. 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 58.6% (2020: 70.2%).

The balance sheet based return on equity (before tax) was 16.5% (2020: 5.5%).

Deka Group performance *in €m (Fig. 7)*

	2021	2020	Change	
Net interest income	161.8	165.0	–3.2	–1.9%
Risk provisions in the lending and securities business	0.6	–178.0	178.6	100.3%
Net commission income	1,623.0	1,308.9	314.1	24.0%
Net financial income	139.9	164.9	–25.0	–15.2%
Other operating profit	94.2	–72.9	167.1	229.2%
Total income	**2,019.5**	**1,387.9**	631.6	45.5%
Administrative expenses (including depreciation and amortisation)	1,183.3	1,098.7	84.6	7.7%
Restructuring expense	–11.5	19.9	–31.4	–157.8%
Total expenses	**1,171.8**	**1,118.5**	53.3	4.8%
Economic result	**847.8**	**269.4**	578.3	214.7%

Business development and profit performance by business division

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

The economic result for the Asset Management Securities business division was €606.3m (previous year: €365.8m). The environment for the business division was favourable, despite the continuing coronavirus pandemic. At €23.0bn, net sales again exceeded the previous year's already high figure of €22.0bn. For retail customers, they more than doubled year-on-year, while a one-off effect led to a significant decline in net sales in business with institutional customers. Total customer assets increased to €320.4bn as at year-end 2021 (previous year: €269.7bn).

Net sales and total customer assets

The division's net sales totalled €23.0bn (previous year: €22.0bn). Business with retail customers performed better than in the previous year due to increased demand for mutual funds. Sales of mutual securities funds reached €16.5bn (previous year: €7.1bn). Sales of equity, bond and mixed funds were particularly positive. In fund-based asset management, however, investor caution was still in evidence, with net redemptions and maturities of €0.6bn. However, this was lower than the previous year's figure of €1.9bn. Business with institutional customers amounted to €7.6bn (previous year: €16.5bn). The decline in net sales in the institutional fund business in the reporting year was caused by a major client changing investment management company. Net sales of special funds and mandates thus stood at €5.8bn (previous year: €16.3bn). However, sales of advisory/management mandates developed positively. Demand for ETFs came to €1.3bn (previous year: €0.6bn).

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

	2021	2020
Net sales	**23,032**	**22,006**
by customer segment		
Retail customers	15,440	5,540
Institutional customers	7,593	16,466
by product category		
Mutual funds and fund-based asset management	15,919	5,176
ETFs	1,277	555
Special funds and mandates	5,837	16,276

Total customer assets in this business division increased by €50.7bn to €320.4bn due to strong sales, a positive investment performance, the inclusion of the portfolio of IQAM Invest GmbH (around €7bn) and distributions to fund investors.

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

	31 Dec 2021	31 Dec 2020	Change	
Total customer assets	**320,419**	**269,716**	50,703	18.8%
by customer segment				
Retail customers	143,952	118,436	25,516	21.5%
Institutional customers	176,467	151,280	25,187	16.6%
by product category				
Mutual funds and fund-based asset management	156,369	124,721	31,649	25.4%
thereof: equity funds	59,409	42,257	17,152	40.6%
thereof: bond funds	29,072	27,312	1,760	6.4%
thereof: mixed funds	24,726	18,726	5,999	32.0%
ETFs	13,220	9,527	3,693	38.8%
Special funds and mandates	150,830	135,469	15,361	11.3%

Profit performance in the Asset Management Securities business division

At €606.3m, the division's economic result was up on the previous year's figure of €365.8m. This was chiefly attributable to the increase in net commission income due to higher portfolio-related commission. In addition, market-induced provisions for guarantee products were lower than in the previous year, while performance fees and sales-related commission were both up on the previous year. Expenses totalled €371.7m (previous year: €357.2m). Personnel and other administrative expenses (including project expenses) were higher than in the previous year. This was primarily due to the inclusion of expenses by IQAM Invest GmbH.

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

	2021	2020	Change	
Net commission income	999.9	741.8	258.1	34.8%
Other income	–10.0	–1.0	–9.0	(< –300%)
Total income	**989.9**	**740.8**	249.1	33.6%
Administrative expenses (including depreciation and amortisation)	370.9	355.7	15.2	4.3%
Restructuring expense	0.9	1.5	–0.6	–42.9%
Total expenses	**371.7**	**357.2**	14.5	4.1%
Economic result before income distribution of Treasury-function	**618.2**	**383.6**	234.5	61.1%
Income distribution of Treasury function	–11.9	–17.8	5.9	33.3%
Economic result	**606.3**	**365.8**	240.5	65.7%

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

At €188.6m, the economic result in the Asset Management Real Estate business division significantly exceeded the previous year's figure of €149.9m. At €3.7bn, net sales also increased year-on-year. Thanks in part to the solid investment performance, the business division's total customer assets climbed to more than €50bn for the first time.

Net sales and total customer assets

The division's net sales increased to €3.7bn (previous year: €3.4bn). 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 continuing high real estate prices. The sales quotas that had been set were largely met by the end of the year.

Mutual funds accounted for around 76% of the division's net sales. WestInvest InterSelect, which focuses on Europe, continued to register particularly high demand. The Deka-ImmobilienMetropolen fund launched in 2019 proved very popular along with Deka-ImmobilienGlobal and Swiss Life REF (DE) European Living.

At €1.2bn, net sales in open-ended mutual property funds for institutional customers, special funds, individual property funds, credit funds and mandates significantly exceeded 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. 11)*

	2021	2020
Net sales	**3,701**	**3,399**
by customer segment		
Retail customers	2,506	2,469
Institutional customers	1,195	930
by product category		
Mutual property funds	2,802	2,729
Special funds, individual property funds and mandates	899	669

Total customer assets in the Asset Management Real Estate business division increased by 9.8% in the reporting year, despite distributions of €0.9bn and the coronavirus pandemic, to reach €50.2bn. A yield-focused cash management policy and the introduction of new products, such as the Domus Megatrends Europa special fund oriented on European markets and the Deka-Immobilien Fokus Logistik Deutschland special fund focused on German logistics real estate, once again contributed to this growth. Of the total customer assets, mutual property funds accounted for €39.5bn, of which approximately 89% was from retail products. Euro-denominated mutual property funds achieved an average volume-weighted return of 2.1% (previous year: 2.3%).

Total customer assets in the Asset Management Real Estate business division *in €m (Fig. 12)*

	31 Dec 2021	31 Dec 2020	Change	
Total customer assets	**50,231**	**45,732**	4,499	9.8%
by customer segment				
Retail customers	35,986	33,397	2,588	7.8%
Institutional customers	14,246	12,335	1,911	15.5%
by product category				
Mutual property funds	39,507	36,505	3,002	8.2%
Special funds, individual property funds and mandates	10,724	9,227	1,497	16.2%

High prices and the ongoing effects of the coronavirus pandemic meant that the volume of real estate purchase and sale transactions in 2021 was below the previous year's level, amounting to €4.4bn (previous year: €5.7bn). Around 83% of the overall transaction volume concerned a total of 39 contractually secured property purchases. There were 16 disposals, representing 17% of the transaction volume. Business activities continue to centre on properties in the office, retail, logistics and hotel 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 in the Asset Management Real Estate business division stood at €188.6m at the end of 2021 compared with €149.9m in the previous year. Income exceeded the previous year's level by €46.3m, principally due to higher net commission income. Portfolio-based fees and commission income from purchasing and construction fees increased year-on-year. Expenses of €149.7m were slightly above the previous year's level. This was mainly due to higher personnel expenses.

Profit performance in the Asset Management Real Estate business division *in €m (Fig. 13)*

	2021	2020	Change	
Net interest income	0.9	1.8	−0.9	−48.4%
Net commission income	334.3	294.4	39.9	13.6%
Net financial income	0.3	−5.6	6.0	105.6%
Other operating profit	3.6	2.2	1.3	58.7%
Total income	**339.1**	**292.8**	46.3	15.8%
Administrative expenses (including depreciation and amortisation)	149.7	141.7	8.0	5.6%
Total expenses	**149.7**	**141.7**	8.0	5.6%
Economic result before income distribution of Treasury-function	**189.4**	**151.1**	38.3	25.3%
Income distribution of Treasury function	−0.8	−1.2	0.4	34.7%
Economic result	**188.6**	**149.9**	38.7	25.8%

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

The Asset Management Services business division achieved an economic result of €21.4m (previous year: €33.4m). There were renewed increases in the number of securities accounts and in custody account volume in Digital Multichannel Management. Assets under custody in the Depositary subdivision also saw a positive trend, rising by 17% year-on-year in 2021.

Business development in the Asset Management Services business division

Based on the favourable market trend in 2021, custody account volume in the Digital Multichannel Management subdivision rose to €174.5bn (previous year: €144.8bn). The number of custody accounts for which the division is the legal provider increased by almost 242,000 in the reporting year to 5.2 million. At 99.1 million, the number of securities transactions was also up on the previous year's figure of 89.8 million. This was due to the high sales figures throughout the year, with over a million additional savings agreements in 2021, and the rise in the number of transactions via S Broker, the Deka Group's online broker. By the end of 2021, the robo-advisory service of bevestor GmbH had been integrated into the sales of 324 savings banks (previous year: 314) as part of the cooperation partner model. bevestor had arranged an investment volume of around €175m and managed around 23,000 customer custody accounts as of year-end 2021.

Assets under custody rose in line with the development in Asset Management to €270.3bn (previous year: €230.8bn). Regular savings products remained a key driver.

Profit performance in the Asset Management Services business division

The economic result for the Asset Management Services business division was €21.4m (previous year: €33.4m). Net commission income of €220.7m (previous year: €205.5m) was the main component of income. The increase was due to a strong rise in transaction volume at S Broker and higher commission from banking business based on the positive market trend. Other operating profit was hit by a provision recognised due to the ruling by the German Federal Court of Justice (BGH) on the mechanism for amending general terms and conditions of business. Expenses came to €194.5m. This was up on the previous year's figure (€175.7m), particularly as a result of higher settlement costs due to increased volumes and sales.

Profit performance in the Asset Management Services business division *in €m (Fig. 14)*

	2021	2020	Change	
Net interest income	5.8	2.8	3.0	104.9%
Risk provisions in the lending and securities business	1.0	–1.0	2.0	201.7%
Net commission income	220.7	205.5	15.2	7.4%
Net financial income	0.3	3.2	–2.9	–90.0%
Other operating profit	–11.1	–0.4	–10.7	(< –300%)
Total income	**216.8**	**210.2**	6.5	3.1%
Administrative expenses (including depreciation and amortisation)	194.5	175.7	18.8	10.7%
Total expenses	**194.5**	**175.7**	18.8	10.7%
Economic result before income distribution of Treasury-function	**22.3**	**34.6**	–12.3	–35.6%
Income distribution of Treasury function	–0.9	–1.2	0.3	27.6%
Economic result	**21.4**	**33.4**	–12.0	–35.9%

Business development and profit performance in the Capital Markets business division

At €122.8m, the economic result in the Capital Markets business division was significantly up on the previous year's figure of €48.1m. The business division has enhanced its profile as the Deka Group's provider of products, solutions and infrastructure by developing the DEA and finledger platforms.

Business development in the Capital Markets business division

The Collateral Trading & Currency subdivision remains well positioned in the repo/lending business. Despite the still low interest rates and still high level of market liquidity, it fell short of the prior-year figure.

The Commission Business subdivision was unable to match the previous year's figures in business with shares, bonds, exchange-traded derivatives and supplementary services, which were driven by high market volatility and turnover particularly in the first quarter of 2020.

In the Trading & Structuring subdivision, business was up on the previous year. At €9.0bn, net sales of certificates at year-end 2021 exceeded the previous year's figure of €6.7bn. At €7.1bn, retail customers accounted for the lion's share of demand (previous year: €4.6bn). Net sales of certificates to institutional customers totalled €1.9bn (previous year: €2.2bn).

Profit performance in the Capital Markets business division

The division achieved an economic result of €122.8m in financial year 2021 (previous year: €48.1m). Net interest income and net commission income could not match the previous year's figures. However, net financial income was significantly higher than in the previous year. This was mainly due to good business in certificates. At €204.2m, expenses exceeded the previous year's level due to higher costs for IT information services.

Profit performance in the Capital Markets business division *in €m (Fig. 15)*

	2021	**2020[1)]**	Change	
Net interest income	3.0	5.5	–2.5	–45.2%
Net commission income	53.4	60.1	–6.7	–11.2%
Net financial income	267.8	193.1	74.7	38.7%
Other operating profit	1.6	2.2	–0.6	–26.7%
Total income	**325.8**	**260.9**	64.9	24.9%
Administrative expenses (including depreciation and amortisation)	204.2	177.5	26.6	15.0%
Total expenses	**204.2**	**177.5**	26.6	15.0%
Economic result before income distribution of Treasury-function	**121.6**	**83.4**	38.3	45.9%
Income distribution of Treasury function	1.2	–35.3	36.5	103.3%
Economic result	**122.8**	**48.1**	74.8	155.5%

1) Since the start of 2021, own investments in securities in the banking book (strategic investments) have been managed in the Treasury corporate centre; until 2020, they were the responsibility of the Capital Markets segment. Together with the securities in the liquidity buffer, both holdings form the Deka Group's liquidity management portfolio. The values for 2021 reflect the new structure. The previous year's figures in the Capital Markets segment and in the Treasury corporate centre have been adjusted accordingly to improve comparability with regard to income and key risk figures. In view of the principle of materiality, the retrospective allocation of expenses and the adjustment of the distribution of income for the Treasury function were waived.

Business development and profit performance in the Financing business division

The economic result in the Financing business division was well into positive territory at €94.9m (previous year: €–87.0m). The division's gross loan volume increased slightly from the end of 2020 (€24.8bn) to reach €25.7bn.

Business development in the Financing business division

Gross loan volume in the Specialised Financing subdivision declined to €14.4bn (year-end 2020: €14.6bn). Of the portfolio at the end of 2021, €4.1bn related to infrastructure financing (year-end 2020: €3.7bn), €3.5bn to public sector financing (year-end 2020: €2.9bn), €1.4bn to export financing (year-end 2020: €1.4bn) and €3.7bn to transport financing (year-end 2020: €3.9bn). The transport financing segment comprised ship financing of €1.3bn (year-end 2020: €1.0bn and aircraft financing of €2.4bn (year-end 2020: €2.9bn). Gross loan volume for savings bank financing fell as expected by €0.8bn compared with the end of 2020 to €1.8bn.

The remainder of the legacy portfolio, which does not conform to the current strategy, was almost completely wound down in 2021. The portfolio was dissolved on 1 January 2022.

Gross loan volume in the Real Estate Financing subdivision increased to €11.3bn (year-end 2020: €10.3bn). The volume of commercial property loans rose significantly to €8.6bn (year-end 2020: €7.8bn). In relation to the gross loan volume in the Real Estate Financing subdivision, around 8% was attributable to the retail use type and around 4% to the hotel use type, as was also the case at the end of 2020. Financing volume in open-ended real estate funds came to €2.7bn, compared with €2.5bn at the end of 2020.

Compared with the end of the previous year, the average rating for the loan portfolio as a whole according to the DSGV master scale deteriorated by one notch to 7 due to the continuing effects of the coronavirus pandemic. This corresponds to a rating of BB on S&P's external rating scale. The average rating for Specialised Financing dropped by one notch from 6 at the end of 2020 to 7 (S&P: from BB+ to BB). The rating for Real Estate Financing also changed by one notch from 5 at the end of the previous year to 6 (S&P: from BBB– to BB+). Taking account of collateralised assets, the average rating for Real Estate Financing (on the DSGV master scale) deteriorated from AA– (S&P: A+) to A– (S&P: A–).

At €5.1bn, the volume of new business in the Financing business division in the reporting year was up €1.2bn on the previous year's figure of €3.9bn. There had been considerable restraint in lending in 2020 in the context of the pandemic. This helped new business of €2.2bn in Specialised Financing (year-end 2020: €1.7bn) and €2.9bn in Real Estate Financing (year-end 2020: €2.2bn) to exceed the previous year's figures. Loans to savings banks accounted for 2% of total new business in the division, matching the prior-year figure.

At €0.5bn, the total volume of placements was below the previous year's figure of €0.7bn. The lion's share of this amount continued to be successfully placed within the *Sparkassen-Finanzgruppe*.

Profit performance in the Financing business division

The Financing business division closed the 2021 financial year with an economic result that was clearly in positive territory at €94.9m (previous year: €–87.0m). The main reason for this were the reduced risk provision needs of €–15.1m (previous year: €–164.9m). Net interest income exceeded the previous year's level, partly due to refinancing gains (tenders). Net commission income of €18.1, which was mainly driven by new business, was also strongly up on the comparative figure for the previous year (previous year: €12.7m). Net financial income of €–1.0m was generated, mainly comprising effects from the disposal of impaired loans and earnings effects from loans and early redemption penalties measured at fair value. Expenses totalled €69.9m and were therefore slightly up on the previous year's level.

Profit performance in the Financing business division *in €m (Fig. 16)*

	2021	2020	Change	
Net interest income	151.8	137.3	14.5	10.6%
Risk provisions in the lending and securities business	– 15.1	– 164.9	149.7	90.8%
Net commission income	18.1	12.7	5.4	42.6%
Net financial income	– 1.0	– 10.2	9.2	90.4%
Other operating profit	0.7	0.3	0.4	115.1%
Total income	**154.5**	**– 24.8**	179.2	(> 300%)
Administrative expenses (including depreciation and amortisation)	69.9	64.6	5.3	8.1%
Total expenses	**69.9**	**64.6**	5.3	8.1%
Economic result before income distribution of Treasury-function	**84.6**	**– 89.4**	174.0	194.6%
Income distribution of Treasury function	10.3	2.4	7.9	(> 300%)
Economic result	**94.9**	**– 87.0**	181.9	209.1%

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. On behalf of the Board of Management, Treasury manages group liquidity and Deka Group refinancing across all maturities and is responsible for asset-liability management. Treasury manages the liquidity management portfolio in the context of compliance with regulatory requirements and safeguarding the Bank's liquidity at all times. This portfolio comprises the liquidity buffer, which contains securities held for short-term liquidity management, and the securities in the proprietary securities portfolio (Strategic Investments portfolio). The Strategic Investments portfolio is used to invest surplus financial resources and balance out differences in maturity structure.

Treasury manages market price risks in the banking book, counterparty risks in its own banking book and equity. By setting transfer prices for the whole Group, Treasury helps to ensure both that the balance sheet is evenly structured and in line with strategy, and that transactions are managed and calculated on a source-specific basis. It also assists the Board of Management with the handling of guarantee risks from funds and fund-related products.

DekaBank supports cash pooling for the savings banks and other companies 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.

For the securities that constitute the strategic investments, liquidity investing is focused on investments in investment-grade bonds, including from public sector issuers, financial services providers and corporates. Given the targets for the liquidity buffer, investment here concentrates on investments in bonds issued by German federal states, German development banks, German run-off institutions, German covered bonds (*Pfandbriefe*), supranational institutions, investment-grade corporate bonds and, where appropriate, credit balances held with central banks. Securities suitable as cover assets for the two covered bond programmes can be taken from the liquidity buffer and Strategic Investments.

Refinancing is carried out in a diversified manner using domestic and international money market and capital market instruments. This includes issues of covered bonds, 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 along with promissory note loans and DekaBank's range of sustainable certificates. DekaBank also uses the repo and lending markets as well as call money and time deposits to raise liquidity, and participates in the various central bank tenders (including TLTROs) as necessary.

See also: Green Bonds

DekaBank offers sustainable products and certificates in line with the Deka Group's sustainability strategy and expanded its product range in 2021. As part of its continuing efforts in the field of sustainability, DekaBank has developed a Green Bond Framework in line with the ICMA Green Bond Principles 2018. This framework enables the issue of green bonds and certain certificates as required as part of ongoing issuing activities. The funds raised are used to fully or partially finance appropriate green loans – new or existing lending in renewable energy and green buildings.

See also: Consolidated financial statements: page 109 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 significantly increased its assets under management in 2021 in a general market environment affected by the sustained policy of low interest rates. This was also associated with an increase in liquid funds within the investment funds, which resulted in higher deposits on the liabilities side at DekaBank. This development was central to the increased deposits with Deutsche Bundesbank and the overall increase of 3.9% in total assets to €88.9bn (previous year: €85.5bn).

The amount due from banks and customers rose during the reporting period by a total of €3.4bn to €44.4bn and equated to around half of total assets. The change resulted mainly from reverse repo transactions newly concluded in the reporting year. Financial assets reported at fair value declined by €5.2bn to €17.7bn, due in particular to the reduction in bonds in synthetic lending transactions as a result of lower volumes. Financial investments fell by €1.3bn year-on-year to €9.3bn, mainly due to securities maturing in the reporting year in the liquidity buffer.

Amounts due to banks and customers rose collectively by €1.7bn to €40.5bn, and thus accounted for around 46% of total assets. This movement resulted mainly from higher current account deposits of investment funds. Securitised liabilities went up by €1.9bn and stood at €9.5bn. The increase was caused by the issue of commercial papers. Financial liabilities reported at fair value declined slightly to €29.2bn (previous year: €30.5bn). This was due in particular to the rise in interest rates in the reporting year, which resulted in a lower market value for derivatives held for hedging purposes.

Changes in the Deka Group balance sheet *in €m (Fig. 17)*

	31 Dec 2021	31 Dec 2020	Change	
Total assets	**88,865**	**85,509**	3,356	3.9%
Selected asset items				
Due from banks and customers	44,378	40,967	3,412	8.3%
Financial assets at fair value	17,738	22,982	–5,243	–22.8%
Financial investments	9,291	10,567	–1,276	–12.1%
Selected liability items				
Due to banks and customers	40,485	38,801	1,684	4.3%
Securitised liabilities	9,543	7,656	1,887	24.6%
Financial liabilities at fair value	29,194	30,550	–1,355	–4.4%

Capital and liquidity adequacy

Full details of capital and liquidity adequacy in the 2021 financial year are provided in the risk report section of the Group management report.

See also:
Risk report:
page 60 ff.

Development of capital market ratings

At year-end 2021, DekaBank's capital market rating 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 Standard & Poor's (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.

Ratings overview *(Fig. 18)*

	Standard & Poor's	Moody's
Bank Ratings		
Issuer Rating	A (stable) Issuer Credit Rating	Aa2 (stable) Issuer Rating
Counterparty Rating	N/A	Aa2 Counterparty 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
Subordinate Debt (Tier 2)	N/A	Baa1 Subordinate Debt
Additional Tier 1 Debt	N/A	Baa3 (hyb) Preferred Stock Non-cumulative
Public Sector Covered Bonds	N/A	Aaa Public Sector Covered Bonds
Mortgage Covered Bonds	N/A	Aaa Mortgage Covered Bonds

S&P published its first ESG credit indicators for DekaBank in January 2022. These are aimed chiefly at increasing transparency around the rating criteria but do not involve any new analytical approaches. The ESG credit indicators highlight the potential impact of ESG factors on credit ratings. The ESG credit indicators for DekaBank are neutral, i.e. ESG factors do not currently affect the credit rating in S&P's view. This is underlined by the E-2 (Environmental), S-2 (Social) and G-2 (Governance) scores.

Human resources report

The total number of employees at the end of 2021 stood at 4,854 and was slightly up on the previous year (year-end 2020: 4,711). 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: 2021 sustainability report

At 4,243, the number of earnings-relevant full-time equivalents as at 31 December 2021 was slightly higher than at the end of 2020 (4,131). 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 77% of the workforce were employed in full-time posts. The average age of active employees (excluding apprentices and inactive staff members) was 45.3 years (previous year: 45.1 years). Further key indicators regarding sustainable HR management can be found in the sustainability report.

The implementation of topics from the management agenda had an impact on structures, processes, roles and tasks throughout the Group. For example, interdisciplinary teams worked on enhancing talent management, on the organisational focus and on a new understanding of leadership. This work is accompanied by regular surveys to take the pulse of the workforce, which cover the Deka Group's attractiveness as an employer and employee satisfaction. The November survey backed up previous findings. It showed that 87% are happy or very happy at the Deka Group and that 80% of employees believe that Deka will remain an attractive employer in future.

Ever more digitalisation in the world of work is placing new demands on managers, employees and the ways in which they work together. This has been accelerated by the consequences of the coronavirus pandemic. Deka continued to expand its virtual learning offerings in 2021 in order to meet these demands. This allowed it to offer professional development opportunities to its employees, even with many of them working from home during the pandemic. There was a particular focus on the "Deka Way", which combines the use of agile and traditional working methods. The Deka Way describes the Deka Group's development into an even more modern and adaptable organisation. At its heart is the empowerment of employees and managers through the integration of agile and traditional working methods, which enables them to respond quickly and flexibly to changing customer and market needs. A Deka Way team in HR helps to implement this with extensive information, training and workshops for employees, managers and teams.

To minimise the infection risk to employees during the coronavirus pandemic, Deka has been making increased use of mobile working since spring 2020. More than 80% of employees on average worked from home in 2021. The support measures offered to employees in 2020 were further enhanced throughout 2021. In addition, all employees were given the opportunity to get vaccinated against coronavirus (first, second and booster doses). To ensure future flexibility in remote working and facilitate the work-life balance, new agreements have been reached with employee representatives. For example, all employees will be able to work at least 40% of their hours remotely in future. The Deka Group has invested significantly in equipment at its premises and in IT in order to support mobile working. Employees are generally provided with a laptop and softphone and can connect to audio visual equipment at any time, especially at the new building in Frankfurt-Niederrad. The Deka Group has introduced Microsoft Teams as a platform for collaborating in hybrid teams.

The Deka Group received awards from the "career and family audit" *Audit berufundfamilie* for its family-friendly HR policy for the sixth time in 2021. To review and enhance its existing health management offering, DekaBank underwent a thorough, multi-stage corporate health audit in the reporting year. The audit was conducted by EUPD Research and the Handelsblatt newspaper and was based on a quality standard that enabled sound analysis across different industries to find out where our own management system stands. The initiators judged DekaBank to have outstanding corporate health management and awarded us their seal of excellence.

The objectives of the Equality Plan were updated in 2021 and will apply until the end of 2024. The updated Equality Plan is being accompanied by increased measures to support career advancement for women at different stages of their career. This will also be supported by the Diversity element of the Management Agenda. A new diversity manager position has been created in HR to work exclusively on promoting diversity in all HR processes and implement the newly formulated diversity strategy for the Deka Group.

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 2022 are subject to uncertainty.

Actual trends in the international money, capital and property markets and in the Deka Group may diverge significantly from our assumptions, which are partly based on expert estimates.

See also:
Risk report: page 60 ff.
Opportunities report: page 59

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 2022 financial year. Conversely, opportunities may result in expectations being exceeded. The opportunities for the Deka Group are set out in the opportunities report.

The global impacts of the coronavirus pandemic on the economy in 2022 cannot yet be reliably predicted. There thus remains a high degree of uncertainty regarding future market developments. At least in the short term, there also still remains a possibility of further setbacks in tackling the pandemic. These may be caused by an insufficient vaccination rate or the spread of mutated variants. In addition, the military escalation of the conflict between Russia and Ukraine is creating geopolitical tensions whose effects cannot yet be fully predicted. If the uncertainty manifests itself in a lasting hit to growth and the capital markets, or the war in Ukraine persists or worsens further, there is a possibility that the earnings, risk and capital situation, and the corresponding key management indicators, will be less favourable than predicted in the forecast report.

Expected macroeconomic trends

Even though the coronavirus pandemic has not yet been overcome, DekaBank expects the economic recovery process to continue in most regions of the world in 2022. DekaBank anticipates that economic pressures such as the coronavirus pandemic, energy price spikes and supply chain problems will gradually reduce later in the year. However, high energy price and trade disruption due to the economic sanctions in response to the war in Ukraine are likely to slow economic recovery. Despite this, global gross domestic product is predicted to rise by 3.5% in 2022. Favourable financing conditions and extensive government spending – despite high sovereign debt levels – will contribute to this economic growth. Increasingly, government investment will be aimed less at tackling the coronavirus pandemic than at the structural transformation towards a digital and sustainable economy.

Many of the factors that drove higher prices in 2021, such as energy price inflation, are likely to abate as 2022 progresses. DekaBank does not expect stability to be threatened by second-round effects, as there are no signs of any changes in the collective bargaining process that would bring about a wage-price spiral. DekaBank therefore expects the inflation rate in the second half of 2022 to be lower than in the previous year but higher than before the coronavirus pandemic. For 2022 as a whole, DekaBank expects an average inflation rate of 5.4% in the eurozone (Germany: 5.5%). DekaBank also expects core inflation to rise but not to the extent that would materially force the hand of central banks.

The aim of the central banks this year is to steadily unwind the ultra-expansionary stance. 2022 will decide whether second-round inflation effects set in. This could either mean central banks sticking to their gradual tightening or responding with faster interest rate hikes. The ECB has defined a clear trigger for tighter monetary policy: a sustained achievement of the 2% mark within the next two years along with a sufficiently established medium-term inflation trend. DekaBank expects the eurozone to near the 2% mark by the end of this year. The ECB is thus likely to be willing to implement an initial rate hike at the end of 2022. In the case of the US Fed, a more rapid normalisation of monetary policy is expected, involving a series of key interest rate hikes this year.

Expected environment for asset management

The main uncertainties for the bond markets remain the inflation outlook for the coming years and the impact of the war in Ukraine, along with the reaction by major central banks. In the US, the Fed has already begun reducing its bond purchases and is expected to have moved key rates much of the way to a neutral stance by the end of 2022. Yields on US Treasuries, especially for short maturities, are likely to rise noticeably in anticipation of key rate changes. The ECB will replicate the turnaround in interest rates at a later stage. While the individual Governing Council members have different ideas about the pace of the shift in monetary policy, they agree that the net bond purchases under the Asset Purchase Programme (APP) should come to an end before the first rate hike. We therefore do not expect an initial increase in the deposit rate until December 2022. This is likely to be reflected in rising bond yields, especially for longer maturities, as the ECB’s first move in unwinding its stimulus will be to end its asset purchases. The environment therefore remains favourable for high-risk asset classes. As real yields on risk-free, interest-bearing investments are likely to remain in negative territory for a very long time to come, investors are focussing on returns on corporate bonds and equities. Even though the pace of growth has slowed somewhat, corporate profits will benefit in the coming year from pent-up demand and the expected normalisation of supply chains.

Real estate asset management remains an appealing asset class. However, investment opportunities for real estate funds remain limited, meaning that restraint is still called for when attracting new inflows. The office real estate markets have weathered the crisis relatively well and are likely to benefit from rising demand and rents in 2022. This will likely increase the purchase prices of office properties. DekaBank also expects a continued rise in prices for logistics real estate and neighbourhood retail centres, which are in very high demand. Given the expected continuing market recovery, DekaBank anticipates stable or slightly increasing prices for shopping centres and hotels. In the ongoing low interest rate environment, yields will nevertheless remain at low levels for the foreseeable future, presenting fund management with particular challenges.

Expected environment for the banking business

Despite high infection rates, the ECB is likely to end its net asset purchases under the pandemic emergency purchase programme (PEPP) at the end of March 2022. However, this does not necessarily mean a material tightening in monetary policy. The ECB may well stick to its low interest rates and continue securities purchases under the APP. Likewise, the end of the TLTRO III transactions in 2022 inherently marks a move away from the ECB's highly expansionary monetary policy while doing little to change the favourable overall financing conditions for companies. Corporate and government issuing activities will not match the 2021 level, as governments will run lower deficits and companies have already raised large amounts of liquidity in recent years. DekaBank therefore expects an increase in money market rates such as EONIA and EURIBOR in 2022 with the prospect of a rate hike at the end of the year. Given the continuing very low interest rates, securities with premiums are likely to remain in high demand, even though the positive economic development is already largely priced into spreads.

The capital markets business will continue to be influenced by high market liquidity and low interest rates throughout the remainder of the year. Governments and corporates also face record indebtedness. In this market environment, DekaBank expects only moderate changes for the Capital Markets business division.

In the financing business, further increased market liquidity compared with 2021, along with investment pressure among institutional investors, will put rising pressure on margins, which may be reflected in the terms and conditions offered. The performance of the Financing business division will also depend on the evolution of the coronavirus pandemic.

Overall assessment of the expected economic trends

Overall, DekaBank expects a positive economic environment for asset management in the 2022 financial year due to a moderate economic recovery and negative real interest rates. Amid significant fluctuation throughout the year, this could result down the line in high prices for shares and real estate, with a positive effect on the Deka Group's total customer assets. Moreover, the high levels of financial assets held by private households in general, and savings bank customers in particular, offer potential for fund sales. In the Capital Markets business division, certificates business with equities could also benefit from the low interest rates. In the Financing business division, margins on the financing portfolio will remain under pressure.

Expected business development and profit performance

The Management Agenda sets the strategic and operational direction to make the Deka Group an even more customer-focused, innovative and sustainable *Wertpapierhaus*. This agenda is focusing, among other things, on innovative processes and platforms for sales, products and distribution channels as well as broader themes such as digitalisation and sustainability.

The global coronavirus pandemic and its impacts on economies, growth and capital markets mean it is not yet possible to reliably predict the effects on the Deka Group in 2022. There is thus still uncertainty about future market trends. In addition, the military escalation of the conflict between Russia and Ukraine is also creating geopolitical tensions whose effects cannot yet be fully predicted.

After the exceptionally strong result in 2021, the forecast for 2022 anticipates an economic result of approximately €550m. This is once again slightly above the average of the last five years. Net commission income will remain the primary component of income, accounting for over 80%, partly due to the positive outlook for the development of total customer assets and net sales. The forecast economic result will ensure that DekaBank remains able to distribute profits and to make the reinvestments needed to strengthen its capital.

Sales plans continue to concentrate on an investment fund business that maintains lasting value. This includes regular securities saving and an expanded range of sustainability-related products and services. The Deka Group anticipates a moderate year-on-year rise in total customer assets in 2022. At approximately €30bn, total net sales are predicted to remain roughly on a level with 2020.

The Asset Management Securities business division will continue its proven strategic direction in 2022 and focus on continuing to develop its range of high-quality products and services in close coordination with the sales departments. Expanding the range of sustainability-related products and services in accordance with the regulatory requirements and Group strategy is a particular priority. Net sales in the retail segment should reach a high level again. The focus will be on an investment fund business that maintains lasting value and products for regular saving. Deka Vermögensverwaltung Premium established itself as an anchor product in Private Banking in 2021. The aim is to continue this growth in the coming years. In institutional customer business, Deka intends to maintain a high level of sales and benefit from the addition of IQAM Invest GmbH asset management solutions to the product portfolio for German customers and from the expansion of digital sales channels.

Risks may arise from the military escalation of the conflict between Russia and Ukraine and the further evolution of the coronavirus pandemic with its economic impact on fund business. In the medium term, there are potential negative impacts from additional political risks, significantly more volatile economic development and an increase in inflation rates. This may hit investors' risk appetite and result in outflows of funds and reluctance to invest. In addition, a pronounced stock market correction could negatively affect total customer assets.

The Asset Management Real Estate business division will continue in 2022 to pursue its aim of being the first choice for savings banks and their customers when investing in commercial property. Portfolio and (real estate) risk management will be constantly developed, taking advantage of potential for digitalisation. In open-ended real estate funds for retail customers, the aim is to build further on what is already an excellent market position without compromising on quality or stability. Using a combination of both existing and new products such as infrastructure funds of funds, the division aims to improve its market position in institutional business. Consistently taking sustainability criteria into account in property purchases and portfolio management will ensure that Deka remains attractive to sustainability-oriented investors. The product range in the area of sustainability will also be gradually expanded. The business division aims to further improve its net sales performance among retail and institutional customers and increase total customer assets. It will drive further digitalisation of business processes and collaboration with sourcing partners to further improve process efficiency and resource use.

There are risks to the performance of the Asset Management Real Estate business division from the military escalation of the conflict between Russia and Ukraine and from fierce competition in the transaction markets, which have been additionally impacted by the coronavirus restrictions. This makes transaction planning difficult. The measures revived to varying degrees in order to tackle the pandemic are also creating more volatile business conditions in parts of the economy and affecting tenants' income. The business division still aims to take a constructive approach to each individual solution and find viable long-term solutions that enable the funds to maintain profitable rental relationships. For office properties in popular locations, we do not so far expect reduced demand for space, for instance due to increased use of remote working. More generous shared space will compensate for potential lower demand for individual offices, and we expect the strong economic growth to lift demand. There are risks from continued strong regulatory pressure and the further consideration of sustainability criteria, though the impacts cannot be fully predicted here.

For 2022, the Asset Management Services business division again aims to increase assets under custody in line with the targeted asset management growth. The Digital Multichannel Management subdivision will continue with its strategic direction, pushing ahead with the expansion of the multichannel offering, which involves the integration of physical branches and other sales channels for the securities products offered by the savings banks. Combined with contemporary, innovative services such as the bevestor GmbH robo-advisory product (digital asset management), this will ensure and expand access to the customer interface in the *Sparkassen-Finanzgruppe*.

The Depositary subdivision will continue to work on expanding its depositary function through growth in the Deka Group investment companies' mutual funds and new third-party mandates, focusing on developing a comprehensive asset servicing solution (master KVG and depositary). The aim is to further enhance its market position in Germany. Custody of crypto securities has been implemented in the Depositary subdivision as part of the digitalisation initiative.

Risks to Digital Multichannel Management arise principally from a delayed implementation of the multichannel strategy due to an insufficiently developed multichannel offering. Risks may arise for custody account business from disruption to product development with a knock-on effect on custody account sales. Risks to business performance in the Depositary subdivision include rising pressure on margins as well as market-induced outflows of assets under custody. The consequences of the military conflict between Russia and Ukraine could also trigger a pronounced correction on stock markets, negatively impacting assets under custody and thus the income achievable in this subdivision.

In 2022, the Capital Markets business division will maintain its proven strategic direction as a customer-centric product and solution provider focused on DekaBank's structured products and the derivatives, issuance and trading business. In so doing, the division will encounter regulatory requirements and current market developments in its own business as well as that of the savings banks. It intends to maintain its position as an infrastructure provider with international capital market access through systematic digitalisation and further development of the existing platform solutions. In the certificates business, retail products will be the focus again in 2022.

Risks to the performance of the Capital Markets business division arise particularly from negative capital market trends and recessionary fears due to exogenous shocks such as the military conflict between Russia and Ukraine, the coronavirus pandemic or trade disputes that result in reduced customer activity. Additional risks arise from regulatory intervention in the design of products and definition of terms and conditions and further increased market pressure on fees. Regulatory or adverse monetary policy escalations leading to additional capital backing or reporting obligations may also affect business performance.

For its business activities in 2022, the Financing business division will continue to concentrate on its defined and well-established segments: specialised financing and real estate financing in liquid markets. Being a sought-after financing partner for the savings banks will remain its main aim. The division will seek to generate new business where this contributes to its objectives and to appropriate management of the balance sheet structure. The business division is pushing ahead with its stability-focused and risk-conscious strategy in a market environment that continues to be shaped by the coronavirus pandemic.

Risks to the Financing business division arise especially from the potential further repercussions of the coronavirus pandemic on the quality of loan exposures, especially in the particularly affected sectors of transport and real estate financing. There are also risks from the military escalation of the conflict between Russia and Ukraine. Further risks may arise from specific creditworthiness risks on the part of borrowers and from further political crises, which could adversely affect the economic outlook for lending segments in which we operate. This could also lead to a need for higher loan loss provisions, or to increased capital adequacy requirements as a result of a rating downgrades. Business performance may be negatively affected by increasing competitive pressure for project and infrastructure financing due to institutional investors acting as direct lenders.

Expected financial and risk position

The Deka Group anticipates a continued sound financial position for 2022. Total assets will be subject to the usual business-related fluctuations over the course of the year. The planning assumption is for total assets of slightly less than €100bn at year-end 2022.

Balance sheet management is geared towards ensuring compliance with an appropriate leverage ratio well above the minimum ratio of 3%, as well as compliance with the requirements for RWA- and LRE-based MREL and with the subordinated MREL requirements.

The Deka Group expects to maintain an adequate capital and liquidity base in both the normative and economic perspective for 2022. To retain sufficient flexibility in the event of unfavourable market developments, the Deka Group aims for a Common Equity Tier 1 capital ratio at an appropriate level above the strategic target of 13%.

In terms of risk-bearing capacity analysis, risk appetite utilisation is expected to remain at a non-critical level. With regard to risk development, however, elevated uncertainty regarding the further development of the market environment cannot be ruled out.

The Group's liquidity position is forecast to remain at a comfortable level. Likewise, all relevant ratios such as LCR and NSFR are expected to be comfortably adhered to with sufficient flexibility.

Forecast development of key performance indicators in the of Deka Group *(Fig. 19)*

		31 Dec 2021	**Forecast 2022 in the Annual Report 2021**
Economic result	€m	847.8	Around 550
Total customer assets	€bn	395.1	Moderately above the previous year
Net sales	€bn	35.7	Around 30
Common Equity Tier 1 capital ratio	%	15.2	Over 13
Utilisation of risk appetite	%	43.3	At uncritical level

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, trends may turn out better than the baseline scenario assumes. Low interest rates, major investment in the structural transformation towards greater digitalisation and sustainability, increased confidence and significant productivity gains could lead to surprisingly high growth without any 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 a more substantial than expected 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 2022, 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. 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 units 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 assessing the adequacy of internal capital and liquidity (Internal Capital Adequacy Assessment Process (ICAAP)/Internal Liquidity Adequacy Assessment Process (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. They are 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 of Management members in relation to this. The framework also sets out the guiding principles that detailed rules on processes and tools have to adhere to. All Deka Group employees receive information and undergo awareness-raising measures on risk culture-related topics through mandatory annual training. The Deka Group conducts a regular survey of the risk culture. The findings from this and other more in-depth survey tools are addressed and feed into the ongoing evolution of the risk culture.

See also: Opportunities report: page 59

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 at least once a year. 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.

The risk data aggregation strategy 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.

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.

Developments in risk management
Whereas the first quarter of 2021 was still dominated by the coronavirus pandemic and its impact on both the real economy and the financial markets, a clear economic recovery emerged starting from the second quarter. As the market situation continued to ease, the changes made in 2020 to the methods used were reviewed to ensure that the models employed by the Deka Group for economic risk management continue to reflect the corporate and market situation in an appropriate and timely manner. For example, at the end of the third quarter of 2021, the risk-bearing capacity calculation for the Deka Group returned to the normal phase. The management concept was then adjusted so that AT1 capital was not included in internal capital for either the current situation or macroeconomic stress testing. For the calculation of market price risk, the extension of the observation period for determining historical volatilities from one to three years was retained in order to include sufficient stress periods in the risk calculation. Furthermore, the averaging period for calculating the bond segment curves in order to determine the economic counterparty risk was permanently increased from 20 days to 60 days, as this approach reduces fluctuations resulting from short-term changes in the curves so that they do not overshadow the view of actual portfolio developments.

The coronavirus pandemic no longer had any material effects on the refinancing markets in 2021. The experience gained throughout the period of stressed refinancing markets in 2020 in terms of the enforceability of collateral in the custody of tri-party agents was put into practice in 2021 with a more conservative modelling of the potential liquidity from this collateral in the funding matrices. The sixth amendment to MaRisk created the option of short-term prolongation for deposits by financial sector companies used to maintain these companies' business operations (operational deposits), thereby harmonising MaRisk with the LCR/NSFR. The Deka Group has been using this relief measure since November 2021 to enhance deposit base modelling for operational deposits of its own and third-party funds in the first week.

The extensively revised model for quantifying business risk went live for the Asset Management Securities business division at the end of August 2021 and for the Asset Management Real Estate and Asset Management Services business divisions at the end of November 2021. The revised model has a refined and, as a result, more accurate modelling system at its core, making it possible to replace some of the conservative assumptions previously used. The effects differed for each business division, with a significant overall reduction in business risk.

The Deka Group continued to press ahead with the project initiated in the previous year to implement the vision adopted by the Board of Management for the establishment of an integrated management system for non-financial risks (NFR). This involved working on the fundamentals across the different risk types and on approaches to risk appetite. At the end of June, for example, we placed an operational limit on the sub-types of operational risk and made changes to the qualitative risk tolerance rules and quantitative risk appetite statements in the form of risk indicators combined with corresponding thresholds. We also began gradually rolling out the methodological guidelines for ensuring consistent risk assessment to all risk sub-types in the design, testing and initial risk identification stages. For the purposes of developing a holistic reputational risk management system, we also put together guidance for the management of reputational risks and implemented it across the Group at the end of the year. This was based on the methods, processes and responsibilities which we had refined during a trial stage.

Given how important sustainability risks are from a macroeconomic perspective and in light of the corresponding marked increase in regulatory expectations, the Deka Group has recently significantly stepped up its activities in this area. Sustainability risks are not seen as a type of risk in their own right, but rather as a driver of existing types of risk. The Deka Group had already performed a comprehensive analysis of the handling of climate and environmental risks in the previous year. Taking regulatory expectations into account, this involved drawing up a comprehensive action plan for business strategy, governance, risk management and disclosure based on an analysis of the status quo. The Deka Group conducted an initial analysis of the climate and environmental risks relevant to it as part of the risk inventory in 2021. This showed that sustainability risks as a whole, climate and environmental risks in particular, are not currently a significant driver materially impacting the existing risk types for the current portfolio in the short- and medium-term perspective. The information available at this time (primarily sectoral breakdown, residual terms to maturity, degree of liquidity and mitigating factors) was taken as a basis and subjected to an expert-led assessment of significance by business division and risk type. The experts used an assessment of the asset- and portfolio-specific impact and of the economic significance of the portfolio and segments. In addition, initial strategic and operational foundations for the handling of climate and environmental risks were created and a structured analysis of the business environment was carried out. The aim was to provide transparency around the changes being driven here by climate and environmental risks and their impact on the business model and product segments of the Deka Group over various time horizons. With regard to the inclusion of sustainability aspects in DekaBank's lending processes, extensive measures were taken in line with regulatory requirements (primarily the EBA Guidelines on loan origination and monitoring) in order to adapt rules and procedures appropriately, particularly in the areas of governance, loan origination and collateral management. The development of segment-specific ESG scorecards, which have been in use for new business and renewals since 1 July 2021, are worthy of particular mention in this regard. More extensive activities relating to the handling of sustainability risks are planned for the coming years. In particular, these include refining the analysis of the business environment and risk drivers with special focus on climate and environmental risks, developing Deka-specific sustainability indicators, especially in the form of key performance indicators (KPIs) and key risk indicators (KRIs), and enhancing internal and external reporting.

Building on the results of the risk inventory, the stress testing programme is also being gradually expanded to enable climate and environmental risks to be handled appropriately. A special type of scenario – climate stress scenarios – is being introduced for this purpose. Calculated annually, these scenarios will particularly reveal sector-specific impacts based on chosen indicators. The climate stress scenarios were calculated for the first time as at the reporting date 31 December 2021. This extension to the internal stress testing programme also forms part of the preparation for the ECB climate stress test in the first half of 2022.

In the wake of the ECB guide to internal models published back in November 2018, more supervisory reviews of internal models under Pillar I of the Basel Accord (Targeted Review of Internal Models, TRIM) were conducted. The reviews aimed to reduce the variability of model results and thereby increase confidence in internal models. They affected the internal rating models for credit risk (IRBA), internal market risk models (IMA) and internal models for estimating exposure to counterparty risk (IMM). With regard to the IRB approach, suitable measures to fulfil the requirements were initiated based on the findings of the 2019 on-site audit of the fund rating module as part of the TRIM and are currently being worked through. TRIM audits concerning counterparty risk did not affect DekaBank.

In addition, as part of the implementation of the EBA Guidelines on PD estimation, LGD estimation and treatment of defaulted assets, further IRB reviews are currently being carried out for four modules in connection with the corresponding model change notifications. In the coming year, more of these reviews will be conducted until all IRB rating modules have been reviewed by the supervisory authority.

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 to the Fundamental Review of the Trading Book (FRTB). The measures necessary to meet the requirements of the new FRTB standardised approach have already been implemented and the first prescribed report has been submitted to the supervisory authority. The planned introduction of the Standardised Measurement Approach (SMA) for calculating operational risk capital, which could also affect Pillar II of the Basel framework under certain circumstances, is also being monitored. The expected effects for Basel IV have been taken into account in normative capital planning.

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 enables the Deka Group to maintain 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 risks and 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 the main drivers of liquidity risk (in the sense of insolvency risk). Other risk types or risk drivers can also be included in the ICAAP or ILAAP.

The risk types relevant for the Deka Group also include investment risk, step-in risk and reputational risk. Model uncertainties and sustainability risks are regarded as relevant risks but not as standalone risk types.

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 narrower and broader senses. Country risk in the narrower 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.

Pension risk is regarded as a sub-type of counterparty risk. It comprises potential losses from pension benefits payable that are not already covered by the provisions recognised for pensions. This also includes the counterparty risk for the plan assets. Management of this risk is not assigned to a specific business division. It is taken into account as a deduction from internal capital.

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.

CVA risk and pension risk are regarded as sub-types of market price risk:

Credit valuation adjustments (CVAs) are valuation adjustments on derivative contracts which represent the expected loss from counterparty risk and are reflected accordingly in the result. CVA risk is the risk of a corresponding financial loss due to potential future changes in the risk factors determining the valuation adjustments. In the normative perspective, there is a regulatory requirement to report separate RWAs for CVAs. In the economic perspective, CVA risk is quantified as an integral part of market price risk.

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. This also includes market price risks in the sense of an additional shortfall in cover on the risk horizon. Management of this risk is not assigned to a specific business division. It is taken into account as a deduction from internal capital.

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. In accordance with its overarching definition in the Deka Group's non-financial risk taxonomy, it can be broken down into the following sub-types: compliance risk, service provider risk in the narrower sense, information and communication technology and security risk, personnel risk, project risk in the narrower sense, process risk and legal risk.

Business risk

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

Investment 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.

Step-in risk

Step-in risk describes the risk of providing support, for reputational reasons or due to other considerations in connection with a stress scenario, to affiliated companies that are not fully consolidated for regulatory or balance sheet purposes and to business partners, despite the absence of a contractual obligation to do so.

The identification and evaluation process as part of the 2021 risk inventory showed no current need for the Deka Group to maintain capital or liquidity to cover step-in risk given the mitigation measures taken or the lack of plausibility.

Reputational risk

Reputational risk describes the danger that loss events or developments resulting from Deka's business activities or in connection with other types of risk may have a negative impact on the external image of the Deka Group. This may lead to a deterioration in capital or liquidity levels in addition to that incurred through other risk types. Reputational risks therefore form part of the Deka Group's risk universe but are regarded, given their effects, as comprising part of or potentially exacerbating business and liquidity risks.

As part of the holistic approach to reputational risks, proactive reputational risk management processes, which are designed to facilitate the management of reputational risk for relevant business processes, are complemented by portfolio-oriented reputational risk management. This aims to ensure transparency along with adequate capital and liquidity backing in the relevant risk types. Qualitative assessment of reputational risks as a basis for managing them takes place in both proactive and portfolio-oriented reputational risk management. It is performed by the risk-owning units in the first line of defence in accordance with standard, Group-wide criteria based on the risk appetite set, the potential losses and the probability of occurrence. If proactive reputational risk management identifies a critical level of risk, the first line of defence must obtain a second opinion on the activity from the second line of defence. In case of doubt, however, the first line of defence is also free to obtain a second opinion for less critical risks. As part of portfolio-oriented reputational risk management, the Risk Control corporate centre coordinates with the support of the Corporate Office & Communications corporate centre on an annual inventory of reputational risks for all units of the business divisions and corporate centres.

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 uncertainty

Risks arising from the deliberate selection, specification, calibration or use of models, or from the choice of parameters, are described as model uncertainty. They can lead to unforeseen financial losses and shortcomings in the ICAAP or ILAAP, and thus to flawed decisions or other damage. They do not represent a standalone risk type for the Deka Group but are examined in conjunction with the individual risk and valuation models.

Model risks in the narrower sense are distinguished from model uncertainty. They are defined as part of process risk, a sub-type of operational risk, and arise from errors in the implementation, use or application of valuation or risk models, or from the incorrect choice of parameters for these models.

Model uncertainty combined with model risks in the narrower sense (i.e. the totality of potential negative effects resulting from the use of models) is also referred to by the term model risk in the broader sense of the term. Model risk thus refers to potential losses arising from errors in the design, implementation or use of models.

In the economic perspective, annual capital and risk planning uses a buffer when setting risk appetite in order to take account of uncertainty in the modelling of risks affecting profit and loss. In the context of liquidity risk, model uncertainty is mitigated using the liquidity buffer. In the normative perspective, model uncertainty from valuation models is deducted from Common Equity Tier 1 capital as part of the additional valuation adjustments under Article 34 CRR.

Sustainability risk

Sustainability risk describes the danger that business activities with climate, environmental, social or corporate governance implications lead to sustainability-related developments or events that result either directly, or indirectly via reputational damage, in a deterioration in capital or liquidity levels. Sustainability risks in connection with the climate and environment include both physical and transitory risks and are also referred to as climate and environmental risks. Physical risks comprise the financial impacts of individual extreme weather events and their consequences as well as long-term changes in climatic and environmental conditions. Transitory risks comprise financial losses that the Deka Group may directly or indirectly incur as a result of the transition to a lower-carbon, more sustainable economy.

Sustainability risks act as drivers of relevant risk types that are significant enough to warrant special attention. Sustainability risks are always viewed in the context of the relevant risk types rather than treated as a standalone risk type.

Procedural measures specific to individual business activities are used to manage sustainability risks. Where sustainability risk arises in connection with counterparty risk, the Deka Group manages this risk by means of a blacklist created as part of the credit risk strategy and by involving the Sustainability Management unit in lending decision processes as appropriate. 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 combats potential sustainability risks arising in connection with business risk through measures such as regular dialogue with sales partners to identify and meet customer requirements, the use of exclusion criteria (e.g. controversial weapons or coal) and special investment universes for sustainably managed funds.

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 realise its mission as a *Wertpapierhaus*, the Deka Group draws on the advantages of combining asset management and banking business. It focuses on services that are in demand from savings banks and their end customers, that add value to the Deka Group, that involve limited risks and that match Deka's expertise. 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 spread risks. In addition, (general) interest rate risks from guarantee products make a significant contribution to the Deka Group's market price risk. Large positions in collateralised derivatives give rise to concentrations of liquidity risk, as high sensitivity to specific market movements can trigger liquidity outflows due to the provision of collateral. 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 business 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 or by the fast pace of sustainability-driven developments in customer behaviour and regulatory affairs. 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. They may be exacerbated by reputational and sustainability risks in view of customer expectations and tighter regulatory requirements. 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. The division also faces investment risks.

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 may be exacerbated by sustainability risks, for instance through impairments on investments in industries affected by climate and environmental risks, but also by changes in customer preferences. Counterparty risks arise primarily from currency, securities lending, securities repurchase and derivatives transactions and from trading in financial instruments in all asset classes with financial institutions, savings banks, funds and companies. 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, share price risks, general interest rate risks and to a lesser extent also 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 business partners, primarily in relation to the world's largest banks and to 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 savings bank financing, financing of the public sector, infrastructure and transport financing, ECA-backed financing and real estate financing) create corresponding focal points, primarily in counterparty risk, which may be exacerbated by sustainability risk, resulting for example in a deterioration of borrowers' creditworthiness due to increased climate and environmental risks or in a loss in the value of collateral. In accordance with the business model, this also leads to regional concentrations of counterparty risk in Germany and western Europe, as well sector-based risk concentrations in relation to financing of real estate, infrastructure, savings banks and the public sector. The division also faces investment risks.

Treasury

The Treasury corporate centre's various functions, especially management of the liquidity management portfolio (consisting of strategic investments, the liquidity buffer and other liquid assets) give rise to counterparty and market price risks. The securities that constitute the strategic investments are currently focused on investments in investment-grade bonds, including from public sector issuers, financial services providers and corporates. In light of the targets for the liquidity buffer, investment here concentrates on investments in bonds issued by German federal states, German development banks, German run-off institutions, German covered bonds (*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 spread risks, which are closely monitored and reduced if required through disposals or credit derivatives. Currency risks, general interest rate risks and share price risks also arise to a limited extent. Operational risks also exist to a small degree.

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 Tier 1 capital ratio, the total capital ratio, the leverage ratio (LR), the Minimum Requirement for Own Funds and Eligible Liabilities (MREL), the subordinated MREL requirements, the utilisation of the large exposure limit, the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). 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 at business division 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 role of the Risk Management Committee (*Managementkomitee Risiko* – MKR) is to address and analyse circumstances, developments and methodological issues that could have a material impact on the Deka Group's current or future total risk profile and/or profitability.

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 the following 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. This usually takes place four times a year. In part B, the risk round table on financial risks, methods and models 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. Part B, which usually takes place once a month, also discusses the handling of model risks. The permanent voting members of the MKR include the member of the Board of Management responsible for risk control and the head of the Risk Control department and, depending on responsibilities and the part of the meeting concerned, the heads of Credit Risk Management, Finance, and Risk Control Capital Market Funds, the COOs for the Asset Management Securities and Asset Management Real Estate business 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) primarily drafts resolutions on matters relating to the management of interest rates, currency, liquidity and refinancing, to fund-based guarantee products (combined in part G of the MKAP) 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. Meetings of the MKAP are usually held once a month. Those of part G of the MKAP take place every two months. The MKAP is supported by various sub-committees, including a Pricing Committee. The permanent voting members of the MKAP comprise the departmental heads 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 job of the Models Committee is to regularly analyse and address issues relating to DekaBank's valuation and risk models (in both the economic and normative perspective). This involves regular examination of their adequacy using model monitoring and assessment of current trends and validation issues. In this function, the Models Committee takes decisions within the scope of the authority granted to it or prepares decisions to be taken by the full Board of Management with the involvement of the MKR. The committee thus makes an important contribution to ensuring overarching consistency in the models employed. Furthermore, the Models Committee represents the central body for assessing model risks, with the aim of ensuring appropriate treatment of model risk.

See also: Counterparty risk: page 88 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 risk provisions as well as monitoring and managing restructuring and liquidation cases, and the Rating Committee, which analyses and monitors the internal rating procedures and processes (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 or counterparty risks, of matters that could significantly influence the risk profile and/or profitability of the Capital Markets business division.

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. On behalf of the Board of Management, the Treasury corporate centre also manages group liquidity, Deka Group refinancing across all maturities, the liquidity management portfolio, market price risks in the banking book, counterparty risks in its own banking book and the equity of the Deka Group within these limits. The Equity investments department in the Corporate Development corporate centre has overall responsibility for the management of equity investments involving investment risk. This also includes monitoring in respect of compliance and other risks and liaising in this context with the relevant functions in the second line of defence.

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 Management corporate centre is primarily responsible for providing a second opinion independent of front office operations, creating and/or approving ratings, verifying and approving specific collateral and ongoing portfolio management for certain financing. The office also acts as the central statistical monitoring centre for early-stage risk identification. In addition – acting independently of front office operations – Credit Risk Management 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, and of the officer for the safeguarding of client financial instruments and funds under section 81 (5) WpHG.

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, Business Continuity Management 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 bank 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. 20)*

		Counterparty risk	Market price risk	Operational risk	Business risk	Investment risk	Step-in 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 (Managementkomitee 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 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 non-performing loans and 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 risk 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 (Managementkomitee Aktiv-Passiv – MKAP)	- Supports the Board of Management in matters relating to interest rate and FX management, liquidity and funding management, fund-based guarantee products (combined in part G of the MKAP) and the capital and balance sheet structure - Supports the Board of Management with operational ICAAP and ILAAP management - Evaluates the measures planned for liquidity crises - Prepares draft resolutions for the Board of Management - Has various sub-committees (including the Pricing Committee)	●	●	●	●	●	●	●
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	Step-in 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 guidelines proposed by the MKAP and established 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 Management (Corporate Centre)	- Market-independent second recommendation - Sets limits for trading and capital market counterparties - Prepares and approves ratings - Ongoing portfolio management for certain financing - Administrative office for early risk identification - Management of troubled and non-performing loans (work out) - Loan administration - Responsible for lending-related processes	●						
Equity investments (Corporate Centre for Strategy and Equity Investments)	- Manages equity investment portfolio					●	●	
Compliance (Corporate Centre)	- Functions as Compliance Officer as set out in the German Banking Act (KWG), German Securities Trading Act (WpHG) and German Investment Code (KAGB), as Money Laundering Officer pursuant to the German Money Laundering Act (GwG) and as Central Office in line with the requirements of the KWG - Party responsible for processes under section 24c KWG - Independent body under sections 70, 85 KAGB - Officer for the safeguarding of client assets (Single Officer) under section 81 (5) WpHG			●				
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	- Identifies, measures and manages 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 control functions as part of the second line of defence (e.g. the Risk Control, Credit Risk Management 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, DekaBank 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 at DekaBank – 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, there are also red thresholds as of the end of 2021 for the Tier 1 capital ratio, the total capital ratio, the leverage ratio, the MREL ratio, the subordinated MREL requirements 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 Tier 1 capital ratio, the total capital ratio, the leverage ratio, the MREL ratio, the subordinated MREL requirements 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 take account of the particular features of non-financial risks, which are quantified as sub-types of operational risk, qualitative risk tolerance rules are also defined for these risks in addition to the quantitative risk appetite relating to the overall risk position. This also applies to reputational risk.

See also:
Individual risk types:
page 88 ff.

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 budget years, with account being taken of 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 adopted by a resolution of the Board of Management.

The regulatory ratios (Common Equity Tier 1 capital ratio, Tier 1 capital ratio, total capital ratio, leverage ratio, MREL ratio and subordinated MREL requirements) 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 sets its own annual thresholds that deviate from the base scenario.

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

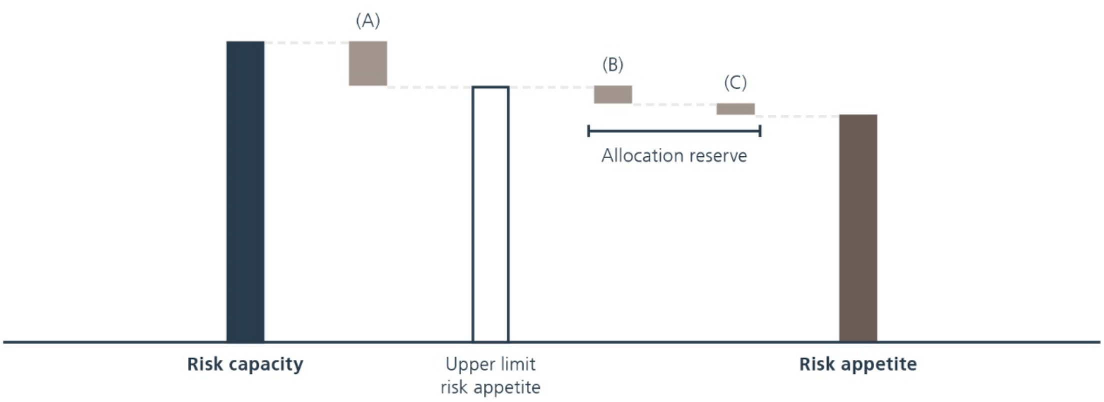
As a basic principle, internal capital is used to determine the maximum level of risk that can be incurred (impacting the income statement), taking into account risk concentrations. Risk capacity is analysed monthly. In the course of the risk-bearing capacity analysis, the risk capacity (in the form 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 as risk capacity – in the sense of a formal total risk limit – to safeguard risk-bearing capacity as a whole.

Based on this risk capacity, 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. 21)*



(A) Deduction of maximum of buffer for model uncertainty and minimum management buffer
(B) Hidden losses and reserves and own credit rating effects (if positive)
(C) Allocation reserve after deduction of (B)

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 represent appropriate historical and hypothetical events and events relating specifically to the Deka Group's business model and associated risk concentrations. There are also scenarios for reputational and sustainability risks. When needed, the scenarios are supplemented with relevant ad-hoc analyses. Reverse stress tests relate to specific manifestations of scenarios that would lead, in the economic perspective, to the risk capacity being reached, and in the normative perspective to a Common Equity Tier 1 capital ratio at the level of the red threshold.

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, MREL ratio and subordinated MREL requirements 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 generally a year in the future.

The results of the macroeconomic stress tests are usually determined quarterly, assessed by the Stress Testing Committee and reported to the Board of Management, the Risk and Credit Committee, and the Administrative Board. Selected scenarios, such as climate stress scenarios, form an annual part of this assessment and reporting process and focus in greater depth on specific aspects.

The regular annual review of the macroeconomic scenarios was carried out in the fourth quarter of 2021. In the light of current economic and regulatory developments, the scenarios were updated in this process as necessary and the description and choice of parameters particularly for the hypothetical and institution-specific stress scenarios adjusted accordingly. In the Deka Group's view, the scenarios examined continue to provide an appropriate reflection of all risks relevant to it.

The scope of the macroeconomic scenarios is also being expanded to include climate stress scenarios for the first time in order to reflect transitory and physical risks.

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.

With the ECB's approval of the liquidity waiver for DekaBank and S Broker, the liquidity subgroup consisting of these companies has been monitored in addition to the Deka Group since April 2020.

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 and the net stable funding ratio (NSFR). 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. The NSFR expresses the amount of available stable funding on the liabilities side of the balance sheet in relation to the amount of less liquid assets for which stable funding is required.

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 thresholds for the LCR and NSFR 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 thresholds for the LCR and NSFR used for internal management purposes. These are comprised of the red thresholds 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.

Market liquidity risk is reflected in the economic and normative perspective using discounts on the market value of liquid assets. A suitable stress scenario is used to monitor the market liquidity risk affecting the income statement as part of market price risk. As market liquidity risk is not considered significant, it is not currently necessary to hold capital for the purposes of risk-bearing capacity.

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. The Treasury corporate centre also ensures an ample liquidity buffer of central bank-eligible collateral and deposits with the Bundesbank. In addition, it is in charge of managing the Deka Group's liquidity buffer 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 are 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 NSFR 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.

Medium term and funding planning

Medium-term planning involves an integrated planning process for profits, balance sheets, funding, capital and risk at Deka Group level for the next three years. This looks at liquidity adequacy in the economic and normative perspective for planning horizons, including under adverse scenarios.

Funding planning must sustainably fulfil the requirements relating to risk appetite, i.e. sustainably adhere to the limits of the combined stress scenario funding matrix and to the applicable regulatory ratios (including LCR and NSFR).

Funding planning is applied to both the going concern scenario and adverse scenarios. The liquidity subgroup is included in the Deka Group perspective.

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 range 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). The liquidity buffer is the responsibility 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. The Treasury corporate centre may independently propose a higher liquidity buffer. 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 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, sufficiently liquid funds are 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. The MaRisk requirements for liquidity management, including under stress scenarios, are thus fully implemented. 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: Liquidity coverage ratios

The Finance corporate centre monitors the internal amber threshold as part of the daily calculation of the LCRs for DekaBank Deutsche Girozentrale (which, together with S Broker, forms the liquidity subgroup). This enables proactive management of the LCRs. An NSFR is prepared on a monthly basis at Group- and sub-Group level along with a Group-wide LCR.

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 and NSFR). 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 and NSFR 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 monthly 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 and the NSFR monthly in the reporting system of the Finance corporate centre and provided to monitoring units.

Capital adequacy in financial year 2021

The coronavirus pandemic continued to shape events in 2021. While in the first quarter of the year, the negative effects associated with ongoing lockdowns to contain the coronavirus pandemic were still keeping the handbrake on the economy, a clear economic recovery emerged at the beginning of the second quarter. The positive economic environment overall, with expectations of rising corporate profits, was also reflected on the equity markets. Most European share indices rose noticeably and in some cases reached new historic highs. Combined with the support from the ECB, this resulted in largely unchanged low risk premiums on the credit and bond markets. Bond markets were more volatile, especially from late summer, due to higher inflation rates and, in particular, higher inflation expectations. Amid significantly increased infection rates in the autumn and concerns about the Omicron variant of the virus, however, there were expectations that the ECB would continue large-scale bond purchases after all. Bund yields at the long end of the curve therefore fell significantly again, though they remained above the level seen at the end of 2020. Mirroring the development in ten-year government bonds, long-term swap rates also saw a fluctuating increase.

Implementation of the benchmark reform initiated by the Financial Stability Board made substantial progress in the reporting year. This was partly due to external influences (such as the clear requirements of supervisory authorities particularly in the UK and US), the new market standards becoming established and the substantially higher liquidity in products using the new risk free rates (RFRs). However, it was also down to the completion of implementation work in DekaBank's systems, processes and methods. The implications of the necessary changes and product adjustments were closely examined but were not found to be significant. Technical implementation did not have a noticeable impact on operational processes either.

As of 31 December 2021, succession arrangements were operational for all benchmark rates being discontinued – for DekaBank, primarily pound sterling, Japanese yen and Swiss francs. These comprised a full replacement for the old market data universe and the necessary changes to the existing positions.

For 2022, the focus will be on the US dollar transition. Other market developments relating to interest rate products, especially interest rate options, are also expected, along with increased demand for the only recently available new term rate alternatives to the overnight-based RFRs.

Looking at the Deka Group, market development in 2021 was characterised by very strong performance on the stock markets and declining volatility. This contributed to very positive issuing business, especially for share certificates. Due to the neutral risk position, developments on the stock markets and rising swap interest rates, especially at the long end, had only a minor impact on the risk situation. The sideways trend in credit spreads also contributed to the low impact. By contrast, market developments resulted in a significant drop in risks from Riester products and pension obligations.

The Deka Group held adequate capital throughout the reporting period. In particular, the Common Equity Tier 1 capital ratio and utilisation of risk capacity and of the risk appetite 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, taking into account the changes applied. The Deka Group's total risk exposure (value-at-risk, confidence level 99.9%, holding period of one year) at the 2021 reporting date was €1,731m, a significant reduction of €1,090m on the 2020 reporting date (€2,821m). Significantly reduced counterparty, market price and business risks were accompanied by a strong (in relative terms) increase in investment risk (which is not a material risk category overall) and almost unchanged operational risk.

At the same time, despite AT1 capital no longer being eligible, risk capacity remained almost unchanged year-on-year at €5,308m (year-end 2020: €5,236m). This was attributable in particular to the overall positive development in earnings components and to the changes in retained earnings, the revaluation reserve and various correction and deduction items, such as the lower deduction for risks resulting from pension obligations. Particularly as a result of the changes and developments described above, the utilisation of risk capacity (32.6%) was significantly lower than at the end of 2020 (53.9%) and thus 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 €4,000m (unchanged since the end of 2020) was 43.3% utilised as at the 2021 reporting date (year-end 2020: 70.5%).

Change in Deka Group risk over the course of the year *€m (Fig. 22)*

	31 Dec 2021	31 Dec 2020	Change	
Counterparty risk	819	1,157	–338	–29.2%
Investment risk	30	20	9	46.4%
Market price risk	426	825	–398	–48.3%
Operational risk	280	279	1	0.4%
Business risk	176	541	–364	–67.4%
Total risk	**1,731**	**2,821**	–1,090	–38.6%

Normative perspective (current situation)

Capital adequacy is determined in accordance with the CRR. 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 2021 stood at €6,075m (year-end 2020: €5,753m).

Compared with the previous year, Common Equity Tier 1 capital increased by €279m to €4,716m. This rise was primarily due to the inclusion of year-end effects from 2020 (profit retention and inclusion of the risk provisions set up in 2020 in the comparison of provisions) and the increase in capital reserves connected to the transformation of atypical silent capital contributions.

Additional Tier 1 capital was strengthened with a new issue of AT1 capital with the amount of €125m. Compared with the previous year, Tier 2 capital was down by €81m to €761m. This was primarily due to the reduced eligibility of Tier 2 capital instruments under the CRR in the last five years before maturity.

RWAs declined overall by €362 m from the year-end 2020 figure of €31,307m to €30,944m. As expected, credit risk increased by €3,894m as against the end of 2020 to €21,499m, mainly due to the first-time application of CRR II in June 2021. This resulted in higher RWAs for the backing of guarantee products due to the application of the CCF (credit conversion factor) approach. For credit risk, there was also an increase in RWAs from lending business due to changes in creditworthiness and new business. The increased credit risk was offset by a drop in market risk of €3,990m to €5,588m. This was mainly attributable to a decline in general market risk as a result of lower spread volatilities and to a drop in specific market risk resulting from the adjustment to reflect the new interpretation of the use of offsetting options in specific interest rate risk. RWAs from operational risk remained almost unchanged at €3,500m. CVA risk came to €358m (2020: €638m).

At 31 December 2021, the Common Equity Tier 1 capital ratio stood at 15.2% (year-end 2020: 14.2%). The Tier 1 capital ratio as of the reporting date was 17.2% (year-end 2020: 15.7%). The total capital ratio increased from 18.4% as of 31 December 2020 to 19.6%.

Taking account of the requirements of the SREP (Supervisory Review and Evaluation Process), DekaBank had to comply at Group level with a Common Equity Tier 1 capital ratio of at least 8.18% as at 31 December 2021. This capital requirement is made up of the Pillar 1 minimum requirement (4.5%) plus the Pillar 2 requirement (1.5%, reduced to 1.125% for the Tier 1 capital ratio and 0.844% for the Common Equity Tier 1 capital ratio, taking into account partial coverage of P2R by Tier 2 capital), the capital conservation buffer (2.5%), the countercyclical capital buffer (approximately 0.083% as at year-end 2021) and the capital buffer for other systemically important banks (0.25%). The capital requirement for the Tier 1 capital ratio was 9.96%. For the total capital ratio, it was 12.33%. These requirements were clearly exceeded at all times. The SREP Pillar 2 requirements remain unchanged for 2022.

Deka Group own funds *in €m (Fig. 23)*

	31 Dec 2021		31 Dec 2020	
	CRR II (without transitional provisions)	**CRR II (with transitional provisions)**	**CRR I (without transitional provisions)**	**CRR I (with transitional provisions)**
Common Equity Tier 1 (CET 1) capital	4,716	4,716	4,437	4,437
Additional Tier 1 (AT 1) capital	599	599	474	484
Tier 1 capital	**5,314**	**5,314**	**4,911**	**4,921**
Tier 2 (T2) capital	761	761	842	842
Own funds	**6,075**	**6,075**	**5,753**	**5,763**
Credit risk	21,499	21,499	17,605	17,605
Market risk	5,588	5,588	9,578	9,578
Operational risk	3,500	3,500	3,485	3,485
CVA risk	358	358	638	638
Risk-weighted assets	**30,944**	**30,944**	**31,307**	**31,307**
%				
Common Equity Tier 1 capital ratio	**15.2**	**15.2**	**14.2**	**14.2**
Tier 1 capital ratio	**17.2**	**17.2**	**15.7**	**15.7**
Total capital ratio	**19.6**	**19.6**	**18.4**	**18.4**

The leverage ratio, i.e. the ratio of Tier 1 capital to total assets adjusted in line with regulatory requirements (leverage ratio exposure), stood at 6.2% as at 31 December 2021 (year-end 2020: 5.6%). Taking account of the phase-in provisions, the leverage ratio for the Deka Group was 6.2% (year-end 2020: 5.6%). The increase was due to higher Tier 1 capital combined with a lower leverage ratio exposure. The minimum leverage ratio of 3.0% applicable from June 2021 onwards was thus adhered to at all times.

The MREL requirements were changed to an RWA- and LRE-based calculation method in the middle of 2021 in accordance with supervisory requirements. The total of own funds and MREL-eligible liabilities is expressed in relation to RWA and LRE. As at the reporting date, the MREL ratio in line with the RWA-based approach amounted to 59.7%, while the figure according to the LRE-based approach came to 21.7%. Both ratios were well above the minimum ratios that will apply as of 1 January 2022. Compared against 31 December 2020, there was a slight reduction of €0.7bn in own funds and MREL-eligible liabilities to €18.5bn. As of the reporting date, this figure was composed of own funds of €6.1bn, senior non-preferred issues of €7.7bn, senior preferred issues of €4.5bn and unsecured subordinated liabilities of €0.2bn.

The subordinated MREL requirements were also changed to an RWA- and LRE-based calculation method in the middle of 2021 in accordance with supervisory requirements. Eligible or total own funds and all subordinated liabilities eligible based on statutory requirements are added together and expressed in relation to RWA and LRE. As at year-end 2021, the subordinated MREL requirements under the RWA-based approach were 42.4%, while the figure under the LRE-based approach came to 16.4%. Both ratios were well above the minimum ratios that will apply as of 1 January 2022.

Macroeconomic stress tests

The in-depth analysis of the results of the macroeconomic stress scenarios in both perspectives also takes into account the probability of occurrence and lead time of the scenarios, calculated each quarter, 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 immediate action was required in relation to capital adequacy.

Liquidity adequacy in financial year 2021

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

The coronavirus pandemic no longer had any material effects on the refinancing markets in 2021. There were no breaches of the internal limits and emergency triggers or the external minimum LCR and NSFR at any time.

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 2021 financial year, at both Deka Group and liquidity subgroup level.

As at 31 December 2021, 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 €9.4bn (year-end 2020: €5.2bn). In the maturity band of up to one month, the liquidity surplus totalled €9.2bn (year-end 2020: €8.2bn), and in the medium-term range (three months) it amounted to €6.2bn (year-end 2020: €12.0bn).

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 approximately €4.8bn on day 1, the Deka Group has a high liquidity potential (around €3.5bn) that is readily convertible at short notice. The Group had 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.

Changes in modelling had a significant effect on liquidity balances beginning in November 2021. In particular, the separate modelling of deposit bases for operational deposits, along with the modelling of a deposit base in the first week of the "combined stress scenario" funding matrix for these deposits, significantly increased the liquidity balances of the "combined stress scenario" funding matrix in the up-to-one-week range. By contrast, the multi-month maturity ranges were negatively affected by the more conservative treatment of received tri-party collateral.

"Combined stress scenario" funding matrix of Deka Group as at 31 December 2021 *€m (Fig. 24)*

	D1	>D1 to D5	>D5 to 1M	>1M to 3M	>3M to 12M	>12M to 5Y	>5Y to 20Y	>20Y
Liquidity potential (accumulated)	3,472	3,992	5,456	3,657	−1,682	−294	−75	−12
Net cash flows from derivatives (accumulated)[1]	−254	532	2,275	3,384	3,866	3,040	2,530	2,518
Net cash flows from other products (accumulated)	5,021	4,857	1,438	−855	8,427	6,550	1,326	−2,473
Liquidity balance (accumulated)	**8,239**	**9,381**	**9,169**	**6,186**	**10,611**	**9,296**	**3,781**	**33**
For information purposes:								
Net cash flows from derivatives by legal maturity (accumulated) [1]	−254	−264	−376	−430	−867	−1,719	−2,034	2,166
Net cash flows from other products by legal maturity (accumulated)	−5,024	−6,514	−8,463	−13,261	−10,567	−4,442	−4,180	−2,997
Net cash flows by legal maturity (accumulated)	**−5,277**	**−6,777**	**−8,839**	**−13,691**	**−11,434**	**−6,161**	**−6,214**	**−831**

[1] Including lending substitute transactions and issued CLNs

As at 31 December 2021, 55.0% (year-end 2020: 52.2%) 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 71% of total capital market issues. The volume of commercial paper issued increased from €0.3bn to €2.5bn year-on-year but remained at a very low level, as it was before the crisis. 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. The proportion of money market refinancing attributable to funds stood at 39.6% (year-end 2020: 36.7%), while other financial institutions accounted for 23.5% (year-end 2020: 21.1%), savings banks for 10.3% (year-end 2020: 19.2%) and central banks for 9.1% (year-end 2020: 8.7%).

Some 57.3% of total refinancing was obtained in Germany and other eurozone countries. Approximately 36.9% of total refinancing was accounted for by issues of bearer securities that cannot be attributed to any buyer country.

Normative perspective

The regulatory LCR requirements were met throughout the period under review. The LCR as at year-end 2021 stood at 160.3% (year-end 2020: 185.6%). The LCR at Deka Group level declined by 25.3 percentage points compared with 31 December 2020. In percentage terms, the rise in net cash outflows was greater than the increase in holdings of high-quality liquid assets. The average LCR for the reporting year was 160.2% (previous year's average: 180.4%). The LCR fluctuated within a range from 144.8% to 198.8%. It was thus always significantly above the minimum limit of 100% applicable in 2021.

The net stable funding ratio (NSFR) came to 118.9% and, at the end of December 2021, was thus significantly above the minimum of 100% to be adhered to from June 2021 onwards. The ratio expresses available stable funding in relation to required stable funding. The NSFR is thus designed to ensure stable long-term funding for assets in relation to their degree of liquidity. A period of one year forms the basis for the assessment.

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 is based on the Deka Group's business strategy and risk strategy and applies across the board to all the Deka Group's organisational units. The Deka Group is committed to sustainable corporate governance and organises its lending business accordingly. The credit risk strategy serves in particular as the foundation for the Group's counterparty risk principles for loans as defined by section 19 (1) of the German Banking Act (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.

The credit risk strategy outlines the Deka Group's risk culture. It aims to ensure that loans are only issued to borrowers who are able to fulfil the terms of the credit agreement and that lending is secured as required by adequate and appropriate collateral and in line with DekaBank's risk appetite. Sustainability risks, i.e. climate-, environment-, social- and governance-related factors (ESG factors) are also taken into account. Adherence to the overall objectives, risk determinants and minimum standards for lending ensures that lending decisions are taken in accordance with the risk culture.

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 member of the Board of Management. The responsibilities performed by the "front office" particularly include monitoring risks at borrower and portfolio level, acting as the administrative office for early risk identification, reporting, reviewing specific items of collateral and managing non-performing and troubled loans (including making decisions regarding risk provisioning for major exposures). Responsibility for applying risk classification procedures, and for establishing, reviewing and monitoring those procedures, is also classified as a front office function.

Authority levels for lending decisions are based on the net total limit and the net 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 and monitoring 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. Among other things, it is responsible for discussing country ratings on both a regular and ad hoc basis, approving and defining country limits within its scope of authority, identifying countries to be excluded (blacklist for high-risk countries) and determining measures to reduce overruns of country limits as well as other risk-reducing measures.

Managing, limiting and monitoring risk

The Deka Group uses different tools to manage and monitor 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 and is subject to continuous monitoring. 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 separate monitoring and assessment 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 fund units in the Group's own investment portfolio and the risk of changes in specific provisions are also taken into account.

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.

The MKR monitors and assesses risk concentrations for individual counterparties, regions and industries.

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 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 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 Risk Talk 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 for counterparty risk. Scenarios include, for example, a rating downgrade by one notch or the ineligibility of physical 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 risk provisions.

DekaBank determines risk 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 significantly in the reporting year to €819m (year-end 2020: €1,157m). Risk capital allocated to counterparty risk stood at €1,595m (year-end 2020: €1,630m) and was 51.3% utilised (year-end 2020: 71.0%). The level of risk capacity utilisation therefore remained non-critical.

The risk development was due predominantly to portfolio optimisation measures in the Capital Markets business division and in the Treasury corporate centre in the first half of the year. In addition, the positive market development already seen in the first half of the year, despite the ongoing coronavirus pandemic, continued in the second half of the year and led to a stabilisation in risk premiums, prompting a further reduction in risk.

The risk position of the cluster portfolio was assessed using an expected shortfall redistribution, which resulted in a significant decrease compared with the previous year. The relative share of the cluster portfolio in the overall portfolio also decreased slightly. Risk concentration thus remained in line with the Deka Group's credit risk strategy.

Gross loan volume increased by €3.8bn from the end of 2020 to reach €123.9bn. The largest contribution to this rise came from the state-affiliated and supranational institutions risk segment due to increased deposits with Deutsche Bundesbank and increased repo volumes with the same counterparty. In the funds risk segment, the gross loan volume increased due to more securities issued as collateral as part of borrowing transactions and also due to increased fund units. Volume in the lending business also exceeded the prior-year figure. This was due to a variety of financing loans for energy, infrastructure and real estate, the vast majority of which were secured. A lower bond volume in the commercial banks and public sector risk segments had the effect of reducing risks. Reduced promissory note loans in the savings banks risk segment and, primarily, lower market values of interest rate hedging instruments in the portfolio also had a downward effect on gross loan volume. The ship portfolio's share of gross loan volume rose slightly to 1.0% (year-end 2020: 0.8%). The aviation segment had a share of 2.2% (year-end 2020: 2.6%). As a result of the difficult market climate, the transport sector in particular is being closely followed and monitored on an ongoing basis.

Gross loan volume *€m (Fig. 25)*

	31 Dec 2021	31 Dec 2020
Commercial banks	16,834	18,275
Other financial institutions	26,114	26,664
Savings banks	5,957	7,574
Insurance companies	1,881	2,077
Industrial sector	5,671	5,082
Service sector	2,837	2,608
Public sector	9,642	13,491
State-affiliated and supranational institutions	19,395	12,123
Transport sector	4,364	4,401
Energy and infrastructure	7,104	6,405
Real estate sector (including real estate funds)	11,531	10,451
Retail sector	124	208
Funds (transactions and units)	12,460	10,797
Total	**123,913**	**120,155**

The net loan volume increased by €2.9bn compared with the end of 2020 to €64.0bn. This increase was smaller than the rise in gross loan volume. Collateralisation meant that the changes in gross loan volume observed for both repo lending (especially in the commercial banks, other financial institutions and funds segments) and bonds (especially in the public sector segment) had relatively small effects on the net loan volume. Increased deposits with Deutsche Bundesbank in the state-affiliated and supranational institutions risk segment also had a risk-increasing effect in net loan volume. There was a decline in the net volume of savings bank financing and in the net bond volume in the commercial banks and public sector segments. However, reduced collateral value for a variety of aviation financing in the transport sector risk segment, mainly due to the coronavirus pandemic, resulted in an increase in net loan volume.

Net loan volume *€m (Fig. 26)*

	31 Dec 2021	31 Dec 2020
Commercial banks	6,373	8,166
Other financial institutions	4,144	4,984
Savings banks	5,772	7,372
Insurance companies	208	268
Industrial sector	2,196	2,161
Service sector	1,401	1,464
Public sector	7,434	8,500
State-affiliated and supranational institutions	18,450	11,844
Transport sector	791	725
Energy and infrastructure	5,521	5,000
Real estate sector (including real estate funds)	2,937	2,658
Retail sector	124	208
Funds (transactions and units)	8,603	7,654
Total	**63,955**	**61,005**

The gross loan volume in the eurozone rose by a total of €9.8bn. This was due to increased deposits with Deutsche Bundesbank, the increase in repo transactions with counterparties in Germany and an increased lending volume in Germany and Luxembourg. Lower bond and securities lending volumes with French issuers had a risk-reducing effect. As a result, the percentage of gross loan volume increased from 72.5% at the end of 2020 to 78.3%. The volume movements in the EU countries outside the eurozone, as well as in the OECD excluding the EU, resulted primarily from the UK's exit from the EU and the shift particularly of high repo volumes from entities in the United Kingdom to countries such as Germany. In addition, the increase in the OECD countries was also due to greater exposure to repo lending business with US counterparties.

Gross loan volume by region *€m (Fig. 27)*

	31 Dec 2021	31 Dec 2020
Eurozone	97,001	87,165
EU excluding eurozone	838	16,848
OECD excluding EU	23,012	13,096
International organisations	54	24
Other countries	3,007	3,023
Total	**123,913**	**120,155**

The gross loan volume attributable to Germany increased by €10.2bn to €62.6bn and equated to a proportion of 50.5% of gross loan volume at the end of 2021. In the eurozone, 10.9% of the gross loan volume was attributable to counterparties in Luxembourg. Counterparties in France accounted for 5.9% of the gross loan volume, and counterparties in Belgium accounted for 4.5%.

Gross loan volume by regional concentration *in €m (Fig. 28)*

	31 Dec 2021	Percentage of Gross loan volume
Germany	62,591	50.5%
Luxembourg	13,557	10.9%
United Kingdom	9,344	7.5%
France	7,310	5.9%
Belgium	5,621	4.5%
Spain	2,810	2.3%
Netherlands	2,424	2.0%
Italy	469	0.4%
Other	19,787	16.0%
Total	**123,913**	**100.0%**

The gross loan volume relating to counterparties in Spain and Italy increased to €3.3bn, from €3.1bn at the end of 2020. 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, the net loan volume attributable to borrowers in Italy and Spain came to only around 24% of gross loan volume. The share of gross loan volume for counterparties in China totalled 0.4%. The gross loan volume for counterparties in Russia stood at €75m. Due to the securing of loans through ECA guarantees for energy supply financing, the net loan volume attributable to Russia was significantly lower than the gross loan volume at around €4m. There remained no gross loan volume attributable to counterparties in Ukraine or Belarus at year-end 2021 and no country limit.

Gross loan volume by risk segment for selected countries as at 31 December 2021 *€m (Fig. 29)*

	Germany	Luxembourg	United Kingdom	United States	France
Commercial banks	5,616	446	550	1,818	2,993
Other financial institutions	8,109	6,435	4,935	847	351
Savings banks	5,957	–	–	–	–
Insurance companies	273	–	1	–	621
Industrial sector	3,294	23	503	422	337
Service sector	354	34	156	1,177	410
Public sector	6,738	–	376	514	543
State-affiliated and supranational institutions	19,169	2	–	–	127
Transport sector	641	–	299	673	151
Energy and infrastructure	2,642	159	471	158	556
Real estate sector (including real estate funds)	3,886	1	2,052	2,384	1,214
Retail sector	124	0	–	–	–
Funds (transactions and units)	5,790	6,458	–	–	7
Total	**62,591**	**13,557**	**9,344**	**7,993**	**7,310**
Change vs. previous year					
Commercial banks	1,500	23	–3,113	–52	–474
Other financial institutions	3,566	–994	–3,743	646	81
Savings banks	–1,617	–	–	–	–
Insurance companies	35	–	–4	–2	–646
Industrial sector	515	12	69	17	–89
Service sector	3	–2	69	227	–65
Public sector	–1,517	–15	–822	–101	–1,059
State-affiliated and supranational institutions	7,113	–16	–	–	116
Transport sector	140	–	60	–126	–82
Energy and infrastructure	705	–6	39	2	77
Real estate sector (including real estate funds)	455	–76	81	61	73
Retail sector	–84	0	–	–	–
Funds (transactions and units)	–629	2,504	–	–	–92
Total	**10,184**	**1,431**	**–7,365**	**672**	**–2,159**

The gross loan volume remained focused primarily on the short-term segment at the end of 2021. The proportion of transactions with a maturity of less than one year was 40.2% (year-end 2020: 41.2%). The proportion of maturities longer than ten years was 6.2%, compared with 8.9% at 31 December 2020. The average legal maturity term of gross lending was 3.3 years (year-end 2020: 3.9 years).

Gross loan volume by maturity *€m (Fig. 30)*

	31 Dec 2021	31 Dec 2020
Up to 1 year	49,844	49,538
1 to 2 years	12,268	13,012
2 to 5 years	15,242	16,537
5 to 10 years	10,231	11,258
10 to 15 years	3,170	3,766
15 to 20 years	1,466	1,985
>20 years	3,048	4,937
No maturity	28,643	19,123
Total	**123,913**	**120,155**

There was no significant change in the level of risk concentration in the loan portfolio during the reporting year. As at 31 December 2021, 15.8% (year-end 2020: 19.9%) 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 reduced by 5 year-on-year to 23. Counterparties in the public sector, savings banks and state-affiliated and supranational institutions accounted for 30.5% of the total volume of the cluster portfolio. A total of 14.4% of net loan volume related to counterparty clusters (year-end 2020: 20.4%).

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 1% of net loan volume as at 31 December 2021 related to shadow banking entities under the principal approach (limit utilisation of total net risk position: 14%). There were no risk exposures to shadow banking entities under the fallback approach as at the end of 2021. The levels of utilisation are considered acceptable. The shadow banking entities had an average rating of 6 on the DSGV master scale.

Over the reporting period, the average rating for the gross loan volume deteriorated by one notch to a rating of 4 on the DSGV master scale. The average probability of default as at 31 December 2021 was 24 basis points (bps) (year-end 2020: 20 bps), which was partly attributable, in the context of the coronavirus pandemic, to deteriorating credit ratings for a central counterparty and to aircraft, ship and real estate financing. For the net loan volume, the average rating score remained unchanged at "A–". The probability of default remained at 10 bps. 84% of net loan volume remained in the same grouping (determined by rating class) as at the end of 2020. 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. 31)*

	Average PD in bps	Average rating 31 Dec 2021	31 Dec 2021	Average PD in bps	Average rating 31 Dec 2020	31 Dec 2020
Commercial banks	6	A	6,373	9	A–	8,166
Other financial institutions	7	A	4,144	10	A–	4,984
Savings banks	1	AAA	5,772	1	AAA	7,372
Insurance companies	6	A+	208	6	A	268
Industrial sector	14	2	2,196	17	3	2,161
Service sector	16	3	1,401	19	3	1,464
Public sector	3	AA	7,434	3	AA	8,500
State-affiliated and supranational institutions	1	AAA	18,450	1	AAA	11,844
Transport sector	220	9	791	126	8	725
Energy and infrastructure	27	4	5,521	31	4	5,000
Real estate sector (including real estate funds)	17	3	2,937	13	2	2,658
Retail sector	N/A	N/A	124	N/A	N/A	208
Funds (transactions and units)	12	2	8,603	11	2	7,654
Total	**10**	**A–**	**63,955**	**10**	**A–**	**61,005**

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 in the earnings-based perspective. 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 thresholds for the Common Equity Tier 1 capital ratio in the normative perspective and on limiting interest rate risks in the banking book in the earnings-based perspective. The MKAP gives recommendations on the operational management of interest rate risks in the banking book in the earnings-based perspective and on management measures in relation to the risks assumed on guarantee products. The latter is the role of part G of the MKAP, which focuses specifically on guarantee products. 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 analyses 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.

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.

Managing, limiting and monitoring risk

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. The Group defines a stop-loss limit as another effective management tool for limiting losses. In addition to the net-present-value approach, interest rate risks in the banking book are also assessed using an earnings-based approach and limited for net interest income (NII).

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, particularly including non-linear 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 spread risk are of particular importance. Appropriate consideration is given to spread risks, using the relevant spread curves, and basis risk.

The model ensures that all risk factors associated with the trading strategy are identified, including non-linear 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.

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 absolute or relative 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.

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 in the earnings-based perspective
In the earnings-based perspective, 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 in the earnings-based perspective 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 in the earnings-based perspective 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 in each of the three years. 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 (clean backtesting). 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 process for identifying and quantifying 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 €426m. The reduction in this figure versus the end of 2020 (€825m) was primarily attributable to a lower risk from guarantee products. This was due in particular to the positive stock market performance in the first half of the year combined with a significant rise in interest rates and declining volatilities.

Utilisation of allocated risk capital for market price risk stood at €1,300m (year-end 2020: €1,255m). This represented a very comfortable utilisation level of 32.8%. In setting allocated risk capital, it was taken into account that guarantee products make a major contribution to market price risk and are highly sensitive to market movements. To limit the risks from guarantee products, sales have already been terminated for one of the Riester products. It was decided to end sales for the second product in mid-2022.

With a confidence level of 99% and a holding period of ten days, market price risk (value-at-risk), excluding guarantee risks, stood at €49.2m as at the reporting date (year-end 2020: €51.9m). The portfolio optimisation measures taken in response to developments in connection with the coronavirus crisis achieved the intended effect. As a result, the development of market price risk is less susceptible to market turbulence. This also included creating macro hedge positions to mitigate the effects of future adverse fluctuations. Utilisation of the operational management limit at Deka Group level (excluding guarantees) stood at €88.0m (year-end 2020: €91.0m). This represented a utilisation level of 56% and was therefore non-critical.

Deka Group value-at-risk excluding guarantee risks [1] (confidence level 99%, holding period ten days)
€m (Fig. 32)

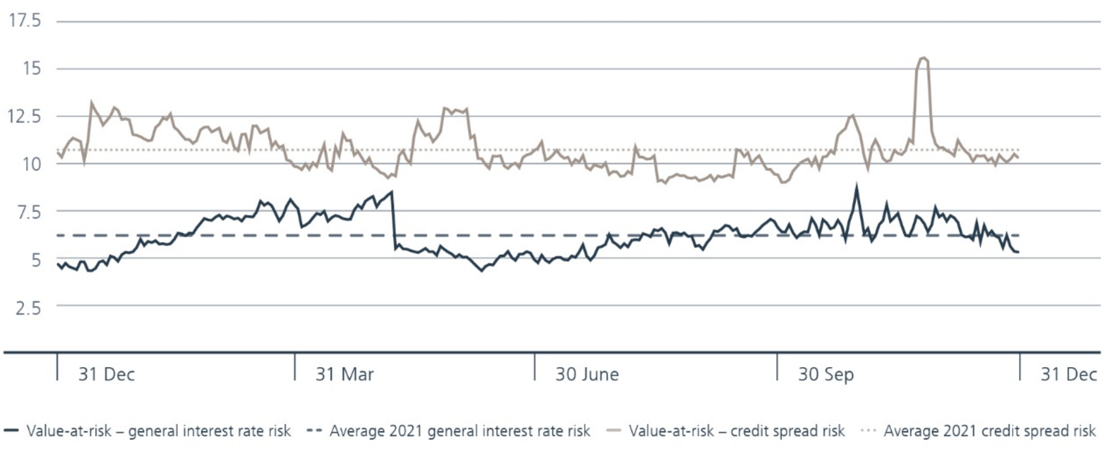
Category	Asset Management Securities business division	Asset Management Real Estate business division	Asset Management Services business division	Capital Markets business division	Treasury	Deka Group excluding guarantees	Change in risk
	31 Dec 2021						
Interest rate risk	4.0	0.0	5.2	11.2	37.8	49.0	−6.8%
Interest rate – general	0.3	0.0	4.7	5.1	7.3	10.8	−5.3%
Credit Spread	4.0	0.0	3.2	10.3	39.1	49.8	−7.4%
Share price risk	0.6	0.0	0.6	10.2	8.1	10.6	65.6%
Currency risk	0.4	0.0	0.0	0.5	10.7	10.8	103.8%
Total risk	**4.1**	**0.0**	**5.3**	**15.9**	**37.2**	**49.2**	−5.2%

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

At the end of 2021, the VaR for spread risk totalled €49.8m, which was moderately below the level seen at year-end 2020 (€53.8m). The drop was mainly due to a reduction in bond positions. Spread risk continues to substantially affect market price risk at Group level. In line with the business model, the largest risk drivers are variable and fixed-rate bonds issued by the public sector, financial institutions and corporates in Germany, western Europe and the US. Risk concentration for spread risk was consistent with the Deka Group's market price risk strategy.

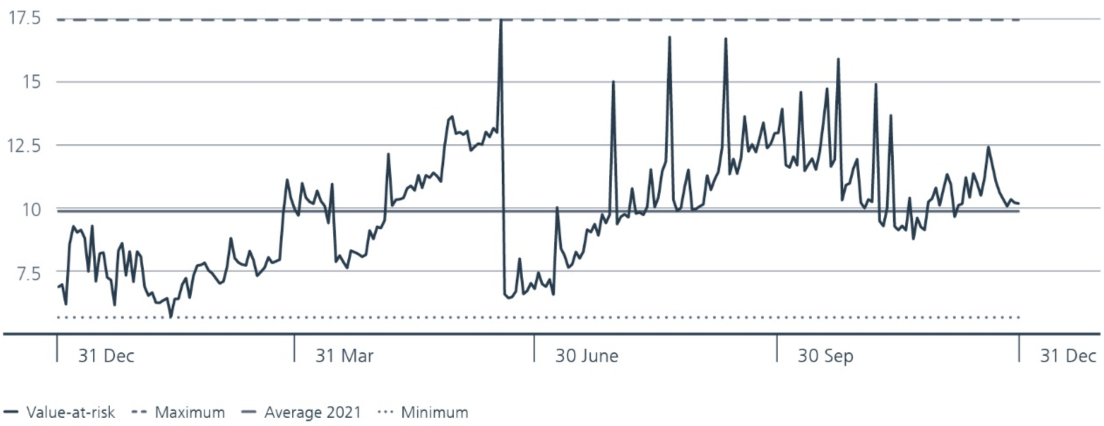
The VaR for general interest rate risk (excluding risks on guarantee products) decreased from €11.4m at year-end 2020 to €10.8m. The reduction began in the first quarter with a tighter management of risk.

Value-at-risk – General interest rate risk and credit spread risk in the Capital Markets trading book over the course of 2021 *€m (Fig. 33)*



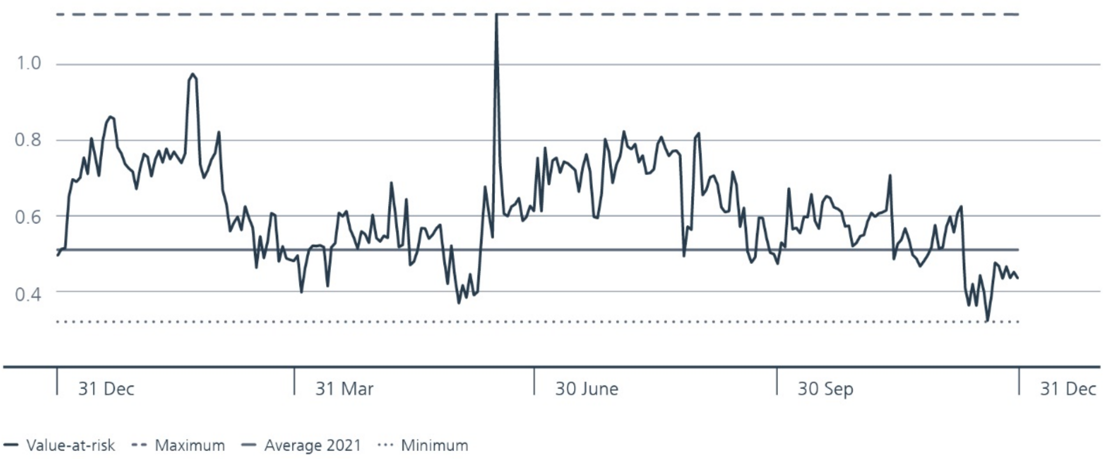
Share price risk rose sharply from €6.4m at the end of 2020 to €10.6m at the end of 2021. This was attributable to an expansion of share certificate business. Share price risk remains of low significance at Group level, however. The majority (€10.2m) of the risk was attributable to share price risk in the Capital Markets business division trading book (year-end 2020: €6.8m).

Value-at-risk – Share price risk in the Capital Markets trading book over the course of 2021 *€m (Fig. 34)*



As in the previous year, currency risk resulted mostly from positions in US dollars and British pounds. At €10.8m, it was significantly up on the prior-year figure (year-end 2020: €5.3m) but continued to be of minor significance. The increase resulted mainly from changes in holdings in the Treasury corporate centre due to the IBOR reform. Currency risk in the Capital Markets business division trading book stood at €0.4m (year-end 2020: €0.5m).

Value-at-risk – Currency risk in the Capital Markets trading book over the course of 2021 *€m (Fig. 35)*



Operational risk

Strategic framework and responsibilities

The strategy for dealing with operational risks (OR strategy) is based on the Deka Group's overarching risk strategy. It sets out the Deka Group's basic approach to operational risks and guidelines for managing and controlling these risks. It defines the framework for the Group-wide establishment and operation of a standard system for identifying, assessing, managing and monitoring all operational risks. The OR strategy applies to all organisational units of the Deka Group.

Decentralised approach to risk measurement and management by the first line of defence

Operational risks differ considerably in nature to traditional financial risk types such as counterparty and market price risk. While the latter arise in connection with individual transactions and can largely be identified and quantified at central level, operational risks are inherent in general business activity and are thus highly process-specific. The Deka Group therefore uses a decentralised approach to identifying and measuring operational risks, i.e. to assessing future risks and examining any incidents that occur. In respect of operational risks, each unit is generally regarded as part of the first line of defence and must manage the risks arising in its area of responsibility. Units such as IT or Human Resources, whose role is to centrally provide infrastructure or processes, are a special case and are responsible for assessing risks related to their services across the Group.

In both cases, the relevant heads of department are responsible for managing operational risk within their area and cannot transfer this responsibility elsewhere. They form the first line of defence within the Deka Group's Three Lines of Defence model. Various pre-defined options for dealing with operational risk are at their disposal (accept, reduce, transfer, avoid). These options must be weighed up in terms of their costs and benefits while ensuring adherence to the law and taking account of the effect on the capital adequacy assessment at Deka Group level.

Central specialisation and overall aggregation and reporting by the second line of defence

The second line of defence sets and monitors adherence to relevant guidelines, thereby helping the units in the first line of defence to take only appropriate risks, and supports the decentralised units with methods for managing operational risks. The overarching view of the Operational Risk unit within Risk Control is complemented by specialist functions for the individual risk sub-types in the Compliance (compliance risk), Finance (tax law and tax compliance risk), Legal (legal risk), Information Security Management (ICT, security and service provider risk), Human Resources (personnel risk) and Organisational Development (process and project risk) units.

The specialist functions set specific requirements for the design of processes and controls for the selected risk sub-types classified as significant for the Deka Group in the results of the annual risk inventory. They also set qualitative and quantitative rules on risk appetite. As well as monitoring adherence to the above, the specialist functions help the units in the first line of defence with risk type-specific methods for identifying, assessing and managing the relevant OR sub-type and proactively liaise with the contacts specified by these departments.

The Operational Risk unit defines overarching methodological standards that ensure that the risks are assessed in a comparable way, reported consistently and taken fully into account in the capital adequacy assessment. It aggregates the information collected locally and reports this to the heads of department and Board of Management. The scenario assessments and loss documentation are validated and plausibility-checked, ensuring that risk assessments are performed to common standards across all departments and all risk sub-types.

Independent review by the third line of defence

The third line of defence is the Deka Group's Internal Audit department. It supports the Board of Management and the oversight bodies (Administrative Board, Audit Committee) with its objective and independent assessment of the appropriateness and effectiveness of risk management, of the controls put in place and of the management processes at the Deka Group.

Methods used

The Deka Group uses various methods for the management and control of operational risks. 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. Alongside the common methods described below, the specialist functions in the second line of defence also use their own methods to monitor selected non-financial risks.

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. 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 are 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.

Current risk situation

The VaR for operational risk (confidence level of 99.9%, holding period of one year) increased only marginally from €279m at year-end 2020 to €280m. On the ex-post side, there were slight risk-increasing effects from a relatively large number of actually incurred losses. The provisions and liabilities recognised due to the ruling by the German Federal Court of Justice (BGH) on the mechanism for amending general terms and conditions of business contributed to these. These effects were almost completely offset, however, by the on balance virtually unchanged assessments of the loss scenarios on the ex-ante side. For example, the scenario at the beginning of the year relating to potential construction delays at the new office site initially led to a moderate increase in risk, which fell away again at the end of the year with the completion of the project as planned and the on-time relocation. Moreover, there have been no major changes in the allocation of VaR to the business divisions and the Treasury corporate centre for internal management purposes.

Risk capital allocated to operational risk stood at €350m (year-end 2020: €335m). Utilisation of this amount was 80.0%. Utilisation thus remains at a non-critical level.

Value-at-Risk *€m (Fig. 36)*

	2019	2020	2021
Asset Management Securities business division	100	102	104
Asset Management Real Estate business division	47	51	50
Asset Management Services business division	55	62	68
Capital Markets business division	39	42	38
Financing business division	12	15	13
Treasury Corporate Centre	7	7	8
Total	**259**	**279**	**280**

At €69m, the OR loss potential identified in the Group-wide risk inventory was higher than the figure for year-end 2020 (€66m). The main drivers included the addition or adjustment of loss scenarios relating to the changed legal environment in view of the BGH ruling on the mechanism for amending general terms and conditions of business, increased risks in relation to computer sabotage, espionage and data manipulation, and compliance risks in the context of the still dynamic regulatory environment. There was no need, however, for any additional adjustments in connection with the coronavirus pandemic following its extensive consideration in the previous year. As things currently stand, there is no reason to expect any increased risk profile in this context in the future either, as the Deka Group has adapted to the new working situation through various measures and the projections already reflect the changes in the cost structure. 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. 37)*

	2019	2020	2021
Asset Management Securities business division	7	10	9
Asset Management Real Estate business division	8	9	9
Asset Management Services business division	4	5	5
Capital Markets business division	6	7	7
Financing business division	4	4	4
Treasury Corporate Centre	1	1	1
Savings Banks Sales & Marketing	2	2	3
Corporate Centres	24	28	30
Total	**56**	**66**	**69**

In the loss documentation, nine major loss events (> €100 thousand) were newly recorded for the reporting period in 2020 and two were recorded retrospectively for previous periods. Legal risks as the trigger for two further events, in addition to the BGH ruling on the mechanism for amending general terms and conditions of business (noted above in relation to VaR), made up the largest share of the total losses. Beyond this, loss events in connection with process risk were of considerable importance again, as in the previous years, for example in the form of reimbursements to investment funds or customers due to process-related errors in the asset management business divisions. In the context of the coronavirus pandemic, updated costs for additional protective and disinfection measures, as well as for the provision of face masks and self-testing kits to employees, are worthy of note. In addition, effects that had previously been taken into account, with the effect of reducing losses, were no longer included in the quantification in line with the requirements on the treatment of the various cost components set out by the supervisory authorities at the end of the previous year.

On 15 July 2021, a revised Federal Ministry of Finance (BMF) circular dated 9 July 2021 was published on the tax treatment of share trades transacted around the dividend record date. Compared to the original BMF circular dated 17 July 2017, this BMF circular sets out more specific details regarding the requirements for relief from capital yields tax (*Kapitalertragsteuer*), as well as with regard to the legal consequences in the event of a refusal by tax authorities to allow relief for share trades transacted around the dividend record date. Based on the revised BMF circular of 9 July 2021 on the tax treatment of share trades transacted around the dividend record date, tax risks exist in connection with relief from capital yields tax on share transactions made around the dividend record date in the years 2013 to 2015. All matters are reported in the Group management report and consolidated financial statements as at 31 December 2021 in accordance with DekaBank's interpretation of the relevant tax regulations and accounting standards.

In addition, DekaBank has conducted voluntary investigations 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. Based on the findings available to it, DekaBank considers it unlikely that the tax authority will be able to make a claim in relation to these matters beyond what has been recognised in the financial statements as at 31 December 2021.

Business risk

The business risk strategy set by the Board of Management sets out the Deka Group's guidelines for dealing with business risk and the requirements for risk management and control. It provides the necessary framework for the creation and operation of a Group-wide standardised system for identifying, monitoring and managing business risks and incorporating them into the risk-bearing capacity analysis. Various mutually complementary tools are used for this purpose.

Adverse variances from plan in terms of the result relevant for business risk purposes form the basis for calculating business risk. Various risk factors specific to the business activity in question are taken into account.

Business risk is driven to a large extent by the fund business. In the asset management business divisions, value-at-risk is calculated based on the deviation in the business risk-relevant components of the economic result (i.e. a large part of net commission income and expenses) from the proportionate planned contribution to annual profit. The corresponding components of net commission income determine the significant fluctuations in the economic result.

Commissions directly depend on total customer assets (for the AM Securities business division and AM Real Estate business division) or assets under custody (for the depositary in the AM Services business division), which are among the elementary risk factors. Both the risk factors and net commission income depend on the behaviour of customers or sales partners as well as on changes in market conditions, legal requirements or competitive conditions.

In the Capital Markets and Financing banking divisions, the fluctuation of commission income is examined taking into account individual risk factors (e.g. the margin on commission business), and potential adverse variances from planned commission income are reported as VaR. This approach is currently being reviewed as part of the development of the business risk model. 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 the behaviour of customers or sales partners, the economic and regulatory environment and competitive conditions. Major risk drivers have a negative impact on the corresponding risk factors and thus on the net commission income relevant for business risk. Sensitivity analyses examine, for example, the effect of a stock market shock or a decline in net inflows. The effects of hypothetical scenarios are also analysed, such as reputational damage or equity stress (exceeding that already observed during the crisis), introduced due to the coronavirus pandemic. Alongside the sensitivity analyses and hypothetical scenarios, the stress tests also involve historical scenarios including market crashes akin to those seen after the terrorist attacks in 2001 or during the financial crisis in 2008. 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 decreased significantly to €176m (year-end 2020: €541m). The significant reduction in risk was due in the first half of the year to lower volatilities against the backdrop of the market recovery following the coronavirus crisis, with effects in the Asset Management Securities, Asset Management Services and Capital Markets business divisions. There was a further significant reduction in risk in the second half of the year due to the switch to the new business risk models in the asset management business divisions. Risk capital allocated to business risk was reduced from €750m at the end of 2020 to €710m. Utilisation was 24.8% and thus at a non-critical level. In the event of increases in market volatility due to the coronavirus pandemic, which is still ongoing, or to geopolitical events, a renewed increase in business risk cannot be ruled out.

Other risks

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 counterparty risk. 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 €30m at year-end 2021, up significantly on the level of €20m at the end of the previous year. The significant increase in risk was primarily due to the acquisition of a new equity investment in September 2021. The treatment of additional contribution obligations consistent with the risk quantile also had a risk-increasing effect. The risk capital allocated to investment risk was increased overall to €45m (year-end 2020: €30m) and was 66.2% utilised at year-end. Large-scale impacts of the coronavirus pandemic on investment risk have not been observed to date. However, negative effects cannot be completely ruled out in the still uncertain situation.

CONSOLIDATED FINANCIAL STATEMENTS

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

Consolidated financial statements

Statement of profit or loss and other comprehensive income
for the period from 1 January to 31 December 2021

€m	Notes	**2021**	**2020**	Change
Interest income		821.8	924.6	–11.1%
(thereof calculated using the effective interest method)		339.5	465.5	–27.1%
Interest expenses		649.6	768.0	–15.4%
Net interest income	[32]	**172.2**	**156.6**	10.0%
Risk provisions in the lending and securities business	[17], [33]	**0.6**	**–178.0**	100.3%
Net interest income after provisions		**172.8**	**–21.4**	(> 300%)
Commission income		3,322.9	2,697.5	23.2%
Commission expenses		1,698.9	1,388.6	22.3%
Net commission income	[34]	**1,624.0**	**1,308.9**	24.1%
Net income from the derecognition of financial assets measured at amortised cost	[35]	**16.5**	**78.1**	–78.9%
Trading profit or loss	[36]	**159.4**	**152.1**	4.8%
Profit or loss on financial assets mandatorily measured at fair value	[37]	**6.4**	**–13.5**	147.4%
Profit or loss on financial instruments designated at fair value	[38]	**25.5**	**25.2**	1.2%
Profit or loss from fair value hedges	[39]	**12.3**	**–0.5**	(> 300%)
Profit or loss on financial investments	[40]	**0.1**	**–0.1**	200.0%
Administrative expenses	[41]	**1,183.3**	**1,098.7**	7.7%
(thereof expenses for the bank levy and deposit guarantee scheme)		79.5	72.8	9.2%
Other operating profit	[42]	**–42.3**	**–44.6**	5.2%
Total of profit or loss before tax		**791.4**	**385.5**	105.3%
Income taxes	[43]	**254.9**	**139.6**	82.6%
Interest expenses for atypical silent capital contributions		**–**	**33.6**	–100.0%
Total of profit or loss		**536.5**	**212.3**	152.7%
Thereof:				
Attributable to non-controlling interests		–	–	o.A.
Attributable to the shareholders of DekaBank		536.5	212.3	152.7%
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		–6.3	–3.6	–75.0%
Change of the foreign currency basis spread of hedging derivatives		–6.5	–16.1	59.6%
Change in currency translation reserve		0.4	–0.4	200.0%
Deferred taxes on items reclassified to profit or loss	[53], [62]	4.1	6.3	–34.9%
Items not reclassified to profit or loss				
Revaluation gains/losses on defined benefit pension obligations		141.4	–50.4	(> 300%)
Change in valuation reserve for own credit risk of financial liabilities designated at fair value		0.4	1.5	–73.3%
Deferred taxes on items not reclassified to profit or loss	[53], [62]	–20.9	12.0	–274.2%
Other comprehensive income		**112.6**	**–50.7**	(> 300%)
Comprehensive income for the period under IFRS		**649.1**	**161.6**	(> 300%)
Thereof:				
Attributable to non-controlling interests		–	–	o.A.
Attributable to the shareholders of DekaBank		649.1	161.6	(> 300%)

Statement of financial position as at 31 December 2021

€m	Notes	31 Dec 2021	31 Dec 2020	Change
Assets				
Cash reserves	[44]	**15,982.4**	**9,206.7**	73.6%
Due from banks	[16], [45]	**13,817.8**	**16,350.2**	–15.5%
Due from customers	[16], [46]	**30,560.6**	**24,616.4**	24.1%
Financial assets at fair value	[18], [48]	**17,738.5**	**22,981.9**	–22.8%
a) Trading portfolio		16,666.4	21,388.7	–22.1%
b) Financial assets mandatorily measured at fair value		1,072.1	1,593.2	–32.7%
c) Financial assets designated at fair value		–	–	o.A.
(of which deposited as collateral)	[77]	3,476.4	5,172.4	–32.8%
Positive market values of derivative hedging instruments	[10], [19], [49]	**91.6**	**638.7**	–85.7%
Financial investments	[20], [50]	**9,290.9**	**10,567.2**	–12.1%
a) Financial assets measured at amortised cost		5,594.9	5,162.1	8.4%
b) Financial assets measured at fair value through other comprehensive income		3,679.6	5,388.7	–31.7%
c) Shares in at-equity accounted companies		16.4	16.4	0.0%
(of which deposited as collateral)	[77]	797.7	875.9	–8.9%
Intangible assets	[21], [51]	**199.6**	**182.0**	9.7%
Property, plant and equipment	[22], [52]	**290.9**	**141.9**	105.0%
Current income tax assets	[24], [53]	**197.9**	**195.1**	1.4%
Deferred income tax assets	[24], [53]	**265.8**	**289.2**	–8.1%
Other assets	[23], [54]	**428.9**	**339.8**	26.2%
Total assets		**88,864.9**	**85,509.1**	3.9%
Liabilities				
Due to banks	[25], [55]	**16,890.6**	**17,140.6**	–1.5%
Due to customers	[25], [56]	**23,594.5**	**21,660.2**	8.9%
Securitised liabilities	[25], [57]	**9,543.3**	**7,656.2**	24.6%
Financial liabilities at fair value	[18], [58]	**29,194.4**	**30,549.6**	–4.4%
a) Trading portfolio		28,724.7	29,884.4	–3.9%
b) Financial liabilities designated at fair value		469.7	665.2	–29.4%
Negative market values of derivative hedging instruments	[10], [19], [59]	**383.9**	**107.1**	258.5%
Provisions	[26], [27], [60], [61]	**457.3**	**620.3**	–26.3%
Current income tax liabilities	[24], [62]	**161.3**	**67.3**	139.7%
Deferred income tax liabilities	[24], [62]	**12.1**	**9.1**	33.0%
Other liabilities	[28], [63]	**1,316.9**	**1,042.1**	26.4%
Subordinated capital	[29], [64]	**964.2**	**959.4**	0.5%
Atypical silent capital contributions	[30], [65]	**–**	**52.4**	–100.0%
Equity	[31], [66]	**6,346.4**	**5,644.8**	12.4%
a) Subscribed capital		191.7	191.7	0.0%
b) Additional capital components		598.6	473.6	26.4%
c) Capital reserve		239.5	190.3	25.9%
d) Retained earnings		5,187.0	4,877.1	6.4%
e) Revaluation reserve		–70.6	–183.2	61.5%
f) Accumulated profit/loss (consolidated profit)		200.2	95.3	110.1%
g) Minority interest		–	–	o. A.
Total liabilities		**88,864.9**	**85,509.1**	3.9%

Statement of changes in equity for the period from 1 January to 31 December 2021

€m	Subscribed capital	Additional capital components	Capital reserve	Retained earnings	Consolidated profit/loss	Provisions for pensions[1]
Equity as at 1 January 2020	**191.7**	**473.6**	**190.3**	**4,733.3**	**55.1**	**–223.4**
Total of profit or loss	–	–	–	–	212.3	–
Other comprehensive income	–	–	–	–	–	–50.4
Comprehensive income for the period under IFRS	**–**	**–**	**–**	**–**	**212.3**	**–50.4**
Changes in the scope of consolidation	–	–	–	–	–	–
Other changes[2]	–	–	–	–28.3	–	–
Allocation to reserves from retained earnings	–	–	–	172.1	–172.1	–
Distribution	–	–	–	–	–	–
Equity as at 31 December 2020	**191.7**	**473.6**	**190.3**	**4,877.1**	**95.3**	**–273.8**
Total of profit or loss	–	–	–	–	536.5	–
Other comprehensive income	–	–	–	–	–	141.4
Comprehensive income for the period under IFRS	**–**	**–**	**–**	**–**	**536.5**	**141.4**
Changes in the scope of consolidation	–	–	–	–	–	–
Capital increase	0.0	–	50.1	–	–	–
Other changes[2]	–	125.0	–0.9	–26.4	–	–
Allocation to reserves from retained earnings	–	–	–	336.3	–336.3	–
Distribution	–	–	–	–	–95.3	–
Equity as at 31 December 2021	**191.7**	**598.6**	**239.5**	**5,187.0**	**200.2**	**–132.4**

[1] Revaluation gains/losses on defined benefit obligations
[2] Mainly includes the new issue of an Additional Tier 1 bond in the reporting year 2021 as well as the interest payments of the Additional Tier 1 bonds, which are classified as equity under IFRS.

Revaluation reserve					Total before minority interest	Minority interest	Equity
Change of the foreign currency basis spread of hedging derivatives	Financial assets measured at fair value through other compre-hensive income	Own credit risk of financial liabilities designated at fair value	Currency translation reserve	Deferred taxes			
2.5	**12.5**	**–3.6**	**0.1**	**79.4**	**5,511.5**	**–**	**5,511.5**
–	–	–	–	–	212.3	–	212.3
–16.1	–3.6	1.5	–0.4	18.3	–50.7	–	–50.7
–16.1	**–3.6**	**1.5**	**–0.4**	**18.3**	**161.6**	**–**	**161.6**
–	–	–	–	–	–	–	–
–	–	–	–	–	–28.3	–	–28.3
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–13.6	**8.9**	**–2.1**	**–0.3**	**97.7**	**5,644.8**	**–**	**5,644.8**
–	–	–	–	–	536.5	–	536.5
–6.5	–6.3	0.4	0.4	–16.8	112.6	–	112.6
–6.5	**–6.3**	**0.4**	**0.4**	**–16.8**	**649.1**	**–**	**649.1**
–	–	–	–	–	–	–	–
–	–	–	–	–	50.1	–	50.1
–	–	–	–	–	97.7	–	97.7
–	–	–	–	–	–	–	–
–	–	–	–	–	–95.3	–	–95.3
–20.1	**2.6**	**–1.7**	**0.1**	**80.9**	**6,346.4**	**–**	**6,346.4**

Statement of cash flows for the period from 1 January to 31 December 2021

€m	31 Dec 2021	31 Dec 2020
Total of profit or loss	**536.5**	**212.3**
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	–1.1	173.4
on intangible assets and property, plant and equipment	61.5	55.6
+/– Allocation to/reversal of provisions	59.4	107.9
+/– Profit or loss from fair value hedges	–12.3	0.5
+/– Other non-cash items	41.3	–268.7
+/– Profit or loss on the disposal of property, plant and equipment	0.1	0.4
+/– Profit or loss on the disposal of financial investments	–	–13.4
+/– Other adjustments	311.4	224.9
= **Sub-total**	**996.8**	**492.9**
Change to assets and liabilities arising from operating activities		
+/– Due from banks	2,198.6	6,461.8
+/– Due from customers	–5,978.5	3,573.9
+/– Financial assets at fair value	3,568.1	4,449.3
+/– Financial investments	1,182.3	192.6
+/– Other assets arising from operating activities	551.0	–761.5
+/– Due to banks	–224.6	–404.9
+/– Due to customers	1,968.2	–2,049.8
+/– Securitised liabilities	1,948.8	–10,131.1
+/– Financial liabilities at fair value	503.8	3,898.1
+/– Other liabilities arising from operating activities	492.2	–326.1
+ Interest paid	785.3	823.1
+ Dividends received	8.7	7.6
– Interest paid	–920.4	–815.1
– Income tax payments	–157.8	–137.2
Cash flow from operating activities	**6,922.5**	**5,273.6**
+ Proceeds from the disposal or redemption of		
equity investments	0.3	50.7
– Disbursements for the purchase of		
Equity investments	–8.6	–
intangible assets	–34.2	–11.5
property, plant and equipment	–11.0	–1.6
– Disbursements for the acquisition of shares in affiliated, non-consolidated companies	–0.0	–
+ Dividends received	1.0	0.9
Cash flow from investing activities	**–52.5**	**38.5**
+ Einzahlungen aus Eigenkapitalzuführungen	125.0	–
– Payments to company owners and minority interests	–140.8	–62.9
– Dividends paid	–95.3	–
+ Inflow of funds from subordinated capital	16.8	131.0
+/– Changes in scope of consolidation	–	–0.4
Cash flow from financing activities	**–94.3**	**67.7**
= Changes to cash and cash equivalents	6,775.7	5,379.8
+ Cash and cash equivalents at the start of the period	9,206.7	3,826.9
Cash and cash equivalents at the end of the period	**15,982.4**	**9,206.7**

The statement of cash flows 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 reserves").

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 reporting year, €1.0m (previous year: €1.2m) was attributable to interest and €40.1m (previous year: €39.4m) was attributable 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, for the last time, 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	2020		Acquisition	Re-scheduling	Exchange rate movements	Fair value changes	2021
Subordinated liabilities	959.4	16.8	–	–	–	–12.0	964.2
Total subordinated capital	**959.4**	**16.8**	**–**	**–**	**–**	**–12.0**	**964.2**
Atypical silent capital contributions	52.4	–2.3	–	–50.1	–	–	–

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.

The Deka Group is the fully-fledged securities service provider (the *Wertpapierhaus*) for the savings banks. The Deka Group is made up of DekaBank and its subsidiaries. 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 and advisory process within the securities business. It also offers comprehensive advice and solutions to the savings banks and to institutional customers outside the *Sparkassen-Finanzgruppe* on investing, liquidity and risk management, as well as refinancing (see note [3] “Segmentation by operating business divisions”). The Deka Group’s business is managed from the head office in Frankfurt/Main (Mainzer Landstraße 16, 60325 Frankfurt/Main).

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 HGB. The Group management report was prepared in accordance with section 315 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 statement of cash flows 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 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16

The European Commission adopted the amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 published by the IASB on 27 August 2020 regarding phase 2 of the IBOR project for implementation in European law on 13 January 2021. The amendments relate to accounting for certain modifications to contractual cash flows that are required as a direct result of the IBOR reform. The amendments also provide for a series of exemptions that allow hedge accounting to continue subject to certain conditions. The changes are mandatory for reporting periods beginning on or after 1 January 2021. DekaBank applies these amendments when accounting for modifications resulting from the IBOR reform and hedges that are directly affected by the reform. DekaBank also makes use of the relief for Phase 1 of the IASB’s IBOR project in connection with hedge accounting involving designated transactions that did not yet have to be switched over to the new interest rate benchmarks in 2021.

DekaBank has opted for a project-based approach to implementing the IBOR reform and introducing the new risk-free rates (RFRs), involving all affected areas at 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. Management is regularly updated on the progress of these activities through the established committees.

The necessary changes over the past two years have been made successfully, and the new interest rates are already firmly established in the business processes concerned. In 2021, implementation activities focused, in particular, on the lending business and related primarily to the GBP, JPY and CHF LIBOR transition, as these interest rate benchmarks ceased to apply at the end of 2021. These moves to daily SONIA, TONAR and SARON fixings meant that extensive adjustments had to be made to front and back-office systems. The fact that market standards for the design of the new interest rates only emerged in the course of 2021 has made transitioning the loan agreements more complex. The same applies to the adjustment of zero floors, which have already been standard market practice for several years now in connection with the negative interest rate phases. While the move to daily fixings allows for different approaches in this context, a floor on the daily interest rate benchmarks is now the established standard. This has resulted in the definition of coupon structures in the credit market that deviate from typical interest rate derivative conventions. These are options featuring lookback or lockout, which either shift the interest period in relation to the payment period or keep fixings constant at the end of the payment period. The aim is always to ensure that there is sufficient time for the smooth settlement of interest payments. As the market for interest rate options based on the new interest rate benchmarks is just starting to develop, it remains to be seen whether conditions will move into line with practices in the lending business.

Alongside the process of transition for loans, further changes were made for derivatives, too, in 2021. Whereas in 2020, the focus had been on switching the discount curves over to the new risk-free rates, the focus in 2021 was on switching over the forward curves. The necessary contractual amendments were made, and the changeover process for the derivatives completed successfully, in the second half of 2021. At DekaBank, these activities focused in particular on cross-currency swaps, which typically have a LIBOR leg in the foreign currency. In line with the increasing liquidity in RFR-based cross-currency swaps in the second half of 2021, DekaBank has already made adjustments in USD in view of the upcoming transition process in 2021, over and above the necessary changes in the LIBOR interest rates that ceased to apply at the end of 2021, primarily GBP, CHF and JPY. Ultimately, all of the necessary changes were made in 2021 to ensure that fixings after 31 December 2021 would be based on the new RFRs.

The fact that the LIBOR-based discount curves ceased to apply meant that the discounting of hedged transactions, for example bonds, was also transitioned to the new RFRs in the currencies affected. The present value remained unchanged in the context of the transition.

The USD LIBOR transition is scheduled for 2022, and the USD is the most important currency for DekaBank alongside the euro. It remains to be seen whether the market standards that emerged in 2021 will also become established practice in the USD market. The wider availability of term SOFR rates could result in coupon structures that bear greater resemblance to conventional LIBOR coupons, although this could end up limiting the availability of suitable interest rate derivatives. DekaBank expects the market to actively forge ahead with the transition process in the first half of 2022 in response to pressure from supervisory authorities and central banks alike. As USD LIBOR is not expected to be phased out until the end of June 2023, the overall transition process will continue into 2023.

The following table shows the total amounts of the contracts that had not yet been switched over to an alternative interest rate benchmark as at 31 December 2021. They include transactions supplemented to feature fallback clauses. The amounts of financial assets and liabilities are shown at their carrying value, with derivatives shown at their nominal values.

	GBP LIBOR	USD LIBOR
€m	Total amount of unreformed contracts	Total amount of unreformed contracts
As of 31 December 2021		
Non-derivative financial assets	861.8	4,688.8
Non-derivative financial liabilities	–	85.8
Derivatives	853.3	21,096.1
Total	**1,715.1**	**25,870.7**

For information regarding the disclosures on the IBOR Reform (Phase 1), we refer to note [10] "Hedge accounting" and note [73] "Further information on 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.

Annual Improvements

On 14 May 2020, the IASB published amendments to four standards (IFRS 1, IFRS 9, IFRS 16 and IAS 41) as part of its Annual Improvements Project for 2018-2020. The amendment to IFRS 9 clarifies which fees should be included in the "10% test" when determining whether to derecognise a financial liability. Only fees paid or received between the lender and borrower or paid or received by the lender or borrower on the other's behalf should be included in the test. The amendment to IFRS 16 involves the deletion of an illustrative example of the recognition of lease incentives in the form of a reimbursement by the lessor for leasehold improvements. Application of the new rules is mandatory for financial years beginning on or after 1 January 2022. Voluntary early adoption is permitted. The amendments have no effect on the consolidated financial statements.

Standards and interpretations not yet adopted into European law

Amendments to IAS 1

On 23 January and 15 July 2020, the IASB published amendments to IAS 1 "Presentation of Financial Statements: Classification of Liabilities as Current or Non-current". The amendments clarify that the classification of liabilities as current or non-current must be based on the rights that exist as of the reporting date. The classification therefore does not depend on the entity's expectations about whether it will exercise its right to defer settlement of the liability. The original date for first-time application of the amendments was postponed by one year to 1 January 2023 due to the COVID-19 crisis.

On 19 November 2021, the IASB also proposed amendments to the application of the original changes in the standard regarding the classification of debt. The amendments clarify that covenants an entity must comply with within twelve months after the reporting period have no effect on the classification of a liability as current or non-current. Instead, liabilities with covenants classified as non-current are to be presented separately in the statement of financial position in the future. Corresponding additional disclosures will also have to be made for debt with covenants with which an entity must comply within twelve months after the reporting period.

Both the January and July 2020 amendments and the November 2021 amendments are effective for financial years beginning on or after 1 January 2024. Voluntary early adoption is permitted. Implementation of these amendments will have no effect on the consolidated financial statements.

Amendments to IAS 1 and IFRS Practice Statement 2

In February 2021, the IASB issued amendments to IAS 1 "Presentation of Financial Statements" and IFRS Practice Statement 2 "Making Materiality Judgements". The amendments are designed to help improve the disclosures regarding accounting policies, the aim being to reduce generic disclosures and replace them with company-specific disclosures. Application of the new rules is mandatory for financial years beginning on or after 1 January 2023. Voluntary early application is possible subject to an endorsement of the amendments, which is still outstanding. Implementation of the amendments will have no material effect on the consolidated financial statements.

Amendments to IAS 8

In February 2021, the IASB issued amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors". The clarifying amendments are intended to help users of financial statements distinguish between changes in accounting policies and accounting estimates. This distinction is important, as it is relevant to how the effects of such changes are to be presented. Changes in accounting estimates are to be applied prospectively to future transactions and events, while changes in accounting policies are to be applied retrospectively to past transactions and events and the current period. Application of the new rules is mandatory for financial years beginning on or after 1 January 2023. Voluntary early application is possible subject to an endorsement of the amendments, which is still outstanding. Implementation of the amendments will have no material effect on the consolidated financial statements.

Amendments to IAS 12

In May 2021, the IASB published amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction". Among other things, the amendment is intended to eliminate existing uncertainty regarding how companies account for deferred tax in connection with leases. The initial recognition exemption provided in IAS 12.15, which previously applied subject to certain conditions, now no longer applies to transactions in which equal amounts of deductible and taxable temporary differences arise on initial recognition, even if the other previously applicable conditions are fulfilled. This therefore constitutes an exception to the initial recognition exemption in narrowly defined cases. The amendment results in the recognition of deferred tax on leases accounted for at the level of the lessee. The changes are mandatory for reporting periods beginning on or after 1 January 2023. Early application of the amendments is possible subject to their endorsement, which is still outstanding. The amendment is not expected to have any material effects 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 of profit or loss 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 the Group's total profit or loss before tax in the "reconciliation" column in the segment reporting.

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 business 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 €0.5bn (31 December 2020: €0.9bn). 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 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 Securities 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. 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 and mixed funds, capital protected funds and combinations of these funds. One particular focal point is the further significant expansion of the existing range of sustainability products and services, as well as even greater emphasis on sustainability aspects in the fund, investment and business risk processes. Group-wide coordination facilitates a consistent and demand-driven approach to meeting increased demand among customers and increasingly stringent regulatory requirements. In addition, the takeover of the fund manufacturer IQAM Invest GmbH in 2021 has supplemented and enhanced the quantitative asset management product range, particularly for institutional customers.

Asset Management Real Estate

The Asset Management Real Estate reporting segment provides fund products and advisory services relating to real estate or real estate financing for the savings banks' and other institutional investors' customer and proprietary business. The product range includes open-ended mutual property funds, special property funds with either an open-ended or closed-ended structure, real estate funds of funds, credit funds that invest in real estate, infrastructure or transport financing, and residential property funds offered together with external partners that are experienced in this segment. In order to meet environmental and social criteria and to respond to investor requirements, sustainability aspects are taken into account in the fund and investment processes. In addition to portfolio management, 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- and fund-related services (property and fund management).

Asset Management Services

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

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. It offers investment solutions to both savings bank retail customers and institutional customers and helps them to put their asset and risk management decisions into practice. With its range of services relating to securities repurchase transactions, securities lending and foreign exchange trading, the segment also acts as the central securities and collateral platform for the Savings Banks 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 certificate issuance business. Institutional customers are provided with clearing services and support with the efficient fulfilment of regulatory requirements.

Financing

The Financing reporting segment is made up of real estate financing and specialised 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 and savings banks or other institutional investors via club deals or syndications. Priority is given to placements within the *Sparkassen-Finanzgruppe*. The specialised financing business concentrates on selected core segments, such as infrastructure financing, transport financing, financing covered by ECAs, public sector financing and savings bank financing. The legacy portfolio that was not consistent with DekaBank's strategy was wound down almost entirely in 2021.

The portfolio was dissolved with effect from 1 January 2022. Real estate financing relates mainly to commercial real estate and is focused on marketable properties in the office, logistics, retail and hotel segments in liquid markets in Europe and North America.

Other

The Other segment primarily comprises income and expenses that are not attributable to the reporting segments. These essentially comprise overheads, actuarial gains and losses resulting from the measurement of pension obligations, the bank levy and the deposit guarantee scheme, as well as a general provision for potential losses that are not directly allocable to any operating segment. 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[5]	
	Economic result							
€m	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Net interest income	3.7	3.9	0.9	1.8	5.8	2.8	3.0	5.5
Risk provisions	–	–	–	–	1.0	–1.0	0.0	–
Net commission income	999.9	741.8	334.3	294.4	220.7	205.5	53.4	60.1
Net financial income[1]	–2.7	–0.4	0.3	–5.6	0.3	3.2	267.8	193.1
Other operating profit[2]	–11.1	–4.5	3.6	2.2	–11.1	–0.4	1.6	2.2
Total income without income distribution from Treasury function	**989.9**	**740.8**	**339.1**	**292.8**	**216.8**	**210.2**	**325.8**	**260.9**
Administrative expenses (including depreciation and amortisation)	370.9	355.7	149.7	141.7	194.5	175.7	204.2	177.5
Restructuring expense[2]	0.9	1.5	0.0	0.0	–	–	–	–
Total expenses	**371.7**	**357.2**	**149.7**	**141.7**	**194.5**	**175.7**	**204.2**	**177.5**
(Economic) result before tax excluding income distribution Treasury function	**618.2**	**383.6**	**189.4**	**151.1**	**22.3**	**34.6**	**121.6**	**83.4**
Income distribution of Treasury function	–11.9	–17.8	–0.8	–1.2	–0.9	–1.2	1.2	–35.3
(Economic) result before tax	**606.3**	**365.8**	**188.6**	**149.9**	**21.4**	**33.4**	**122.8**	**48.1**
Cost/income ratio[3]	0.37	0.48	0.44	0.48	0.90	0.83	0.63	0.68
Total risk (value-at-risk)[4]	445	1,216	110	89	167	185	292	406
Total customer assets	320,419	269,716	50,231	45,732	–	–	24,498	23,712
Gross loan volume	7,581	6,912	6	84	908	765	59,337	60,978

[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 expense are disclosed in the Group financial statements under Other operating profit.
[3] Calculation of the cost/income ratio does not take into account the restructuring expense or 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] Since the start of 2021, own investments in securities in the banking book (strategic investments) have been managed in the Treasury corporate centre; until 2020, they were the responsibility of the Capital Markets segment. Together with the securities in the liquidity buffer, both holdings form the Deka Group's liquidity management portfolio. The values for 2021 reflect the new structure. The previous year's figures in the Capital Markets segment and in the Treasury corporate centre have been adjusted accordingly to improve comparability with regard to income and key risk figures. In view of the principle of materiality, the retrospective allocation of expenses and the adjustment of the distribution of income for the Treasury function were waived.
[6] This includes effects relevant for management purposes of €–105.0m (previous year: €+40.0m) 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] No cost/income ratio is presented for the segment Other because as this is deemed of limited economic informative value.

Financing		Other[5]		Deka Group		Reconciliation		Deka Group	
		Economic result						Total profit or loss before tax (IFRS)	
31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
151.8	137.3	−3.4	13.7	161.8	165.0	10.4	−8.4	172.2	156.6
−15.1	−164.9	14.7	−12.1	0.6	−178.0	–	–	0.6	−178.0
18.1	12.7	−3.4	−5.7	1,623.0	1,308.9	1.0	–	1,624.0	1,308.9
−1.0	−10.2	−124.9[6]	−15.1[6]	139.9	164.9	80.3	76.4	220.2	241.3
0.7	0.3	110.5	−72.9	94.2	−72.9	−148.0	48.2	−53.8	−24.7
154.5	**−24.8**	**−6.5**	**−92.1**	**2,019.5**	**1,387.9**	**−56.4**	**116.1**	**1,963.2**	**1,504.1**
69.9	64.6	194.2	183.4	1,183.3	1,098.7	–	–	1,183.3	1,098.7
–	–	−12.3	18.4	−11.5	19.9	–	–	−11.5	19.9
69.9	**64.6**	**181.8**	**201.8**	**1,171.8**	**1,118.5**	**–**	**–**	**1,171.8**	**1,118.5**
84.6	**−89.4**	**−188.3**	**−293.9**	**847.8**	**269.4**	**−56.4**	**116.1**	**791.4**	**385.5**
10.3	2.4	2.1	53.1	–	–	–	–	–	–
94.9	**−87.0**	**−186.3**	**−240.8**	**847.8**	**269.4**	**−56.4**	**116.1**	**791.4**	**385.5**
0.41	0.46	–[7]	–[7]	0.59	0.70				
393	480	413	545	1,731	2,821				
–	–	–	–	395,148	339,160				
25,684	24,824	30,398	26,591	123,913	120,154				

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 €56.4m (previous year: €–116.1m) and mainly resulted from the circumstances referred to below.

The result not recognised in profit or loss amounted to €–74.5m in the reporting period (previous year: €–46.9m). Of this total, €60.0m (previous year: €–58.5m) 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 €–29.5m on the AT1 bonds (previous year: €–28.4m). Distributions made in the previous year 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 2021, the provision for these effects in the management accounts amounted to €–235.0m (previous year: €–130.0m). In the 2021 reporting year, there was an effect on the economic result of €–105.0m (previous year: €+40.0m; reported under Other).

The change of €129.5m in the revaluation reserve before tax (previous year: €–68.9m) was also included in the economic result. Of this, €141.4m (previous year: €–50.4m) 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, €–17.1m (previous year: €–36.9m) 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	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Income	1,747.7	1,352.8	202.1	147.2	13.4	4.1	1,963.2	1,504.1
Total of profit or loss before tax	653.5	306.2	138.6	76.7	–0.7	2.6	791.4	385.5
Long-term segment assets[1]	436.9	290.6	27.9	33.2	25.6	0.0	490.4	323.8

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

Right-of-use assets under leases are also 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 changes referred to in this note and new accounting standards which were applied for the first time in the 2021 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.

For forward-looking assumptions, both discretionary decisions and estimates are necessary as part of IFRS accounting, as is reflected in various parts of these consolidated financial statements. 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 appropriate under the given circumstances. The 2021 reporting year was once again characterised by an uncertain global economic environment caused by the COVID-19 pandemic. 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:

- classification of financial assets (see note [8] "Financial instruments");
- recognition of risk provisions in the lending and securities business and provisions for credit risks from off-balance sheet commitments (see notes [17], [33] and [47] "Risk provisions in the lending and securities business");
- fair value measurement of financial instruments (see note [68] "Fair value disclosures");
- recognition of pension obligations (see notes [26] and [60] "Provisions for pensions and similar commitments");
- impairment test for goodwill (see note [51] "Intangible assets");
- recognition of other provisions and other liabilities (see notes [27] and [61] "Other provisions" and note [76] "Contingent liabilities and other obligations");
- lease accounting (see note [14] "Lease accounting"); and
- recognition of deferred taxes (see note [24] "Income taxes").

In addition to the information provided in the Group management report, explanatory information on the impact of the COVID-19 pandemic can be found primarily in notes [17], [33] and [47] "Risk provisions in the lending and securities business".

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 IFRS, 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 20.0% or more of the voting rights.

The only type of joint arrangements, as defined in IFRS 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

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 7 (previous year: 5) foreign affiliated companies in which DekaBank directly or indirectly holds the majority of the voting rights. The scope of consolidation also includes 3 (previous year: 3) structured entities that are controlled by the Deka Group.

The changes in the 2021 reporting year are due to the initial consolidation of IQAM Invest GmbH, Salzburg, and IQAM Partner GmbH, Vienna.

A total of 11 (previous year: 10) 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]).

Company acquisitions

With effect from 1 January 2021, DekaBank acquired 100% of the shares in IQAM Invest GmbH (formerly Spängler IQAM Invest GmbH), Salzburg, and IQAM Partner GmbH (formerly Spängler IQAM Partner GmbH), Vienna. DekaBank holds a direct stake of 74.5% in IQAM Invest GmbH and holds 25.5% indirectly via its interest in IQAM Partner GmbH.

With the purchase, Deka is building on its position as a leading provider of quantitative product solutions and enhancing its outstanding academic expertise in the German-speaking countries.

The total purchase price amounts to €27.9m for 100% of the shares in IQAM Invest GmbH and 100% of the shares in IQAM Partner GmbH. An advance payment of €23.1m was made at the date of acquisition. A contingent purchase price payment was also agreed in the purchase agreement based on the average assets under management (AuM) in 2020. As a result, a payment of €1.9m was made in February 2021. A fee of €1.1m was also paid for the surplus capital available as at 31 December 2020. In addition, a compensation payment of €1.8m was made for the 2020 annual result. The contingent purchase price payments have been made in full.

The fair value of the total consideration transferred/the amounts recognised for the identifiable assets acquired and liabilities assumed are shown in the table below:

€m	
Total purchase price	**27.9**
Identifiable assets acquired and liabilities assumed	
Due from banks	4.5
Shares and other non fixed-interest securities	1.4
Intangible assets	19.7
Property, plant and equipment	0.2
Income tax assets	0.6
Other assets	3.4
Provisions	1.2
Income tax liabilities	4.9
Other liabilities	3.6
Total identifiable net assets	**20.1**
Purchased goodwill	**7.8**

The gross carrying amount due from banks comes to €4.5m. No contingent liabilities were acquired.

The positive goodwill of €7.8m can be traced back to IQAM Invest GmbH's strong market position in the area of quantitative asset management and quantitative research, as well as the synergies that the company acquisition is expected to bring in respect of our own Asset Management Securities business division. IQAM Invest GmbH's customers, both retail and institutional, are offered individual investment solutions. There is no portion of the goodwill recognised that is expected to be tax-deductible.

The customer relationships acquired as a result of the purchase of the company were valued at €14.7m as part of the purchase price allocation. Software developed in-house worth €3.7m was also identified. The "IQAM" brand was measured at €1.1m. Deferred tax liabilities of €4.9m were also calculated within this context.

In the 2021 reporting year, IQAM Invest GmbH generated income of €31.3m and net income after tax of €1.2m, which was taken into account accordingly in the statement of profit or loss and other comprehensive income for 2021.

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 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), 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 their focus is on generating a profit in the short term combined with customer-oriented product design.

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.

The Deka Group uses significant unobservable inputs in the valuation model for less structured trading issues and in the corresponding economic hedging derivatives. In cases involving these financial instruments, the Deka Group recognises the difference between the fair value as at the reporting date and the transaction price in the carrying value, deferring the recognition of gains/losses. These are recognised over the average term of the financial instruments in question (see note [68] "Fair value disclosures").

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. The Group applies the general hedge accounting provisions set out in IFRS 9 to present hedges.

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. For those currencies in which the LIBOR replacement has already been implemented (JPY, CHF and GBP), the hedged interest component of the underlying transactions is calculated as the change in the fair value of the underlying transaction due to a change in the risk-free rate swap curve for the matching currency. For all other currencies, the hedged interest component of the underlying transactions is calculated as the change in the 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 currency-specific swap rate or, for those interest rate benchmarks that have already been switched over, the currency-specific risk-free rate 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".

For those currencies in which the LIBOR replacement has not yet been made, the expected ineffectiveness in the interest rate fair value hedges results primarily from the difference in discounting between the underlying and hedging transactions. 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, where appropriate, 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. These interest rate-related causes play less of a role for those currencies in which the LIBOR replacement has already been implemented (JPY, CHF and GBP) insofar as risk-free rate interest rates are contracted for the variable leg of the hedging derivative in line with standard ISDA interest rate conventions (compounded RFR, fixing in arrears).

Fair value hedges for currency risks

The Deka Group recognises 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. 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 and securities 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. As soon as the credit risk begins to dominate the changes in value of a financial asset, the asset is excluded from the group of underlying transactions as a whole. A hedge is to be dissolved on a pro rata basis in the event of overhedging.

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. Ineffectiveness is largely eliminated for those currencies in which the LIBOR replacement has already been implemented (JPY, CHF and GBP) insofar as risk-free rate interest rates are contracted for the hedging derivative in line with standard ISDA interest rate conventions (compounded RFR, fixing in arrears).

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] "Profit or loss from fair value hedges", note [49] "Positive market values of derivative hedging instruments", note [59] "Negative market values of derivative hedging instruments", note [67] "Result by measurement category" and note [73] "Further information on hedge accounting" provide detailed quantitative information on fair value hedges for interest rate risks and 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

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 defined 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 2021, 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 twenty 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 2021, 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 2021, 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 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.

Separate provisions 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.

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.

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.

$$\mathrm{ECL} := \sum_{i \geq \mathrm{Stichtag}} \mathrm{EAD_i} \cdot \mathrm{PD_i} \cdot \mathrm{LGD_i} \cdot \mathrm{DF_i}$$

ECL	=	expected credit loss at calculation date
EAD_i	=	exposure at time i
PD_i	=	marginal probability of default during the period from i to i+1
LGD_i	=	loss given default at time i
DF_i	=	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 for the scenarios used to calculate risk provisions as at 31 December 2021: baseline scenario = 65%, negative scenario = 20% and positive scenario = 15%) 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. The factors for Germany for the forecast period (2021-2023) are shown in the table below:

Inputs	**Baseline scenario**	**Negative scenario**	**Positive scenario**
Unemployment rate (%)	5.1 to 5.7	5.6 to 7.0	3.6 to 5.7
Annual rate of change in GDP (%)	1.2 to 3.5	−0.5 to 2.6	1.3 to 6.0
Annual rate of change Consumer Price Index (%)	1.6 to 3.1	0.9 to 3.1	2.0 to 4.0
Annual rate of change Leading Share Index (%)	3.8 to 14.4	−6.3 to 14.4	11.3 to 21.4
Short-term interest rates (%)	−0.5	−0.6 to −0.5	−0.5 to 0.1
Long-term interest rates (%)	−0.3 to 0.2	−0.6 to −0.3	−0.3 to 1.2
Annual rate of change in the exchange rate EUR/USD (%)	−3.69 to 3.71	−9.72 to 3.71	3.71 to 9.72
Brent oil price (USD per barrel)	68.0 to 75.0	71.0 to 119.2	41.6 to 71.0

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.

The Bank continued to apply its established process for calculating risk provisions as of the reporting date, even against the backdrop of the coronavirus pandemic. Given the particular risks in the context of the COVID-19 pandemic and, in particular, the Omicron variant that emerged at the end of 2021, the assumptions and parameters used to calculate risk provisions were once again reviewed and updated as part of the Bank's risk management processes.

Due to the particular impact on the aviation industry and sections of the real estate industry (particularly hotels and shopping centres), the decision was made to double the probability of default (PD) used to calculate expected credit losses for borrowers in the aircraft financing rating module and for certain borrowers in the real estate financing rating module as at 31 December 2021. This post-model adjustment, which was based on expert estimates and the analysis of observable historical data, was applied to reflect the need to consider all available, up-to-date customer and macroeconomic data as at the reporting date. In the reporting year, this had an effect of €13.9m on aircraft financing and €6.4m on real estate financing.

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 to 15
Technical equipment and machines	2 to 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.

This item also includes 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

The dissolution of the atypical silent partnerships (see information in note [30] "Atypical silent capital contributions") by adding the atypical silent capital contributions to DekaBank's capital reserve means that, effective 1 January 2021, DekaBank is a "normal" corporation whose entire income for tax purposes is subject to taxation. This means that DekaBank no longer attributes a proportion (previous year: 45.6%) of its income for tax purposes to atypical silent partners. The applicable combined tax rate (trade tax plus 15.0% corporation tax and a solidarity surcharge of 5.5%) is 31.9% (previous year: also 31.9% due to the obligation to bear the tax expense of the atypical silent partners).

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 always 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 base. 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 largely 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 represent liabilities that are uncertain in terms of their amount or maturity. They are recognised for present obligations arising from past events, provided that an outflow of resources embodying economic benefits is probable and the amount of the obligation can be estimated reliably.

Provisions are recognised on a best estimate basis in the amount of the net present value of the expected utilisation. 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 scenario. Accordingly, other scenarios could lead to a lower provision 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").

On 10 November 2021 ("closing date"), the atypical silent partnerships of DSGV ö.K. and Deka Erwerbsgesellschaft mbH & Co. KG were dissolved and contributed to DekaBank. The contribution was made by means of the contribution in kind of the atypical silent partnerships to the capital reserve in connection with a cash capital increase amounting to €10.6 thousand (the "transformation of atypical silent partnership"). The contribution of the atypical silent partnerships to the capital reserve and the implementation of the cash capital increase results in a corresponding change in equity. As a result, the capital reserve increased by the nominal amount of the atypical silent capital contributions. At the same time, DekaBank acquired a small volume of future tax reduction potential as part of the recognition of the tax carrying values of the contributing partners. This was offset by a compensation payment of €2.3m, which was also offset against the capital reserve. All in all, this means that the capital reserve increased by €50.1m.

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, as well as the atypical silent partnerships that were dissolved and contributed to DekaBank in the reporting year (see information in note [30] "Atypical silent capital contributions").

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 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.

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 also posted to the revaluation reserve.

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 is not included as it is reported in trading profit or loss.

€m	2021	2020	Change
Interest income from			
Financial assets measured at amortised cost	**462.0**	**569.1**	–107.1
thereof: lending and money market transactions	379.4	477.2	–97.8
thereof: fixed-interest securities	82.6	91.9	–9.3
Financial assets measured at fair value through other comprehensive income	**4.6**	**10.8**	–6.2
thereof: fixed-interest securities	4.6	10.8	–6.2
Financial assets measured at fair value through profit or loss	**152.8**	**182.8**	–30.1
Trading portfolio			
thereof: lending and money market transactions	4.4	23.1	–18.8
thereof: interest rate derivatives (economic hedges)	132.1	123.1	8.9
Financial assets mandatorily measured at fair value through profit or loss			
thereof: lending and money market transactions	5.2	10.9	–5.6
thereof: fixed-interest securities	1.4	17.2	–15.8
thereof: current income from shares and other non-fixed-interest securities	8.7	7.6	1.1
thereof: current income from equity investments	1.0	0.9	0.1
Hedge derivatives (hedge accounting)	**43.3**	**25.3**	18.0
Negative interest from liabilities	**159.1**	**136.6**	22.5
Total interest income	**821.8**	**924.6**	–102.8
Interest expenses for			
Financial liabilities measured at amortised cost	**142.7**	**218.0**	–75.3
thereof: lending and money market transactions	77.5	112.6	–35.1
thereof: securitised liabilities	32.0	74.0	–41.9
thereof: subordinated liabilities	33.2	31.4	1.8
Financial liabilities measured at fair value through profit or loss	**220.0**	**298.9**	–78.9
Trading portfolio			
thereof: lending and money market transactions	16.4	24.4	–8.0
thereof: interest rate derivatives (economic hedges)	181.7	243.5	–61.8
Financial liabilities designated at fair value			
thereof: lending and money market transactions	21.8	31.0	–9.2
thereof: securitised liabilities	–	–	–
Hedge derivatives (hedge accounting)	**157.9**	**133.6**	24.3
Negative interest on money-market transactions and fixed-interest securities	**129.0**	**117.5**	11.5
Total interest expenses	**649.6**	**768.0**	–118.4
Net interest income	**172.2**	**156.6**	15.6

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), as well as the expenses and income resulting from the change in provisions for credit risks for loan commitments and financial guarantee contracts, insofar as 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	2021	2020	Change
Allocation to risk provisions/provisions for credit risks	–113.2	–172.8	59.6
Reversal of risk provisions/provisions for credit risks	94.2	9.9	84.2
Direct write-downs on receivables	–0.4	–0.2	–0.2
Income on written-down receivables	0.9	0.7	0.2
Net income from modifications in the lending business (stage 3 or POCI)	0.0	0.2	–0.2
Risk provisions in the lending business	**–18.5**	**–162.1**	143.6
Allocation to risk provisions	–0.5	–16.7	16.2
Reversal of risk provisions	19.6	0.8	18.7
Direct write-downs on securities	–	–	–
Net income from modifications in the securities business (stage 3 or POCI)	–	–	–
Risk provisions in the securities business	**19.1**	**–15.8**	34.9
Risk provisions in the lending and securities business	**0.6**	**–178.0**	178.6

The drop in expenses for risk provisions is mainly due to one-off effects from the previous year. As in the previous year, there was once again an increased need in the reporting year for risk provisions in the transport and real estate financing segments, which were hit particularly hard by the COVID-19 crisis. However, improved credit ratings and transfers to other stages, as well as disposals of certain exposures, led to provisions being reversed.

34 Net commission income

Net commission income by type of service is as follows:

€m	2021	2020	Change
Commission income from			
Investment fund business	3,054.1	2,478.7	575.4
Securities business	228.2	179.2	49.0
Lending business	20.7	17.1	3.6
Other	19.9	22.5	–2.6
Total commission income	**3,322.9**	**2,697.5**	625.4
Commission expenses for			
Investment fund business	1,573.0	1,308.0	265.0
Securities business	118.5	71.9	46.6
Lending business	2.8	4.5	–1.7
Other	4.6	4.2	0.4
Total commission expenses	**1,698.9**	**1,388.6**	310.3
Net commission income	**1,624.0**	**1,308.9**	315.1

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 business divisions.

In the Asset Management Securities business 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 business 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 business 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 business 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 business division.

Of the net commission income of €1,624.0m (previous year: €1,308.9m), €999.9m (previous year: €741.8m) is attributable to the Asset Management Securities business division, €334.3m (previous year: €294.4m to the Asset Management Real Estate business division, €220.7m (previous year: €205.5m) to the Asset Management Services business division, €53.4m (previous year: €60.1m) to the Capital Markets business division and €18.1m (previous year: €12.7m) 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. The net income from derecognition is mainly due to sales of registered and bearer bonds with no detrimental impact on the business model, as well as to the unscheduled repayment of loans.

€m	**2021**	**2020**	Change
Gains arising from the derecognition of financial assets measured at amortised costs	16.8	78.4	–61.6
Losses arising from the derecognition of financial assets measured at amortised costs	0.3	0.3	–0.0
Profit or loss arising from the derecognition of financial assets measured at amortised costs	**16.5**	**78.1**	–61.6

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. In general, the net interest income from derivative and non-derivative financial instruments in this sub-category is also reported under this item. However, net interest income from economic hedging derivatives (banking book portfolios) is reported under net interest income.

€m	2021	2020	Change
Sale and valuation results	514.5	366.8	147.7
Net interest income and current income from trading transactions	–326.8	–209.6	–117.2
Foreign exchange profit or loss	–10.0	12.6	–22.6
Commission	–18.3	–17.7	–0.6
Trading profit or loss	**159.4**	**152.1**	7.3

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	2021	2020	Change
Sale and valuation results	6.2	–14.0	20.2
Commission	0.1	0.5	–0.3
Profit or loss on financial assets mandatorily measured at fair value	**6.4**	**–13.5**	19.9

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	2021	2020	Change
Sale and valuation results	25.5	25.2	0.3
Commission	–	–	–
Profit or loss on financial instruments designated at fair value	**25.5**	**25.2**	0.3

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	2021	2020	Change
Interest rate fair value hedges			
Net valuation result from hedging financial assets	8.8	13.5	–4.7
Net valuation result from hedging financial liabilities	–5.6	–4.3	–1.3
Currency fair value hedges			
Net valuation result from hedging financial assets	9.1	–9.7	18.8
Profit or loss from fair value hedges	**12.3**	**–0.5**	12.8

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	2021	2020	Change
Sale results	0.0	–0.1	0.1
Commission	–	–	–
Net income from equity-accounted companies	0.0	–0.0	0.0
Profit or loss on financial investments	**0.1**	**–0.1**	0.2

41 Administrative expenses

Administrative expenses comprise personnel expenses, other administrative expenses and depreciation and amortisation. The breakdown of the items is as follows:

€m	2021	2020	Change
Personnel expenses			
Wages and salaries	479.8	433.2	46.6
Social security contributions	61.2	56.6	4.5
Allocation to/reversals of provisions for pensions and similar commitments	30.9	36.9	−6.0
Expenses for defined contribution plans	6.0	5.5	0.6
Other expenses for retirement pensions and benefits	−1.2	2.5	−3.7
Total personnel expenses	**576.7**	**534.7**	42.1
Other administrative expenses			
Consultancy expenses	137.9	134.3	3.5
Computer equipment and machinery	96.2	93.3	2.8
Bank levy and deposit guarantee scheme	79.5	72.8	6.7
IT information services	65.5	43.9	21.7
Marketing and sales expenses	37.5	37.6	−0.1
Subscriptions and fees	37.8	33.4	4.4
Lump sum fees for fund administration services	16.4	24.7	−8.4
Rentals and expenses for buildings	17.7	16.9	0.8
Postage/telephone/office supplies	18.2	16.5	1.6
Other administrative expenses	38.4	34.9	3.5
Total other administrative expenses	**545.0**	**508.4**	36.6
Depreciation and amortisation of property, plant and equipment	44.9	42.4	2.5
Depreciation and amortisation of intangible assets	16.6	13.2	3.4
Total depreciation and amortisation	**61.5**	**55.6**	5.9
Administrative expenses	**1,183.3**	**1,098.7**	84.6

The increase in administrative expenses can be traced back to higher personnel expenses due to the improved business development, as well as a higher number of employees due to the acquisition of IQAM Invest GmbH. There was also an increase in other administrative expenses due primarily to higher expenses for IT information services, a higher bank levy and higher subscriptions and fees.

Other administrative expenses primarily include expenses for outsourced services, expenses for the annual accounts and auditing, and relocation expenses.

The increase in depreciation and amortisation is the result of intangible assets acquired as part of a business combination (see note [7] "Scope of consolidation") and the move into the new office building in Frankfurt am Main in December 2021. The new office building is reported in property, plant and equipment under leasing assets (see note [52] "Property, plant and equipment").

Administrative expenses include expenses of €3.2m (previous year: €2.7m) from leases of low-value assets in non-short-term leases. As in the previous year, no expenses from short-term leases were incurred in the 2021 reporting year.

42 Other operating profit

The breakdown of other operating profit is as follows:

€m	2021	2020	Change
Income from repurchased debt instruments	**–7.5**	**–2.1**	–5.4
Other operating income			
Reversal of provisions for restructuring	14.1	0.1	13.9
Reversal of other provisions	0.8	0.5	0.2
Rental income	0.7	1.1	–0.3
Other income	15.6	16.0	–0.4
Total other operating income	**31.2**	**17.7**	13.5
Other operating expenses			
VAT on provision of intra-Group services	13.2	13.8	–0.6
Expenses for restructuring	2.6	20.0	–17.4
Other taxes	0.3	0.3	–0.0
Other expenses	49.8	26.1	23.7
Total other operating expenses	**65.9**	**60.2**	5.7
Other operating profit	**–42.3**	**–44.6**	2.3

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.

In the 2021 reporting year, other expenses included interest expenses from lease liabilities amounting to €1.0m (previous year: €1.2m).

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	2021	2020	Change
Current tax expense in financial year	252.3	121.2	131.1
Current tax expense/income (–) in previous years	–3.2	–15.8	12.6
Current tax expense	**249.1**	**105.4**	143.7
Effect of origination and reversal of temporary differences	2.3	9.6	–7.3
Effect of origination and reversal of permanent differences	2.0	10.0	–8.0
Prior-year deferred tax income	1.5	14.6	–13.1
Deferred tax expense	**5.8**	**34.2**	–28.4
Total income tax expense	**254.9**	**139.6**	115.3

The contribution of the atypical silent partnerships to the capital reserve (see information in note [30] "Atypical silent capital contributions") in accordance with the provisions set out in the German Reorganisation Tax Act (*Umwandlungssteuergesetz*) with retroactive effect for tax purposes as of 31 December 2020/ 1 January 2021, resulted in the atypical silent partnerships being dissolved. This also meant that, with effect from 1 January 2021, the attribution, for tax purposes, of a proportion of DekaBank's income to the atypical silent partnerships and the associated entitlement to reclaim from DekaBank the income tax payable on this amount (corporation tax and solidarity surcharge) also ended. This now only applies on a transitional basis for any adjustments to the tax assessment bases of previous years. DekaBank is now subject to the applicable tax rates (corporation tax 15.0%, solidarity surcharge 5.5% and the relevant trade tax depending on the local tax factor) for its entire profit. Overall, as in the previous year, the combined tax rate for the companies in the DekaBank income tax group is 31.9%. The tax rate of 31.9% (previous year: 31.9%) is also applied for the measurement of deferred 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. In the Deka Verwaltungsgesellschaft Luxembourg S.A. tax group, this tax rate remains unchanged at 24.94%.

The origination or reversal of temporary differences led to deferred tax expenses of €2.3m (previous year: €9.6m). The current tax income for previous years amounting to €3.2m is attributable to several Group companies (previous year: €15.8m, almost exclusively attributable to DekaBank). The following statement reconciles the result before tax with the tax expense:

€m	2021	2020	Change
Total of profit or loss before tax	791.4	385.5	405.9
x income tax rate	31.90%	31.90%	–
= Anticipated income tax expense in financial year	**252.5**	**123.0**	129.5
Increase from taxes due to non-deductible expenses	24.5	32.0	–7.5
Decrease from taxes on tax-exempt income	4.5	1.6	2.9
Withholding tax	0.7	0.1	0.6
Tax effect of special funds	0.2	–0.0	0.2
Effects of tax rate changes	–	–	–
Tax effect of holdings accounted for under the equity method	–0.0	0.0	–0.0
Tax effects from past periods	–1.7	–1.1	–0.6
Effect of the distribution of the AT1 bond	–9.4	–9.1	–0.3
Effects of differing effective tax rates	–9.2	–5.3	–3.9
Other	1.8	1.6	0.2
Tax expenses according to IFRS	**254.9**	**139.6**	115.3

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. By contrast, the change in the deferred tax liability in connection with future capital repayments by Deka Verwaltungsgesellschaft Luxembourg S.A. is down considerably in a year-on-year comparison.

The tax-free income is attributable, among other things, to valuation gains at an affiliated company, as well as to gains/income from various mutual funds in the liquidity reserve. The prior-year effect was caused largely by the sale of an affiliated company.

Notes to the statement of financial position

44 Cash reserves

The breakdown in cash reserves is as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Cash on hand	3.5	3.5	0.0
Balances with central banks	15,979.0	9,203.2	6,775.7
Total	**15,982.4**	**9,206.7**	6,775.7

The required minimum reserve was maintained at all times during the reporting year and amounted to €284.5m at the reporting date (previous year: €231.5m).

45 Due from banks

Amounts due from banks can be broken down by business type as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Current accounts	360.7	377.2	–16.5
Daily and time deposits	5,322.1	5,010.1	312.0
Lending business	1,838.1	2,553.0	–714.9
Genuine repurchase agreements and collateralised securities lending transactions	6,297.0	8,410.2	–2,113.2
Due from banks before risk provisions	**13,817.9**	**16,350.5**	–2,532.6
Risk provisions in the lending business	–0.1	–0.3	0.2
Total	**13,817.8**	**16,350.2**	–2,532.4

The breakdown of amounts due from banks by region is as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Domestic banks	8,050.6	6,214.4	1,836.2
Foreign banks	5,767.3	10,136.1	–4,368.8
Due from banks before risk provisions	**13,817.9**	**16,350.5**	–2,532.6
Risk provisions in the lending business	–0.1	–0.3	0.2
Total	**13,817.8**	**16,350.2**	–2,532.4

46 Due from customers

Amounts due from customers can be broken down by business type as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Current accounts	453.7	242.8	210.9
Daily and time deposits	1,329.5	1,224.3	105.2
Lending business	22,394.0	21,134.3	1,259.7
Genuine repurchase agreements and collateralised securities lending transactions	6,556.3	2,200.4	4,355.9
Due from customers before risk provisions	**30,733.5**	**24,801.8**	5,931.7
Risk provisions in the lending business	–172.9	–185.4	12.5
Total	**30,560.6**	**24,616.4**	5,944.2

The breakdown of amounts due from customers by region is as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Domestic borrowers	11,367.5	7,144.9	4,222.6
Foreign borrowers	19,366.0	17,656.9	1,709.1
Due from customers before risk provisions	**30,733.5**	**24,801.8**	5,931.7
Risk provisions in the lending business	– 172.9	– 185.4	12.5
Total	**30,560.6**	**24,616.4**	5,944.2

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 2021 were as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Risk provisions in the lending business	**179.1**	**191.1**	– 12.0
Risk provisions for loan losses – due from banks	0.1	0.3	– 0.2
Risk provisions for loan losses – due from customers	172.9	185.4	– 12.5
Provisions for credit risks from off-balance sheet commitments	6.1	5.4	0.7
Risk provisions in the securities business	**5.5**	**24.5**	– 19.0
Risk provisions for securities[1]	5.5	24.5	– 19.0
Total	**184.6**	**215.6**	– 31.0

[1] Including risk provisions for financial assets measured at fair value through other comprehensive income

Movements in risk provisions in 2021 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 2021	**0.3**	**0.0**	**–**	**0.3**
Transfer to other stages	–	–0.0	–	–0.0
Transfer from other stages	0.0	–	–	0.0
Change in position including new business	–0.1	–0.0	–	–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 2021	**0.1**	**–**	**–**	**0.1**
Due from customers				
Position as at 1 January 2021	**10.5**	**51.9**	**123.0**	**185.4**
Transfer to other stages	–0.3	–1.5	–0.1	–1.9
Transfer from other stages	1.6	0.3	–	1.9
Change in position including new business	0.2	–2.6	–20.6	–23.0
Allocation	3.3	33.8	36.2	73.3
Reversal	–4.8	–15.4	–16.7	–36.8
Utilisation	–	–	–44.3	–44.3
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–0.0	5.2	0.1	5.3
Changes in the scope of consolidation	–	–	–	–
Exchange rate-related and other changes	0.4	3.9	8.8	13.1
Position as at 31 December 2021	**10.9**	**75.6**	**86.4**	**172.9**
Financial investments				
Position as at 1 January 2021	**2.9**	**21.0**	**–**	**23.9**
Transfer to other stages	–	–0.7	–	–0.7
Transfer from other stages	0.7	–	–	0.7
Change in position including new business	–0.1	–1.5	–	–1.6
Allocation	0.4	0.1	–	0.4
Reversal	–1.5	–16.1	–	–17.6
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	0.0	–	0.1
Position as at 31 December 2021	**2.4**	**2.8**	**–**	**5.2**

€m	Stage 1	Stage 2	Stage 3	Total
Due from banks				
Position as at 1 January 2020	**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	–0.0	–	0.1
Allocation	0.1	0.0	–	0.1
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 2020	**0.3**	**0.0**	**–**	**0.3**
Due from customers				
Position as at 1 January 2020	**9.3**	**8.0**	**72.0**	**89.3**
Transfer to other stages	–2.2	–1.9	–	–4.1
Transfer from other stages	0.1	2.0	2.0	4.1
Change in position including new business	–0.4	–0.8	–2.3	–3.5
Allocation	3.3	47.4	115.4	166.1
Reversal	0.6	–2.7	–4.1	–6.2
Utilisation	–	–	–52.5	–52.5
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–0.0	1.2	0.9	2.1
Changes in the scope of consolidation	–	–	–	–
Exchange rate-related and other changes	–0.2	–1.3	–8.4	–9.9
Position as at 31 December 2020	**10.5**	**51.9**	**123.0**	**185.4**
Financial investments				
Position as at 1 January 2020	**2.9**	**5.0**	**–**	**7.9**
Transfer to other stages	–1.0	–0.0	–	–1.0
Transfer from other stages	0.0	1.0	–	1.0
Change in position including new business	–0.1	–0.3	–	–0.4
Allocation	1.2	15.8	–	17.0
Reversal	–0.0	–0.4	–	–0.4
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	–0.1	–0.1	–	–0.2
Position as at 31 December 2020	**2.9**	**21.0**	**–**	**23.9**

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 2021	**0.6**	**–**	**–**	**0.6**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	0.0	–	–	0.0
Allocation	0.0	–	–	0.0
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 2021	**0.3**	**–**	**–**	**0.3**

€m	Stage 1	Stage 2	Stage 3	Total
Financial investments				
Position as at 1 January 2020	**0.9**	**–**	**–**	**0.9**
Transfer to other stages	−0.1	–	–	−0.1
Transfer from other stages	0.1	–	–	0.1
Change in position including new business	−0.6	–	–	−0.6
Allocation	0.5	–	–	0.5
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 2020	**0.6**	**–**	**–**	**0.6**

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 2021	**0.7**	**4.7**	**0.0**	**5.4**
Transfer to other stages	–	−0.0	–	−0.0
Transfer from other stages	0.0	–	–	0.0
Change in position including new business	0.4	−0.3	−0.2	−0.0
Allocation	0.2	3.8	0.2	4.2
Reversal	−0.4	−3.2	–	−3.6
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	0.2	−0.0	0.2
Position as at 31 December 2021	**0.9**	**5.2**	**0.0**	**6.1**

€m	Stage 1	Stage 2	Stage 3	Total
Loan commitments and financial guarantee contracts				
Position as at 1 January 2020	**0.9**	**0.0**	**0.0**	**0.9**
Transfer to other stages	–0.1	–	–	–0.1
Transfer from other stages	–	0.1	–	0.1
Change in position including new business	–0.3	–0.0	–	–0.3
Allocation	0.3	4.7	0.0	5.0
Reversal	–0.2	–0.0	–	–0.2
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.1	–0.1	–0.0	0.0
Position as at 31 December 2020	**0.7**	**4.7**	**0.0**	**5.4**

The calculation of risk provisions is based on three probability-weighted macroeconomic scenarios (see note [17] “Risk provisions in the lending and securities business”). In order to examine the sensitivity of the ECL model to possible future developments, the Bank performed further calculations related to stages 1 and 2 of the impairment model. An extreme weighting of 100% for each of the scenarios on which the ECL calculation is based (baseline, negative and positive scenario) was applied. In the baseline scenario, risk provisions would be approximately 3% higher, while they would be approximately 11% higher in the negative scenario and around 3% lower in the positive scenario.

Movements in the gross carrying values relevant to risk provisions and committed/guaranteed amounts were as follows in 2021:

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 2021	**5,423.6**	**118.8**	**–**	**5,542.4**
Transfer to other stages	–	–95.7	–	–95.7
Transfer from other stages	95.7	–	–	95.7
Change in position including new business	–784.6	–23.8	–	–808.4
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	10.5	0.7	–	11.2
Position as at 31 December 2021	**4,745.2**	**–**	**–**	**4,745.2**
Due from customers				
Position as at 1 January 2021	**16,006.7**	**4,795.7**	**506.2**	**21,308.6**
Transfer to other stages	–660.4	–2,009.9	–50.6	–2,720.9
Transfer from other stages	2,060.5	660.4	–	2,720.9
Change in position including new business	1,790.4	–569.2	–116.1	1,105.1
Derecognition	–	–	–44.6	–44.6
Changes due to non-substantial modifications	–	1.7	0.0	1.7
Change in the scope of consolidation	–	–	–	–
Currency effects	536.2	274.1	35.3	845.6
Position as at 31 December 2021	**19,733.4**	**3,152.8**	**330.2**	**23,216.4**
Financial investments				
Position as at 1 January 2021	**2,867.9**	**2,233.4**	**–**	**5,101.3**
Transfer to other stages	–	–2,145.1	–	–2,145.1
Transfer from other stages	2,145.1	–	–	2,145.1
Change in position including new business	461.9	–104.7	–	357.2
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	70.9	34.2	–	105.1
Position as at 31 December 2021	**5,545.8**	**17.8**	**–**	**5,563.6**

€m	Stage 1	Stage 2	Stage 3	Total
Due from banks				
Position as at 1 January 2020	**8,916.2**	**7.1**	**–**	**8,923.3**
Transfer to other stages	–49.5	–5.9	–	–55.4
Transfer from other stages	5.9	49.5	–	55.4
Change in position including new business	–3,438.3	68.1	–	–3,370.2
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–10.7	–	–	–10.7
Position as at 31 December 2020	**5,423.6**	**118.8**	**–**	**5,542.4**
Due from customers				
Position as at 1 January 2020	**21,969.4**	**956.4**	**186.2**	**23,112.0**
Transfer to other stages	–3,956.8	–208.9	–	–4,165.7
Transfer from other stages	94.8	3,642.8	428.1	4,165.7
Change in position including new business	–1,280.5	481.5	–44.0	–843.0
Derecognition	–	–	–52.7	–52.7
Changes due to non-substantial modifications	–1.9	–0.0	0.2	–1.7
Change in the scope of consolidation	–	–	–	–
Currency effects	–818.3	–76.1	–11.6	–906.0
Position as at 31 December 2020	**16,006.7**	**4,795.7**	**506.2**	**21,308.6**
Financial investments				
Position as at 1 January 2020	**5,264.9**	**98.7**	**–**	**5,363.6**
Transfer to other stages	–2,054.9	–4.9	–	–2,059.8
Transfer from other stages	4.9	2,054.9	–	2,059.8
Change in position including new business	–227.4	84.7	–	–142.7
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–119.6	–	–	–119.6
Position as at 31 December 2020	**2,867.9**	**2,233.4**	**–**	**5,101.3**

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 2021	**5,357.0**	**–**	**–**	**5,357.0**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	–1,686.4	–	–	–1,686.4
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–	–	–	–
Position as at 31 December 2021	**3,670.6**	**–**	**–**	**3,670.6**

€m	Stage 1	Stage 2	Stage 3	Total
Financial investments				
Position as at 1 January 2020	**5,295.6**	**–**	**–**	**5,295.6**
Transfer to other stages	–58.8	–	–	–58.8
Transfer from other stages	58.8	–	–	58.8
Change in position including new business	61.4	–	–	61.4
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–	–	–	–
Position as at 31 December 2020	**5,357.0**	**–**	**–**	**5,357.0**

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 2021	**1,045.2**	**435.1**	**–**	**1,480.3**
Transfer to other stages	–	–158.0	–	–158.0
Transfer from other stages	158.0	–	–	158.0
Change in position including new business	158.2	–112.9	0.0	45.3
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	13.0	12.6	–	25.6
Position as at 31 December 2021	**1,374.4**	**176.8**	**0.0**	**1,551.2**

€m	Stage 1	Stage 2	Stage 3	Total
Loan commitments and financial guarantee contracts				
Position as at 1 January 2020	**2,032.2**	**18.4**	**–**	**2,050.6**
Transfer to other stages	–333.5	–	–	–333.5
Transfer from other stages	–	333.5	–	333.5
Change in position including new business	–612.7	84.8	–	–527.9
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–40.8	–1.6	–	–42.4
Position as at 31 December 2020	**1,045.2**	**435.1**	**–**	**1,480.3**

In the 2021 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 2021	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	**4,708.7**	**35.8**	**0.7**	**–**	**–**	**–**	**–**
Stage 1	4,708.7	35.8	0.7	–	–	–	–
Stage 2	–	–	–	–	–	–	–
Stage 3	–	–	–	–	–	–	–
Due from customers	**8,823.0**	**8,607.1**	**2,605.3**	**1,432.1**	**1,408.5**	**330.3**	**10.0**
Stage 1	8,738.7	8,283.4	1,921.6	636.5	143.2	–	9.8
Stage 2	84.3	323.7	683.7	795.6	1,265.3	–	0.2
Stage 3	–	–	–	–	–	330.3	–
Financial investments	**6,107.4**	**3,099.4**	**9.8**	**–**	**17.7**	**–**	**–**
Stage 1	6,107.4	3,099.4	9.8	–	–	–	–
Stage 2	–	–	–	–	17.7	–	–
Stage 3	–	–	–	–	–	–	–
Off-balance sheet commitments	**303.9**	**926.1**	**30.7**	**78.8**	**200.4**	**–**	**11.4**
Stage 1	303.9	926.1	30.2	75.5	27.3	–	11.4
Stage 2	–	–	0.5	3.3	173.1	–	–
Stage 3	–	–	–	–	–	–	–

[1] These are the rating grades according to DSGV master scale.

31 Dec 2020	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	**5,512.1**	**29.8**	**0.2**	**0.3**	**–**	**–**	**–**
Stage 1	5,393.3	29.8	0.2	0.3	–	–	–
Stage 2	118.8	–	–	–	–	–	–
Stage 3	–	–	–	–	–	–	–
Due from customers	**8,421.2**	**7,125.4**	**3,498.4**	**1,251.2**	**486.1**	**506.2**	**20.1**
Stage 1	8,100.6	5,606.1	1,770.4	495.1	15.4	–	19.1
Stage 2	320.6	1,519.3	1,728.0	756.1	470.7	–	1.0
Stage 3	–	–	–	–	–	506.2	–
Financial investments	**6,858.7**	**3,481.9**	**78.8**	**15.0**	**24.0**	**–**	**–**
Stage 1	5,953.0	2,271.9	–	–	–	–	–
Stage 2	905.7	1,210.0	78.8	15.0	24.0	–	–
Stage 3	–	–	–	–	–	–	–
Off-balance sheet commitments	**333.5**	**734.1**	**98.0**	**124.5**	**174.5**	**–**	**15.7**
Stage 1	304.2	575.4	98.0	5.0	46.9	–	15.7
Stage 2	29.3	158.7	–	119.5	127.6	–	–
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.

Further information on the current risk situation and concentration risks is provided in the risk report section of the management report.

The table below provides an overview of stage 1 and stage 2/3 financial assets to which minor modifications were made in the reporting year.

	2021		2020	
€m	**Stage 1**	**Stage 2/3**	**Stage 1**	**Stage 2/3**
Financial assets modified during the period				
Amortised cost before modification	189.9	728.4	1,002.4	462.8
Result from modifications	–	1.7	–1.9	0.2
Financial assets modified since initial recognition				
Gross carrying amount at the end of the reporting period of financial assets for which the loss allowance has changed during the reporting period to an amount equal to 12-month expected credit losses.	–	–	–	–

As at 31 December 2021, the portfolio did not include any financial instruments (previous year: two financial instruments with a gross carrying value of €51.9m) for which no valuation allowance was recognised due to collateral.

Key ratios for provisions for loan losses:

%	**2021**	**2020**
Reversal/allocation ratio as at reporting date[1]		
(Ratio of net allocation/-reversal to gross carrying values relevant for risk provisions)	0.00	–0.46
Default rate as at reporting date		
(Ratio of defaults to gross carrying values relevant for risk provisions)	0.11	0.14
Average default rate		
(Ratio of defaults on a 5-year average to gross carrying values relevant for risk provisions)	0.23	0.30
Net provisioning ratio as at reporting date		
(Ratio of risk provisions to gross carrying values relevant for risk provisions)	0.48	0.56

[1] Reversal ratio shown without negative lending sign

The calculations of the figures above are based on a gross carrying amount relevant for risk provisioning purposes of €38.7bn (previous year: €38.8bn).

Risk provisions by risk segment:

€m	Valuation allowances and provisions in the lending and securities business 31 Dec 2021	31 Dec 2020[3]	Defaults[1] 2021	2020[3]	Net allocations to[2]/reversals of valuation allowances and provisions for credit risk 2021	2020[3]
Customers						
Real estate sector (including real estate funds)	92.3	60.8	–0.3	–0.1	–26.2	–53.2
Transport sector	80.3	109.8	39.9	52.1	–3.1	–100.4
Energy and infrastructure	2.9	16.1	4.0	–	9.4	–7.0
Public sector	2.1	2.0	–	–	–0.1	–1.7
Industrial sector	0.6	0.4	–	–	–0.1	0.0
Other financial institutions	0.5	0.7	–	–	0.2	–0.0
Service sector	0.1	0.9	–	–	0.8	–0.7
Other	0.2	0.1	0.1	–	–0.2	0.2
Total customers	**179.0**	**190.8**	**43.7**	**52.0**	**–19.3**	**–162.9**
Banks						
Commercial banks	0.0	0.1	–	–	0.2	–0.0
Savings banks	0.1	0.1	–	–	0.1	0.1
Other financial institutions	0.0	0.1	–	–	0.0	–0.1
Total banks	**0.1**	**0.3**	**–**	**–**	**0.3**	**–0.0**
Securities						
Energy and infrastructure	3.1	7.8	–	–	4.7	–3.8
Industrial sector	0.9	4.5	–	–	3.6	–1.7
Service sector	0.7	1.3	–	–	0.6	–0.4
Commercial banks	0.6	9.0	–	–	8.4	–8.3
Transport sector	0.0	1.3	–	–	1.3	–1.2
Other	0.2	0.6	–	–	0.5	–0.4
Total securities	**5.5**	**24.5**	**–**	**–**	**19.1**	**–15.8**
Total	**184.6**	**215.6**	**43.7**	**52.0**	**0.1**	**–178.8**

[1] Includes utilisation, direct write-downs and income on written-down receivables and securities
[2] Negative in the column
[3] In the reporting year, the segmentation by risk segment was changed to create a uniform counterparty segmentation in order to reduce the complexity of risk reporting and at the same time increase transparency. Prior-year figures have been adjusted to improve comparability.

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 2021	31 Dec 2020	Change
Trading portfolio			
Debt securities and other fixed-interest securities	6,574.0	10,808.7	–4,234.7
Bonds and debt securities	6,574.0	10,808.7	–4,234.7
Money market securities	–	–	–
Shares and other non fixed-interest securities	3,422.4	2,049.6	1,372.8
Shares	2,616.6	981.2	1,635.4
Units in investment funds	805.8	1,068.4	–262.6
Positive market values of derivative financial instruments	6,263.9	8,183.9	–1,920.0
Positive market values of derivative financial instruments (trading)	6,244.1	8,091.3	–1,847.2
Positive market values of derivative financial instruments (economic hedging derivatives)	19.8	92.6	–72.8
Loan receivables	406.1	346.5	59.6
Total – trading portfolio	**16,666.4**	**21,388.7**	–4,722.3
Financial assets mandatorily measured at fair value through profit or loss			
Debt securities and other fixed-interest securities	573.1	782.2	–209.1
Bonds and debt securities	573.1	764.1	–191.0
Money market securities	–	18.1	–18.1
Shares and other non fixed-interest securities	253.5	428.3	–174.8
Shares	4.6	3.8	0.8
Units in investment funds	248.9	424.5	–175.6
Loan receivables	215.1	364.8	–149.7
Shareholdings	30.4	17.9	12.5
Equity investments	29.5	15.8	13.7
Shares in affiliated companies	0.6	0.6	–
Holdings in joint ventures	0.0	0.0	–
Shares in associated companies	0.3	1.5	–1.2
Total – financial assets mandatorily measured at fair value through profit or loss	**1,072.1**	**1,593.2**	–521.1
Total	**17,738.5**	**22,981.9**	–5,243.4

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 2021	31 Dec 2020	Change
Debt securities and other fixed-interest securities	6,256.9	8,647.9	–2,391.0
Shares and other non fixed-interest securities	2,940.0	1,467.4	1,472.5

49 Positive market values of derivative hedging instruments

The positive market values of hedging instruments that meet the criteria for hedge accounting can be broken down by underlying hedged transaction as follows:

€m	31 Dec 2021 Nominal of the hedging instruments	Carrying amount of the hedging instruments[1]	Valuation result of the hedging instruments for the reporting period[2]	31 Dec 2020 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	580.0	0.1	10.2	447.4	0.0	–0.6
Due from customers	5,377.2	19.1	190.2	3,199.6	0.8	–72.7
Financial investments	1,215.1	0.1	8.4	742.6	0.0	0.1
Financial assets measured at fair value through other comprehensive income						
Financial investments	986.0	0.5	41.5	623.4	0.1	–23.5
Financial liabilities measured at amortised cost						
Due to banks	25.0	0.0	–0.9	654.0	0.1	6.4
Due to customers	125.0	0.0	–9.7	550.6	0.2	11.0
Securitised liabilities	250.0	0.0	–17.7	1,537.5	0.3	40.8
Subordinated capital	113.0	0.0	–4.7	250.0	0.0	5.6
Currency fair value hedges						
Bottom layer financial assets	2,430.1	71.9	–167.4	8,974.4	637.2	684.0
Total	**11,101.4**	**91.6**	**49.9**	**16,979.5**	**638.7**	**651.1**

[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 2021	31 Dec 2020	Change
Financial assets measured at amortised cost			
Debt securities and other fixed-interest securities	5,600.1	5,186.0	414.1
Financial assets measured at fair value through other comprehensive income			
Debt securities and other fixed-interest securities	3,679.6	5,388.7	–1,709.1
Shareholdings			
Shares in equity-accounted companies	16.4	16.4	0.0
Financial investments before risk provisions	**9,296.1**	**10,591.1**	–1,295.0
Risk provisions for securities (AC)	–5.2	–23.9	18.7
Total	**9,290.9**	**10,567.2**	–1,276.3

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 2021	31 Dec 2020	Change
Debt securities and other fixed-interest securities	7,921.7	9,133.5	–1,211.8

51 Intangible assets

€m	31 Dec 2021	31 Dec 2020	Change
Purchased goodwill	155.9	148.1	7.8
Software	21.6	24.9	–3.3
Purchased	14.9	19.4	–4.5
Developed in-house	6.7	5.5	1.2
Other intangible assets	22.1	9.0	13.1
Total	**199.6**	**182.0**	17.6

Purchased goodwill includes goodwill arising on the acquisition of Deka Vermögensmanagement GmbH in the amount of €95.0m. The item also includes goodwill from IQAM Invest GmbH and IQAM Partner GmbH, which were acquired in the first half of 2021, totalling €7.8m. For the purposes of impairment testing as at 31 December 2021, the goodwill resulting from the acquisition of Deka Vermögensmanagement GmbH, IQAM Invest GmbH and IQAM Partner GmbH was 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 for this was carried out at the level of the Asset Management Real Estate business division in the course of normal testing procedures as at 31 December 2021. For more detailed information on the acquisition of the two companies, please see note [7] "Scope of consolidation".

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. Due to the impact of the COVID-19 pandemic, another scenario was calculated as part of the assessment.

The performance of the Asset Management Securities business 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 2026. The long-term growth rate is 0.00% (previous year: 0.50%). The discount rate was 8.94% (previous year: 8.91%). 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.

Internal forecasts based on national economic data and specific competition and market analyses were used for the Asset Management Real Estate business 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 2025 and 2026, 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. A perpetual return based on the forecast for 2026 was also taken into account and a long-term growth rate of 0.00% (previous year: 0.50%) was assumed. The discount rate was 7.31% (previous year: 7.13%). 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 and IQAM Partner 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 2020	238.7	195.5	84.9	29.8	548.9
Additions	–	9.4	2.5	–	11.9
Disposals	–	0.6	–	–	0.6
Change in scope of consolidation	–	1.7	0.8	–	2.4
As at 31 December 2020	**238.7**	**206.0**	**88.1**	**29.8**	**562.6**
Additions	–	5.0	2.2	–	7.2
Disposals	–	111.1	–	–	111.1
Change in scope of consolidation	7.8	1.5	3.7	15.7	28.7
As at 31 December 2021	**246.5**	**101.4**	**94.0**	**45.5**	**487.4**
Cumulative amortisation/impairment					
As at 1 January 2020	90.6	176.1	79.0	19.5	365.2
Amortisation/impairment	–	9.1	2.8	1.3	13.2
Disposals	–	0.3	–	–	0.3
Change in scope of consolidation	–	1.7	0.8	–	2.4
As at 31 December 2020	**90.6**	**186.6**	**82.6**	**20.8**	**380.6**
Amortisation/impairment	–	9.2	4.7	2.6	16.5
Disposals	–	110.6	–	–	110.6
Change in scope of consolidation	–	1.3	–	0.0	1.3
As at 31 December 2021	**90.6**	**86.5**	**87.3**	**23.4**	**287.8**
Carrying value as at 1 December 2020	**148.1**	**19.4**	**5.5**	**9.0**	**182.0**
Carrying value as at 1 December 2021	**155.9**	**14.9**	**6.7**	**22.1**	**199.6**

52 Property, plant and equipment

€m	31 Dec 2021	31 Dec 2020	Change
Plant and equipment	19.1	16.9	2.2
Technical equipment and machines	7.4	3.0	4.4
Right-of-use assets for leases (leasing assets)	264.4	122.0	142.4
Total	**290.9**	**141.9**	149.0

The increase in leasing assets is related to the move into the new office building in Frankfurt am Main in December 2021. The new lease will run for 20 years.

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 2020	47.4	61.9	186.2	7.6	1.4	304.5
Additions	0.3	1.0	3.2	2.7	–	7.2
Disposals	0.0	0.1	1.9	0.0	–	2.0
Change in currency translation	–0.0	–0.0	–	–	–	–0.0
As at 31 December 2020	**47.7**	**62.7**	**187.5**	**10.3**	**1.4**	**309.6**
Additions	4.4	6.6	180.3	2.1	0.2	193.6
Disposals	10.4	46.4	–	0.0	–	56.8
Change in currency translation	0.0	0.0	–	–	–	0.0
Change in scope of consolidation	0.9	0.3	0.4	–	–	1.6
As at 31 December 2021	**42.6**	**23.3**	**368.1**	**12.4**	**1.6**	**448.0**
Cumulative amortisation/impairment						
As at 1 January 2020	29.1	57.9	35.6	2.4	0.5	125.5
Amortisation/impairment	1.7	2.0	35.7	2.5	0.5	42.4
Disposals	–	0.1	–	–	–	0.1
Change in currency translation	0.0	0.0	–	–	–	0.0
As at 31 December 2020	**30.8**	**59.7**	**71.3**	**4.9**	**1.0**	**167.7**
Amortisation/impairment	2.0	2.3	37.4	2.7	0.4	44.8
Disposals	10.1	46.4	–	–	–	56.5
Change in currency translation	–0.0	–0.0	–	–	–	–0.0
Change in scope of consolidation	0.8	0.3	–	–	–	1.0
As at 31 December 2021	**23.5**	**15.9**	**108.7**	**7.6**	**1.4**	**157.1**
Carrying value as at 31 December 2020	**16.9**	**3.0**	**116.2**	**5.4**	**0.4**	**141.9**
Carrying value as at 31 December 2021	**19.1**	**7.4**	**259.4**	**4.8**	**0.2**	**290.9**

53 Income tax assets

€m	31 Dec 2021	31 Dec 2020	Change
Current income tax assets	197.9	195.1	2.8
Deferred income tax assets	265.8	289.2	–23.4
Total	**463.7**	**484.3**	–20.6

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 base.

In the year under review, deferred tax assets included €2.4m in relation to tax loss carry-forwards at one Group company (previous year: €4.4m at three companies).

Deferred tax assets were recognised in relation to the following line items:

€m	31 Dec 2021	31 Dec 2020	Change
Asset items			
Due from customers	10.4	0.1	10.3
Financial assets at fair value	0.4	0.2	0.2
Intangible assets	52.2	61.3	–9.1
Other assets	0.1	1.7	–1.6
Liability items			
Due to banks	0.3	5.5	–5.2
Due to customers	26.4	40.9	–14.5
Securitised liabilities	–	10.8	–10.8
Financial liabilities at fair value	169.3	214.1	–44.8
Negative market values of derivative hedging instruments	105.0	183.3	–78.3
Provisions	168.1	187.1	–19.0
Other liabilities	89.7	41.2	48.5
Subordinated capital	0.3	2.7	–2.4
Loss carryforwards	**2.4**	**4.4**	–2.0
Sub-total	**624.6**	**753.3**	–128.7
Netting	–358.8	–464.1	105.3
Total	**265.8**	**289.2**	–23.4

Reported deferred tax assets include €235.5m (previous year: €177.3m) that are medium or long-term in nature.

As at the balance sheet date, four Group companies had unrecognised loss carryforwards of €2.2m (previous year: four companies with unrecognised losses of €1.5m). 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.

At the reporting date, as in the previous year, there were no outside basis differences that would have led to the recognition of deferred tax assets.

Deferred income tax assets amounting to €74.7m in connection with provisions for pensions (previous year: €95.5m) were offset against equity. In addition, deferred tax assets of €0.6m for creditworthiness-related fair value changes to financial liabilities designated at fair value were offset against equity (previous year: €0.7m). Finally, deferred tax assets of €6.4m were recognised for currency fair value hedges (previous year: €4.3m).

54 Other assets

€m	31 Dec 2021	31 Dec 2020	Change
Amounts due from investment funds	234.9	177.1	57.8
Amounts due from non-banking business	3.6	34.1	– 30.5
Amounts due or refunds from other taxes	0.7	1.5	– 0.9
Other miscellaneous assets	155.0	94.4	60.6
Prepaid expenses	34.8	32.7	2.1
Total	**428.9**	**339.8**	89.2

Other provisions include €0.1m (previous year: €2.6m) 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 2021	31 Dec 2020	Change
Overdrafts	307.0	510.7	– 203.7
Daily and time deposits	9,358.4	10,958.2	– 1,599.8
Promissory note loans and registered bonds	2,226.6	2,617.5	– 390.9
Collateralised registered bonds and promissory note loans	142.9	112.8	30.1
Unsecured registered bonds and promissory note loans	2,083.7	2,504.7	– 421.0
Genuine repurchase agreements and collateralised securities lending transactions	4,812.5	2,910.7	1,901.8
Borrowings	186.1	143.5	42.6
Total	**16,890.6**	**17,140.6**	– 250.0

The regional breakdown of amounts due to banks is as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Domestic banks	13,265.7	13,154.3	111.4
Foreign banks	3,624.9	3,986.3	– 361.4
Total	**16,890.6**	**17,140.6**	– 250.0

56 Due to customers

Amounts due to customers can be broken down by business type as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Overdrafts	18,820.9	13,706.9	5,114.0
Daily and time deposits	2,262.7	5,448.1	–3,185.4
Promissory note loans and registered bonds	1,734.7	2,043.0	–308.3
Collateralised registered bonds and promissory note loans	551.8	638.0	–86.2
Unsecured registered bonds and promissory note loans	1,182.9	1,405.0	–222.1
Genuine repurchase agreements and collateralised securities lending transactions	603.4	299.8	303.6
Borrowings	172.8	162.4	10.4
Total	**23,594.5**	**21,660.2**	1,934.3

The regional breakdown of amounts due to customers is as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Domestic customers	18,001.6	17,392.6	609.0
Foreign customers	5,592.9	4,267.6	1,325.3
Total	**23,594.5**	**21,660.2**	1,934.3

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 €189.9m (previous year: €200.1m) were deducted from the issued bonds.

€m	31 Dec 2021	31 Dec 2020	Change
Uncovered debt securities issued	4,964.2	5,728.5	–764.3
Covered debt securities issued	2,118.7	1,652.8	465.9
Money market securities issued	2,460.4	274.9	2,185.5
Total	**9,543.3**	**7,656.2**	1,887.1

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 2021	31 Dec 2020	Change
Trading portfolio			
Trading issues	22,160.3	21,849.7	310.6
Securities short portfolios	619.3	877.3	– 258.0
Negative market values of derivative financial instruments (trading)	5,907.3	7,114.4	– 1,207.1
Negative market values of derivative financial instruments (economic hedging derivatives)	37.8	43.0	– 5.2
Total – trading portfolio	**28,724.7**	**29,884.4**	– 1,159.7
Financial liabilities designated at fair value			
Issues	469.7	665.2	– 195.5
Total – financial liabilities designated at fair value	**469.7**	**665.2**	– 195.5
Total	**29,194.4**	**30,549.6**	– 1,355.2

Issues are broken down by product type as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Trading portfolio			
Uncovered trading issues			
Bearer bonds issued	18,513.0	17,830.8	682.2
Registered bonds issued	1,350.5	1,525.9	– 175.4
Promissory notes raised	2,296.8	2,493.0	– 196.3
Total	**22,160.3**	**21,849.7**	310.6
Financial liabilities designated at fair value			
Uncovered issues			
Registered bonds issued	141.9	174.8	– 32.9
Promissory notes raised	20.7	42.4	– 21.7
Covered issues	307.1	448.0	– 140.9
Total	**469.7**	**665.2**	– 195.5

The fair value of issues in the designated at fair value category (fair value option) includes cumulative creditworthiness-related changes in value amounting to €1.8m (previous year: €2.1m) 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 €31.6m (previous year: €63.7m) 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 can be broken down by underlying hedged transaction as follows:

€m	31 Dec 2021 Nominal of the hedging instruments	31 Dec 2021 Carrying amount of the hedging instruments[1]	31 Dec 2021 Valuation result of the hedging instruments for the reporting period[2]	31 Dec 2020 Nominal of the hedging instruments	31 Dec 2020 Carrying amount of the hedging instruments[1]	31 Dec 2020 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	235.0	0.0	4.3	952.9	0.0	−6.7
Due from customers	4,261.1	35.2	116.9	4,579.5	72.4	−149.1
Financial investments	228.8	0.0	−1.1	592.1	0.0	−22.0
Financial assets measured at fair value through other comprehensive income						
Financial investments	216.5	0.0	3.1	1,682.1	0.0	1.0
Financial liabilities measured at amortised cost						
Due to banks	574.0	0.1	−23.7	–	–	–
Due to customers	458.3	0.1	−18.9	–	–	–
Securitised liabilities	815.0	0.1	−32.8	193.8	0.0	−0.4
Subordinated capital	160.5	0.1	−7.8	40.0	0.0	0.1
Currency fair value hedges						
Bottom layer financial assets	8,724.0	348.2	−459.7	1,956.7	34.6	63.4
Total	**15,673.2**	**383.9**	**−419.7**	**9,997.1**	**107.1**	**−113.7**

[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 2020	**243.6**	**24.3**	**267.9**
Allocation	32.4	4.5	36.9
Utilisation	16.7	5.3	22.0
Reclassifications	1.2	0.7	1.9
Change in plan assets	–8.7	–1.7	–10.4
Revaluations recognised in other comprehensive income	50.4	–	50.4
Reclassification due to net asset	–0.1	–	–0.1
As at 31 December 2020	**302.1**	**22.5**	**324.6**
Allocation	29.9	2.1	32.0
Utilisation	18.5	6.2	24.7
Reversals	–	1.2	1.2
Reclassifications	2.9	2.0	4.9
Change in plan assets	–34.6	–0.5	–35.1
Revaluations recognised in other comprehensive income	–141.4	–	–141.4
Reclassification due to net asset	0.5	–	0.5
As at 31 December 2021	**140.9**	**18.7**	**159.6**

[1] Including provision for working hours accounts

The pension provisions of €140.9m include defined benefit plans in the form of final salary plans and general contribution schemes, as well as unit-linked defined contribution plans. Provisions for similar commitments in the amount of €18.7m are associated with commitments in relation to early retirement, transitional payments, working hours accounts and obligations to pay other allowances. As commitments similar to pensions, the latter are to be differentiated from the defined benefit plans accordingly. For the first time in the reporting year, the following tables relate exclusively to pension provisions in the narrower sense of the term and, as a result, to the underlying defined benefit obligations. Prior-year figures have been adjusted accordingly for better comparability. The present value of the defined benefit obligations can be reconciled to the provisions for pensions as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Present value of fully or partially funded defined benefit obligations	964.5	950.0	14.5
Fair value of plan assets at reporting date	826.7	694.2	132.5
Funding status	**137.8**	**255.8**	–118.0
Present value of unfunded defined benefit obligations	2.3	46.0	–43.7
Reclassification due to net asset	0.8	0.3	0.5
Provisions for pensions	**140.9**	**302.1**	–161.2

The movement in the net liability was as follows:

	Defined benefit obligations		Fair value of plan assets		Net obligation/(net asset)	
€m	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
As at 1 January	**996.0**	**931.7**	**694.2**	**688.5**	**302.1**	**243.6**
Current service cost	27.8	29.6	–	–	27.8	29.6
Interest expense or income	7.1	10.4	5.0	7.6	2.1	2.8
Pension expenses (recognised in profit or loss)	**34.9**	**40.0**	**5.0**	**7.6**	**29.9**	**32.4**
Actuarial gains/losses from:						
Financial assumptions	–76.4	50.1	–	–	–76.4	50.1
Demographic assumptions	–	–	–	–	–	–
Experience adjustment	27.9	–10.3	–	–	27.9	–10.3
Income from plan assets excluding interest income	–	–	92.9	–10.6	–92.9	10.6
Revaluation gains/losses (recognised in other comprehensive income)	**–48.5**	**39.8**	**92.9**	**–10.6**	**–141.4**	**50.4**
Transfers	2.9	1.2	–	–	2.9	1.2
Employer contributions	–	–	33.3	5.5	–33.3	–5.5
Employee contributions	–	–	5.8	6.3	–5.8	–6.3
Benefits paid	–18.5	–16.7	–4.5	–3.1	–14.0	–13.6
Other changes	–	–	–	–	0.5	–0.1
As at 31 December	**966.8**	**996.0**	**826.7**	**694.2**	**140.9**	**302.1**
Comprising:						
Final salary plans and general contribution schemes	552.3	605.4	438.2	395.5	114.1	209.9
Unit-linked defined contribution plans	414.5	390.6	388.5	298.7	26.8	91.9

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 2021**	**31 Dec 2020**	Change
Actuarial interest rate	1.15	0.70	0.45
Pension trend for adjustments according to Section 16(2) Company Pension Funds Act (BetrAVG)[1]	1.75	1.75	–
Pension adjustment with overall trend updating[1]	2.00	2.00	–
Salary trend[1]	2.50	2.50	–

[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 –0.42% (previous year: –0.55%). 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 obligations (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 2021**	**31 Dec 2020**
Actuarial interest rate	Increase of 1.0 percentage points	–115.0	–144.6
	Reduction of 1.0 percentage points	153.7	186.7
Salary trend	Increase of 0.25 percentage points	4.3	5.7
	Reduction of 0.25 percentage points	–4.2	–5.4
Pension trend	Increase of 0.25 percentage points	18.5	21.1
	Reduction of 0.25 percentage points	–17.6	–20.0
Life expectancy	Extended by 1 year	29.4	33.5

At the balance sheet date, plan assets were as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Mutual funds	388.2	298.2	90.0
Equity funds	373.8	284.6	89.2
Bond funds	3.0	2.7	0.3
Mixed funds	11.4	10.9	0.5
Special funds	438.2	395.6	42.6
Insurance contracts	0.3	0.4	–0.1
Total	**826.7**	**694.2**	132.5

Additional plan assets were set up to cover obligations under final salary plans and general contribution schemes by allocating €27.8m to a special fund in the financial year under review.

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 2021, the plan assets included €826.4m of the Deka Group’s own investment funds (previous year: €693.8m). 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. 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 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 13.9 years as at the reporting date (previous year: 16.0 years).

The present value of the defined benefit obligations is made up as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Current scheme members	522.6	529.7	–7.1
Former scheme members	221.2	234.0	–12.8
Pensioners and surviving dependents	223.0	232.3	–9.3
Present value of defined benefit obligation	**966.8**	**996.0**	–29.2

For the 2022 financial year it is expected that contributions amounting to €13.4m (previous year: €13.8m) will have to be allocated to the defined benefit schemes.

61 Other provisions

€m	31 Dec 2021	31 Dec 2020	Change
Provisions in investment funds business	92.7	96.2	–3.5
Provisions for legal risks	22.3	10.0	12.3
Provisions for credit risks	6.1	5.4	0.7
Provisions for operational risks	5.7	5.2	0.5
Provisions for restructuring measures	1.5	35.0	–33.5
Provisions in human resources	0.2	0.1	0.1
Sundry other provisions	169.2	143.8	25.4
Total	**297.7**	**295.7**	2.0

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 €11.6m (previous year: €15.1m) 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: €1.9bn) as at the respective guarantee dates. The market value of the relevant funds totalled €2.7bn (previous year: €2.1bn). This includes funds with a forecast return performance, as described below, which had a volume of €0.4bn (previous year: €0.3bn).

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 €19.0m (previous year: €16.9m) had been established. The underlying total value of the funds was €0.8bn (previous year: €0.9bn), of which €0.4bn (previous year: €0.3bn) related to funds with a capital guarantee and €0.4bn (previous year: €0.6bn) to funds without a capital guarantee.

For the fund-based *Riester* products offered as private pensions, DekaBank provides a capital guarantee at the start of the disbursement phase, for which a provision of €47.7m (previous year: €51.7m) was recognised. Potential obligations from fund-based pension products totalled €5.3bn at the reporting date (previous year: €4.9bn). The market value of the fund-based pension products totalled €7.7bn (previous year: €6.2bn).

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. Operational risks can lead to claims from customers, counterparties and supervisory authorities or to legal action.

Provisions for legal risks relate primarily to the ruling by the German Federal Court of Justice (BGH) on 27 April 2021, rendering amendments to the General Terms and Conditions of Business (GTCs) concerning fee adjustments partially ineffective. The Deka Group has reviewed the relevant customer agreements and set up a provision for legal risks in the amount of €13.2m for potential claims for the repayment of fees.

DekaBank has undertaken voluntary investigations 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. The possibility of a claim in the amount of €3.8m being asserted against DekaBank in this regard due to its function as custodian cannot be ruled out in all probability. As a result, a provision for operational risks was set up in the corresponding amount as at 31 December 2020. This scenario was unchanged as at 31 December 2021.

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").

Restructuring provisions result primarily from the restructuring activities in connection with the strategic cost initiative. Provisions for restructuring measures fell in the 2021 reporting year due to utilisations and the reversal of provisions that were no longer required, largely in connection with the strategic cost initiative.

The sundry other provisions were established in respect of liabilities arising from a range of issues. Sundry other provisions once again chiefly comprise a provision of €140.0m, created in the 2019 financial year, for capital-strengthening measures in relation to a company in the equity investment portfolio.

The movement in other provisions is as follows:

€m	Opening balance 1 Jan 2021	Allocation	Utilisations	Reversal	Reclassi-fications	Accrued interest	Currency effects	Closing Balance 31 Dec 2021
Provisions in investment funds business	96.2	25.0	1.9	26.6	–	–0.0	–	92.7
Provisions for restructuring measures	35.0	2.0	19.4	14.1	–2.0	–	–	1.5
Provisions for legal risks	10.0	15.0	0.1	0.1	–2.5	–	–	22.3
Provisions for credit risks	5.4	4.8	–	4.3	–	–	0.2	6.1
Provisions for operational risks	5.2	1.3	0.1	0.7	–	–	–	5.7
Provisions in human resources	0.1	0.6	0.5	0.0	–	–	–	0.2
Sundry other provisions	143.8	25.6	0.2	0.0	–	–	–	169.2
Other provisions	**295.7**	**74.3**	**22.2**	**45.8**	**–4.5**	**–0.0**	**0.2**	**297.7**

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 €168.4m (previous year: €182.3m) that are of a medium or long-term nature.

62 Income tax liabilities

€m	31 Dec 2021	31.12.2020	Change
Provisions for income taxes	6.5	12.3	–5.8
Current income tax liabilities	154.8	55.0	99.8
Deferred income tax liabilities	12.1	9.1	3.0
Total	**173.4**	**76.4**	97.0

The provisions for income taxes relate to corporation tax, the solidarity surcharge and trade tax (€4.4m), as well as to a foreign tax liability in the amount of €2.1m. The provisions for income taxes reported are of a short-term nature (previous year: €12.3m of a short-term 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 base.

Deferred tax liabilities were recognised in relation to the following line items on the balance sheet:

€m	31 Dec 2021	31 Dec 2020	Change
Asset items			
Due from banks	8.1	15.1	–7.0
Due from customers	–	96.6	–96.6
Financial assets at fair value	172.4	218.4	–46.0
Positive market values of derivative hedging instruments	72.1	69.2	2.9
Financial investments	15.5	32.9	–17.4
Shares in equity-accounted companies	0.1	1.4	–1.3
Intangible assets	8.9	2.7	6.2
Property, plant and equipment	80.1	36.9	43.2
Other assets	1.5	–	1.5
Liability items			
Due to banks	2.7	–	2.7
Securitised liabilities	7.8	–	7.8
Provisions	0.1	0.0	0.1
Subordinated capital	1.6	–	1.6
Sub-total	**370.9**	**473.2**	–102.3
Netting	–358.8	–464.1	105.3
Total	**12.1**	**9.1**	3.0

Reported deferred tax liabilities include €4.5m (previous year: €0.1m) 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.

As at the reporting date, temporary differences existed in connection with outside basis differences at consolidated subsidiaries amounting to €506.3m (previous year: €468.7m), resulting in imputed deferred tax liabilities of €8.1m (previous year: €7.5m). €8.0m (previous year: €7.4m) of this amount was recognised as a liability in the reporting year due to the return of the banking licence by Deka Verwaltungsgesellschaft Luxembourg S.A. The remainder is attributable to another company and was not recognised as a liability in accordance with IAS 12.39.

In the year under review, deferred income tax liabilities of €0.8m had to be recognised in connection with the fair value measurement of financial assets in other comprehensive income (previous year: €2.6m). A further €0.1m had to be recognised for risk provisions in connection with the fair value measurement of financial assets in other comprehensive income (previous year: €0.2m).

63 Other liabilities

The breakdown of other liabilities is as follows:

€m	31 Dec 2021	31 Dec 2020	Change
Liabilities			
Liabilities from leasing transactions	272.7	128.4	144.3
Commissions not yet paid to sales offices	184.6	132.4	52.2
Liabilities from current other taxes	45.4	30.2	15.1
Shares of profit attributable to atypical silent partners	4.5	104.9	– 100.3
Debt capital from minority interests	0.7	0.7	0.0
Other	110.3	79.4	30.9
Accruals			
Sales performance compensation	446.1	364.9	81.2
Personnel costs	173.1	130.7	42.4
Other accruals	70.9	62.6	8.3
Year-end audit and other audit costs	8.4	7.9	0.5
Prepaid expenses	0.2	0.0	0.2
Total	**1,316.9**	**1,042.1**	274.9

Up until the previous year, DekaBank offset the share of profit attributable to atypical silent partners against the taxes already deducted for the benefit of the owners. As the atypical silent partnerships were dissolved effective 31 December 2020/1 January 2021, no profit shares were offset in the reporting year (see note [30] "Atypical silent capital contributions"). The amount reported under "Shares of profit attributable to atypical silent partners" in the reporting year relates to outstanding amounts in connection with company tax audits for 2013–2020.

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 €3.2m (previous year: €3.8m) that are of a medium or long-term nature.

Leases are broken down by residual term as follows:

€m	31 Dec 2021	31 Dec 2020
Up to 1 year	40.4	40.4
Between 1 and 5 years	96.9	82.4
More than 5 years	158.6	8.5
Total	**295.9**	**131.3**

64 Subordinated capital

€m	31 Dec 2021	31 Dec 2020	Change
Subordinated bearer bonds	285.3	275.3	10.0
Subordinated promissory note loans	94.7	94.7	–
Other subordinated liabilities	565.5	570.9	–5.4
Prorated interest on subordinated liabilities	18.6	18.5	0.1
Total	**964.2**	**959.4**	4.8

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

The atypical silent partnerships reported as at 31 December 2020 in the amount of €52.4m were contributed to the capital reserve by the partners in the reporting year, meaning that they automatically ceased to exist by law due to the borrower acquiring its own debt (*Konfusion*) (see information in note [30] "Atypical silent capital contributions").

66 Equity

€m	31 Dec 2021	31 Dec 2020	Change
Subscribed capital	**286.3**	**286.3**	–
Own shares (deduction)	**94.6**	**94.6**	–
Additional capital components (AT1 bonds)	**598.6**	**473.6**	125.0
Capital reserve	**239.5**	**190.3**	49.2
Retained earnings	**5,187.0**	**4,877.1**	309.9
Statutory reserve	6.1	6.1	–
Reserves required by the Bank's statutes	–	–	–
Other reserves from retained earnings	5,180.9	4,871.0	309.9
Revaluation reserve	**–70.6**	**–183.2**	112.6
For provisions for pensions	–132.4	–273.8	141.4
For foreign currency basis spreads of hedging derivatives	–20.1	–13.6	–6.5
For financial assets measured at fair value through other comprehensive income	2.6	8.9	–6.3
For own credit risk of financial liabilities designated at fair value	–1.7	–2.1	0.4
Currency translation reserve	0.1	–0.3	0.4
Deferred taxes	80.9	97.7	–16.8
Accumulated profit/loss (consolidated profit)	**200.2**	**95.3**	104.9
Total	**6,346.4**	**5,644.8**	701.6

In the 2021 financial year, the issue of an AT1 bond in the amount of €125.0m resulted in the creation of additional capital components.

The increase in the capital reserve is due primarily to the contribution of the atypical silent capital contributions (see information in note [30] "Atypical silent capital contributions").

Actuarial gains on pension obligations came to €141.4m due to market-related factors (previous year: loss of €50.4m). These mainly arose due to both the increase in the actuarial interest rate to 1.15% (year-end 2020: 0.70%) and to the increase in plan assets.

Notes on financial instruments

67 Result by measurement category

The individual measurement categories resulted in the following contributions to net results:

€m	2021	2020	Change
Financial assets and liabilities measured at fair value through profit or loss	**122.4**	**46.2**	76.2
Trading portfolio	97.7	30.5	67.2
Financial assets mandatorily measured at fair value through profit or loss	20.6	20.1	0.5
Financial assets designated at fair value	–	–	–
Financial liabilities designated at fair value	4.1	–4.4	8.5
Thereof amounts recognised in profit or loss	3.7	–5.9	9.6
Thereof amounts recognised in other comprehensive income (OCI)	0.4	1.5	–1.1
Financial assets measured at fair value through other comprehensive income	**–14.5**	**–4.2**	–10.3
Thereof amounts transferred to profit or loss due to derecognition	0.0	–0.1	0.1
Thereof amounts recognised in other comprehensive income (OCI)	–6.3	–3.6	–2.7
Financial assets measured at amortised cost	**365.4**	**368.3**	–2.9
Financial liabilities measured at amortised cost	**8.9**	**–81.3**	90.2
Profit or loss from fair value hedges	**5.8**	**10.6**	–4.8
Thereof amounts recognised in profit or loss	12.3	–0.5	12.8
Thereof amounts recognised in other comprehensive income (OCI)	–6.5	–16.1	9.6
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.

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 2021		31 Dec 2020	
€m	**Fair value**	**Carrying value**	**Fair value**	**Carrying value**
Assets				
Financial assets measured at amortised cost				
Cash reserves	15,982.4	15,982.4	9,206.7	9,206.7
Due from banks	13,822.9	13,817.8	16,366.8	16,350.2
Due from customers	30,901.5	30,560.6	24,997.0	24,616.4
Financial investments	5,707.1	5,594.9	5,348.5	5,162.1
Other assets	239.8	239.8	211.8	211.8
Financial assets measured at fair value through other comprehensive income				
Financial investments	3,679.6	3,679.6	5,388.7	5,388.7
Financial assets measured at fair value through profit or loss				
Trading portfolio				
Financial assets at fair value	16,666.4	16,666.4	21,388.7	21,388.7
Financial assets mandatorily measured at fair value through profit or loss				
Financial assets at fair value	1,072.1	1,072.1	1,593.2	1,593.2
Other assets	0.8	0.8	0.9	0.9
Positive market values of derivative hedging instruments	91.6	91.6	638.7	638.7
Total asset items	**88,164.2**	**87,706.0**	**85,141.0**	**84,557.4**
Liabilities				
Financial liabilities measured at amortised cost				
Due to banks	16,946.1	16,890.6	17,271.4	17,140.6
Due to customers	23,698.6	23,594.5	21,832.9	21,660.2
Securitised liabilities	9,541.1	9,543.3	7,749.5	7,656.2
Subordinated capital	1,032.6	964.2	1,052.3	959.4
Other liabilities	539.5	539.5	323.1	323.1
Financial liabilities measured at fair value through profit or loss				
Trading portfolio				
Financial liabilities at fair value	28,724.7	28,724.7	29,884.4	29,884.4
Other liabilities	0.7	0.7	0.9	0.9
Financial liabilities designated at fair value				
Financial liabilities at fair value	469.7	469.7	665.2	665.2
Negative market values of derivative hedging instruments	383.9	383.9	107.1	107.1
Total liability items	**81,337.0**	**81.111,2**	**78,886.8**	**78,397.1**

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. Other liabilities include lease liabilities totalling €272.7 m (previous year: €128.4 m).

In the following description of the fair value hierarchy, financial assets amounting to €17,072.3m (previous year: €10,059.6m) and financial liabilities amounting to €19,668.3m (previous year: €14,541.4m) are not allocated to any level of the fair value hierarchy.

Fair value hierarchy
Financial instruments carried at fair value on the statement of financial position, 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 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Financial assets measured at fair value through profit or loss						
Debt securities, other fixed-interest securities and loan receivables	3,543.8	6,602.9	3,619.2	3,996.7	605.2	1,702.6
Shares and other non fixed-interest securities	3,562.1	2,351.4	96.4	46.7	17.5	79.8
Derivative financial instruments	113.7	79.1	6,125.4	8,006.5	24.9	98.4
Interest-rate-related derivatives	–	–	4,659.8	6,988.0	20.4	92.1
Currency-related derivatives	–	–	56.3	148.6	–	–
Share and other price-related derivatives	113.7	79.1	1,409.3	869.9	4.5	6.3
Shareholdings	–	–	–	–	30.4	17.9
Positive market values of derivative hedging instruments	–	–	91.6	638.7	0.0	0.0
Financial assets measured at fair value through other comprehensive income						
Debt securities and other fixed-interest securities	1,630.3	1,798.1	2,049.2	3,590.6	–	–
Shares and other non fixed-interest securities	–	–	–	–	–	–
Financial assets measured at amortised cost						
Due from banks	–	–	10,627.5	12,561.6	2,799.5	3,407.3
thereof: assets from genuine repurchase agreements and collateralised securities lending transactions	–	–	3,797.1	5,746.4	2,498.0	2,661.3
Due from customers	–	–	6,724.5	2,216.8	23,723.6	22,537.8
thereof: assets from genuine repurchase agreements and collateralised securities lending transactions	–	–	5,395.3	992.6	1,161.2	1,207.2
Debt securities and other fixed-interest securities	3,894.9	3,356.6	1,645.6	1,607.3	166.6	384.4
Total	**12,744.8**	**14,188.1**	**30,979.4**	**32,664.9**	**27,367.7**	**28,228.4**

€m	Prices listed on active markets (level 1) 31 Dec 2021	31 Dec 2020	Valuation method based on observable market data (level 2) 31 Dec 2021	31 Dec 2020	Valuation method not based on observable market data (level 3) 31 Dec 2021	31 Dec 2020
Financial liabilities measured at fair value through profit or loss						
Securities short portfolios	513.4	740.6	105.9	136.7	–	–
Derivative financial instruments	107.5	123.6	5,764.6	6,850.3	73.0	183.5
Interest-rate-related derivatives	–	–	3,907.0	5,390.8	54.9	120.6
Currency-related derivatives	–	–	74.3	100.7	–	–
Share and other price-related derivatives	107.5	123.6	1,783.3	1,358.8	18.1	62.9
Issues	–	–	20,733.1	20,118.4	1,896.9	2,396.5
Negative market values of derivative hedging instruments	–	–	383.9	107.1	–	–
Financial liabilities measured at amortised cost						
Due to banks	–	–	16,453.0	16,281.5	186.1	479.3
thereof: liabilities from genuine repurchase agreements and collateralised securities lending transactions	–	–	4,809.0	2,560.8	–	330.6
Due to customers	–	–	4,632.9	7,865.6	244.7	260.5
thereof: liabilities from genuine repurchase agreements and collateralised securities lending transactions	–	–	531.7	204.8	71.5	95.0
Securitised liabilities	–	–	9,541.1	7,749.5	–	–
Subordinated capital	–	–	–	–	1,032.6	1,052.3
Total	**620.9**	**864.2**	**57,614.5**	**59,109.1**	**3,433.3**	**4,372.1**

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 2021	2020	Reclassifications from level 2 to level 1 2021	2020
Financial assets measured at fair value through profit or loss				
Debt securities, other fixed-interest securities and loan receivables	398.8	400.0	490.9	958.5
Derivative financial instruments	63.5	39.6	45.8	31.5
Share and other price-related derivatives	63.5	39.6	45.8	31.5
Financial liabilities measured at fair value through profit or loss				
Securities short portfolios	14.1	19.0	10.3	25.3
Derivative financial instruments	62.8	25.6	30.0	58.8
Interest-rate-related derivatives	–	–	–	–
Share and other price-related derivatives	62.8	25.6	30.0	58.8

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 yield curves. Interest rate swaps are discounted using the currency-specific yield curve. This is used for bootstrapping the forward yield curves. 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 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 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 covered bonds (*Pfandbriefe*), for example.

Reclassifications were made in the course of 2021 in order to reflect the IBOR reform for GBP, CHF and JPY. The LIBOR-based valuation curves for these currencies were switched over to RFR-based valuation curves at the beginning of December.

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 and originated loans.

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 €0.3m 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 €0.03m 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 €–1.5m as at 31 December 2021. 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 +2.2%, giving rise to a measurement difference of €+0.1m. 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 2021 is approximately €–130.5m. 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 2021, this results in a value of €0.2m.

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.

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 2021, 100% of bonds and other fixed-interest securities allocated to level 3 for which an external rating was available were rated as investment grade.

Day one gains and losses

The table below shows the total unrealised day one gains at the beginning and end of the reporting year. The day one gains result from the difference between the transaction price and the fair value calculated using standard measurement techniques. The transaction price is not used as the fair value, as it includes both hedge costs and the margin. Furthermore, the transaction price is not calculated using market data verified independently of trading operations – in contrast to the fair value, which is measured daily as part of a process that is independent of trading operations.

€m	2021	2020	Change
Balance at 1 January (unrecognised gains)	**0.8**	**–**	0.8
Increase due to new trades	1.8	1.2	0.6
Reduction due to passage of time	1.4	0.4	1.0
Balance at 1 December (unrecognised gains)	**1.1**	**0.8**	0.3

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	Shares and other non fixed-interest securities	Interest-rate-related derivatives	Share and other price-related derivatives	Shareholdings	Positive market values of derivative hedging instruments	Total
As at 1 January 2020	**2,830.3**	**–**	**345.3**	**16.1**	**61.3**	**0.1**	**3,253.1**
Additions through purchase	469.8	–	–	–	–	–	469.8
Disposals through sale	735.5	–	3.6	4.3	50.8	–	794.2
Maturity/repayments	644.0	–	111.8	7.1	–	–	762.9
Transfers							
To Level 3	118.5	79.8	3.1	–	–	–	201.4
From Level 3	270.4	–	200.5	2.4	–	–	473.3
Changes arising from measurement/disposal							
Recognised in profit or loss[1]	–66.1	–	59.6	4.0	7.4	–0.1	4.8
Recognised in other comprehensive income[2]	–	–	–	–	–	–	–
As at 31 December 2020	**1,702.6**	**79.8**	**92.1**	**6.3**	**17.9**	**0.0**	**1,898.7**
Movement in unrealised gains or losses in respect of assets in the portfolio at the balance sheet date[3]	**–73.0**	**–**	**59.6**	**4.0**	**–6.0**	**–0.1**	**–15.5**
As at 1 January 2021	**1,702.6**	**79.8**	**92.1**	**6.3**	**17.9**	**0.0**	**1,898.7**
Additions through purchase	420.8	92.4	–	4.7	8.7	–	526.6
Disposals through sale	955.2	157.8	–	–	0.3	–	1,113.3
Maturity/repayments	243.8	–	–	–	–	–	243.8
Transfers							
To Level 3	16.5	–	–	–	–	–	16.5
From Level 3	330.9	–	3.1	4.1	–	–	338.1
Changes arising from measurement/disposal							
Recognised in profit or loss[1]	–4.8	3.1	–68.6	–2.4	4.1	–	–68.6
Recognised in other comprehensive income[2]	–	–	–	–	–	–	–
As at 31 December 2021	**605.2**	**17.5**	**20.4**	**4.5**	**30.4**	**0.0**	**678.0**
Movement in unrealised gains or losses in respect of assets in the portfolio at the balance sheet date[3]	**–41.7**	**1.2**	**–34.6**	**3.1**	**4.1**	**–**	**–67.9**

[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. In the reporting period, the mirror "performance of financial instruments in fair value hierarchy level 3" was standardised with regard to the presentation of the different financial instruments for reasons of better readability. In the case of disposals of derivative financial instruments, for example, the value in the opening balance is now also divided into disposal value and realised profit and loss for the period.

The movement in level 3 liabilities carried at fair value is shown in the table below.

€m	Interest-rate-related derivatives	Share and other price-related derivatives	Issues	Total
As at 1 January 2020	**276.7**	**99.3**	**4,177.0**	**4,553.0**
Additions through purchase	12.6	0.1	49.9	62.6
Disposals through sale	–	1.9	34.4	36.3
Additions through issues	–	–	211.7	211.7
Maturity/repayments	67.5	70.5	498.5	636.5
Transfers				
To Level 3	2.9	–	–	2.9
From Level 3	163.1	13.8	1,498.8	1,675.7
Changes arising from measurement/disposal				
Recognised in profit or loss[1]	–59.0	–49.7	10.4	–98.3
Recognised in other comprehensive income[2]	–	–	–	–
As at 31 December 2020	**120.6**	**62.9**	**2,396.5**	**2,580.0**
Movement in unrealised gains or losses in respect of liabilities in the portfolio at the balance sheet date[3]	**–59.0**	**–49.7**	**–5.8**	**–114.5**
As at 1 January 2021	**120.6**	**62.9**	**2,396.5**	**2,580.0**
Additions through purchase	2.2	–	–	2.2
Disposals through sale	–	1.7	–	1.7
Additions through issues	–	–	101.2	101.2
Maturity/repayments	–	14.2	292.6	306.8
Transfers				
To Level 3	–	–	1.6	1.6
From Level 3	2.9	28.5	197.9	229.3
Changes arising from measurement/disposal				
Recognised in profit or loss[1]	65.0	0.4	111.9	177.3
Recognised in other comprehensive income[2]	–	–	–	–
As at 31 December 2021	**54.9**	**18.1**	**1,896.9**	**1,969.9**
Movement in unrealised gains or losses in respect of liabilities in the portfolio at the balance sheet date[3]	**–42.5**	**–17.0**	**76.9**	**17.4**

[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. In the reporting period, the mirror "performance of financial instruments in fair value hierarchy level 3" was standardised with regard to the presentation of the different financial instruments for reasons of better readability. In the case of disposals of derivative financial instruments, for example, the value in the opening balance is now also divided into disposal value and realised profit and loss for the period.

During the reporting period, positive market values of debt securities, other fixed-interest securities and loan receivables amounting to €330.9m, of interest-rate-related derivatives amounting to €3.1m and of share and other price-related derivatives of €4.1m were transferred from level 3. Negative market values of interest-rate-related derivatives amounting to €2.9m, of share and other price-related derivatives of €28.5m and of (trading) issues amounting to €197.9m were also transferred from level 3. Positive market values of debt securities, other fixed-interest securities and loan receivables amounting to €16.5m were migrated to level 3. Furthermore, negative market values of debt securities, other fixed-interest securities and loan receivables amounting to €1.6m were migrated to level 3. This was due to a more detailed analysis of the market data used for valuation.

At the end of the 2021 reporting year, the analyses for level 3 financial instruments were refined further with regard to the materiality of spread curves and correlation matrices. In the case of spread curves, the valuation is performed without a spread or with a spread of zero. If the resulting change in present value is insignificant (≤5%), the product can be assigned to level 2. For financial instruments whose valuation involves the use of a correlation matrix (historical 250-day correlations), sensitivity to a change in the correlation matrix is a relevant factor. This sensitivity is expressed in relation to the present value of the financial instrument. If the sensitivity is insignificant (≤0.5% of the present value), the product can be assigned to level 2. On the reporting date, 129 positions with a market value of €70.9m were transferred from level 3 to level 2.

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 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 repurchase agreements and derivative transactions (see also note [13] “Genuine repurchase agreements and securities lending transactions” and note [71] “Derivative transactions”).

31.12.2021				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)	3,597.6	2,971.3	626.3	626.3	–	–
Receivables arising from securities repurchase agreements (not eligible for offsetting)	12,091.3	–	12,091.3	12,091.3	–	–
Derivatives (eligible for offsetting)	7,142.1	7,104.0	38.1	–	38.1	–
Derivatives (not eligible for offsetting)	6,317.4	–	6,317.4	120.3	1,954.7	4,242.4
Total	**29,148.4**	**10,075.3**	**19,073.1**	**12,837.9**	**1,992.8**	**4,242.4**
Liabilities						
Liabilities arising from securities repurchase agreements (eligible for offsetting)	5,151.3	2,971.3	2,180.0	2,180.0	–	–
Liabilities arising from securities repurchase agreements (not eligible for offsetting)	2,979.2	–	2,979.2	2,979.2	–	–
Derivatives (eligible for offsetting)	7,594.3	7,555.1	39.2	39.2	–	–
Derivatives (not eligible for offsetting)	6,289.9	–	6,289.9	424.2	2,899.4	2,966.3
Total	**22,014.7**	**10,526.4**	**11,488.3**	**5,622.6**	**2,899.4**	**2,966.3**

31.12.2020				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)	3,802.4	3,682.9	119.5	119.5	–	–
Receivables arising from securities repurchase agreements (not eligible for offsetting)	10,346.3	–	10,346.3	10,346.3	–	–
Derivatives (eligible for offsetting)	8,671.7	8,649.7	22.0	–	22.0	–
Derivatives (not eligible for offsetting)	8,800.6	–	8,800.6	93.7	2,917.8	5,789.1
Total	**31,621.0**	**12,332.6**	**19,288.4**	**10,559.5**	**2,939.8**	**5,789.1**
Liabilities						
Liabilities arising from securities repurchase agreements (eligible for offsetting)	3,690.8	3,682.9	7.9	7.9	–	–
Liabilities arising from securities repurchase agreements (not eligible for offsetting)	2,413.6	–	2,413.6	2,413.6	–	–
Derivatives (eligible for offsetting)	10,045.5	10,021.0	24.5	24.5	–	–
Derivatives (not eligible for offsetting)	7,239.9	–	7,239.9	314.8	3,311.3	3,613.8
Total	**23,389.8**	**13,703.9**	**9,685.9**	**2,760.8**	**3,311.3**	**3,613.8**

In principle, the Deka Group enters into 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. The contractual agreements generally provide for the right to offset receivables and liabilities both in the course of ordinary business and in the event 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 sector	Energy and infrastructure	Real estate sector	Other	Total 31 Dec 2021	Total 31 Dec 2020
Non-performing exposures[1]	93.9	–	239.4	–	333.3	536.6
Collateral[2]	68.9	–	173.1	–	242.0	356.8
Provisions for loan losses/credit rating-related changes in fair value	24.9	–	61.5	–	86.4	133.9

[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.

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 are indicators of impaired creditworthiness (see note [17] “Risk provisions in the lending and securities business”).

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.

€m	Transport sector	Energy and infrastructure	Real estate sector	Other	Total 31 Dec 2021	Total 31 Dec 2020
Forborne exposures[1]	359.9	23.2	885.2	–	1,268.3	1,392.4
thereof: Performing	300.0	23.2	696.8	–	1,020.0	1,000.2
thereof: Non-Performing	59.9	–	188.4	–	248.3	392.2
Collateral[2]	330.4	–	813.7	–	1,144.1	1,236.4
Provisions for loan losses/credit rating-related changes in fair value	29.4	0.0	69.3	–	98.7	106.4

[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 2021	31 Dec 2020
NPE ratio at the reporting date		
(Ratio of non-performing exposures to maximum credit risk)	0.39	0.63
NPE coverage ratio, including collateral, at the reporting date		
(Ratio of risk provisions, including collateral, to non-performing exposures)	98.53	91.45
NPE coverage ratio, excluding collateral, at the reporting date		
(Ratio of risk provisions, excluding collateral, to non-performing exposures)	25.94	24.95
Forborne-Exposure-Quote zum Stichtag		
(Ratio of forborne exposures to maximum credit risk)	1.48	1.64

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 €85.5bn (previous year: €85.0bn).

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 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Interest rate risks						
OTC products						
Interest rate swaps	539,175.0	474,943.1	10,846.8	14,436.2	10,448.8	13,799.9
Forward rate agreements	138,163.0	3,337.0	7.3	0.7	7.9	1.0
Interest rate options						
Purchases	20,673.4	24,481.9	400.4	634.0	176.9	240.5
Sales	25,677.0	27,058.4	335.4	418.5	681.5	1,167.0
Caps, floors	23,608.2	24,482.5	66.0	76.6	64.1	45.6
Other interest rate contracts	4,944.9	3,761.0	34.4	38.5	37.0	201.6
Exchange traded products						
Interest rate futures/options	14,425.0	15,857.6	5.3	0.5	5.6	1.0
Sub-total	**766,666.5**	**573,921.5**	**11,695.6**	**15,605.0**	**11,421.8**	**15,456.6**
Currency risks						
OTC products						
Foreign exchange future contracts	13,606.0	15,717.5	56.4	148.5	74.3	100.6
(Interest rate) currency swaps	13,640.0	12,974.3	107.4	690.4	400.1	98.2
Currency options						
Purchases	–	2.0	–	0.1	–	–
Sales	–	–	–	–	–	–
Sub-total	**27,246.0**	**28,693.8**	**163.8**	**839.0**	**474.4**	**198.8**
Share and other price risks						
OTC products						
Share options						
Purchases	1,013.7	169.4	84.2	5.7	–	–
Sales	435.0	6,000.0	–	–	45.7	1.0
Credit derivatives	8,885.9	11,706.9	120.0	132.0	133.7	150.6
Other forward contracts	5,793.2	3,397.8	50.4	13.3	78.9	100.7
Exchange traded products						
Share options	34,099.6	23,800.4	1,349.5	877.9	1,735.4	1,378.4
Share futures	536.1	451.4	13.8	7.3	6.5	6.0
Sub-total	**50,763.5**	**45,525.9**	**1,617.9**	**1,036.2**	**2,000.2**	**1,636.7**
Total	**844,676.0**	**648,141.2**	**13,477.3**	**17,480.2**	**13,896.4**	**17,292.1**
Net amount disclosed in the statement of financial position			**6,355.5**	**8,822.6**	**6,329.1**	**7,264.4**

[1] Fair values are shown before offsetting against variation margin paid or received

The lower amount carried on 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 €7.1bn (previous year: €8.7bn). Conversely, the variation margin paid reduced fair values within liabilities by a total of around €7.6bn (previous year: €10.0bn).

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 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Banks in the OECD	637,523.2	473,124.5	9,041.9	12,306.6	9,550.2	11,700.4
Public sector entities in the OECD	14,019.0	12,565.1	1,512.3	2,067.7	184.4	369.7
Other counterparties	193,133.8	162,451.6	2,923.1	3,105.9	4,161.8	5,222.0
Total	**844,676.0**	**648,141.2**	**13,477.3**	**17,480.2**	**13,896.4**	**17,292.1**

[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 2021	31 Dec 2020	Change
Asset items			
Due from banks			
Due on demand and indefinite term	4,067.2	4,399.3	–332.1
Up to 3 months	3,963.2	2,235.0	1,728.2
Between 3 months and 1 year	1,919.3	1,689.9	229.4
Between 1 year and 5 years	3,557.0	7,556.6	–3,999.6
More than 5 years	311.2	469.4	–158.2
Due from customers			
Due on demand and indefinite term	1,811.4	1,568.6	242.8
Up to 3 months	1,557.1	2,657.8	–1,100.7
Between 3 months and 1 year	5,130.0	2,277.2	2,852.8
Between 1 year and 5 years	14,233.7	11,010.3	3,223.4
More than 5 years	7,828.4	7,102.5	725.9
Financial assets at fair value			
Thereof: non-derivative assets			
Due on demand and indefinite term	3,586.9	2,238.2	1,348.7
Up to 3 months	389.4	991.1	–601.7
Between 3 months and 1 year	6,795.3	10,818.7	–4,023.4
Between 1 year and 5 years	498.5	581.7	–83.2
More than 5 years	203.9	168.3	35.6
Thereof: Derivative assets			
Due on demand and indefinite term	0.0	4.3	–4.3
Up to 3 months	313.6	531.5	–217.9
Between 3 months and 1 year	5,943.7	7,631.3	–1,687.6
Between 1 year and 5 years	4.6	9.9	–5.4
More than 5 years	2.0	6.9	–4.9
Positive market values of derivative hedging instruments			
Due on demand and indefinite term	–	–	–
Up to 3 months	0.1	11.0	–10.9
Between 3 months and 1 year	17.8	77.5	–59.7
Between 1 year and 5 years	57.6	409.5	–352.1
More than 5 years	16.1	140.7	–124.6
Financial investments			
Due on demand and indefinite term	–	–	–
Up to 3 months	969.1	786.7	182.4
Between 3 months and 1 year	839.7	1,501.5	–661.8
Between 1 year and 5 years	6,554.2	7,133.6	–579.4
More than 5 years	911.5	1,129.0	–217.5

€m	31 Dec 2021	31 Dec 2020	Change
Liability items			
Due to banks			
Due on demand and indefinite term	2,535.5	3,472.2	–936.7
Up to 3 months	5,818.5	4,114.8	1,703.7
Between 3 months and 1 year	1,203.8	3,390.8	–2,187.0
Between 1 year and 5 years	6,411.0	5,101.3	1,309.7
More than 5 years	921.8	1,061.5	–139.7
Due to customers			
Due on demand and indefinite term	20,136.7	15,236.3	4,900.4
Up to 3 months	1,392.6	1,888.5	–495.9
Between 3 months and 1 year	353.9	2,580.1	–2,226.2
Between 1 year and 5 years	781.3	925.4	–144.1
More than 5 years	930.0	1,029.9	–99.9
Securitised liabilities			
Due on demand and indefinite term	–	–	–
Up to 3 months	2,702.8	948.8	1,754.0
Between 3 months and 1 year	366.8	593.0	–226.1
Between 1 year and 5 years	3,426.1	2,624.7	801.4
More than 5 years	3,047.6	3,489.7	–442.1
Financial liabilities at fair value			
Thereof: non-derivative liabilities			
Due on demand and indefinite term	195.2	378.0	–182.8
Up to 3 months	1,036.9	1,440.7	–403.8
Between 3 months and 1 year	21,776.4	20,991.3	785.1
Between 1 year and 5 years	200.2	393.9	–193.7
More than 5 years	40.5	188.3	–147.8
Thereof: Derivative financial liabilities			
Due on demand and indefinite term	0.0	–	0.0
Up to 3 months	343.7	662.9	–319.2
Between 3 months and 1 year	5,585.9	6,470.1	–884.1
Between 1 year and 5 years	9.0	1.0	7.9
More than 5 years	6.6	23.4	–16.8
Negative market values of derivative hedging instruments			
Due on demand and indefinite term	–	–	–
Up to 3 months	22.1	4.0	18.1
Between 3 months and 1 year	30.2	8.0	22.2
Between 1 year and 5 years	206.8	25.8	181.0
More than 5 years	125.0	69.3	55.7
Subordinated capital			
Due on demand and indefinite term	–	–	–
Up to 3 months	18.6	18.5	0.1
Between 3 months and 1 year	–	–	–
Between 1 year and 5 years	519.0	498.6	20.5
More than 5 years	426.5	442.3	–15.8

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 2021			31 Dec 2020		
	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 LIBOR (CAD)						
Nominal (C$m)	265.8	575.2	1,080.4	–	405.2	976.4
Nominal (€m)[1]	184.6	399.4	750.2	–	259.2	624.6
Average fixed rate (%)	1.2	1.8	1.8	–	2.0	1.8
Interest rate swaps EURIBOR (EUR)						
Nominal (€m)	1,001.7	2,453.4	3,269.3	1,599.1	3,324.9	2,546.7
Average fixed rate (%)	0.4	0.3	0.7	0.4	0.4	0.8
Interest rate swaps LIBOR/SONIA (GBP)						
Nominal (£m)	287.3	1,013.3	587.0	57.5	1,116.3	316.0
Nominal (€m)[1]	342.2	1,207.2	699.3	64.0	1,241.7	351.5
Average fixed rate (%)	0.7	1.3	0.9	1.3	0.9	1.0
Interest rate swaps LIBOR/TONAR (JYP)						
Nominal (¥m)	–	9,000.0	–	–	9,000.0	–
Nominal (€m)[1]	–	68.9	–	–	71.2	–
Average fixed rate (%)	–	−0.2	–	–	−0.2	–
Interest rate swaps LIBOR (USD)						
Nominal ($m)	20.4	2,325.1	553.1	27.0	2,059.6	1,083.8
Nominal (€m)[1]	18.0	2,049.6	487.5	22.0	1,678.4	883.2
Average fixed rate (%)	1.5	2.4	1.9	1.7	2.3	2.1
Interest rate swaps other benchmark interest rates (Other currencies)						
Nominal (€m)[1]	48.2	47.9	72.2	–	66.2	86.9
Interest rate fair value hedges of financial liabilities						
Interest rate swaps EURIBOR (EUR)						
Nominal (€m)	–	150.0	2,370.8	230.1	150.0	2,845.8
Average fixed rate (%)	–	0.5	1.0	0.4	0.5	0.7

[1] The conversion is made at the exchange rate on the balance sheet date.

The nominal volume of the hedging instruments in the table above approximately reflects the volume affected by the interest rate benchmark reform that is designated as hedges (see note [2] "Accounting standards applied for the first time and to be applied in future").

	31 Dec 2021			31 Dec 2020		
	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$m)	291.2	600.1	990.5	100.0	660.2	800.0
Nominal (€m)[1]	202.3	416.7	687.8	64.0	422.3	511.7
Average contract rate (EUR/CAD)[2]	1.52	1.48	1.50	1.56	1.50	1.51
Cross-currency base swaps (CHF/EUR)						
Nominal (CHFm)	50.0	–	74.6	5.0	50.0	79.1
Nominal (€m)[1]	48.2	–	72.0	4.6	46.3	73.3
Average contract rate (EUR/CHF)[2]	1.09	–	1.15	1.19	1.09	1.15
Cross-currency base swaps (GBP/EUR)						
Nominal (£m)	330.2	1,417.8	594.0	151.5	1,719.3	338.0
Nominal (€m)[1]	393.4	1,689.1	707.6	168.5	1,912.4	376.0
Average contract rate (EUR/GBP)[2]	0.83	0.87	0.87	0.78	0.87	0.89
Cross-currency base swaps (JPY/EUR)						
Nominal (¥m)	–	13,337.0	–	–	27,737.0	–
Nominal (€m)[1]	–	102.2	–	–	219.3	–
Average contract rate (EUR/JPY)[2]	–	118.51	–	–	119.74	–
Cross-currency base swaps (USD/EUR)						
Nominal ($m)	828.4	5,372.0	1,436.4	1,028.0	5,484.1	2,108.0
Nominal (€m)[1]	730.3	4,735.5	1,266.2	837.8	4,469.1	1,717.8
Average contract rate (EUR/USD)[2]	1.15	1.15	1.15	1.14	1.15	1.13
Cross-currency base swaps (other currencies)						
Nominal (€m)[1]	–	90.0	12.8	17.9	57.8	32.3

[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 2021			31 Dec 2020		
	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	831.0	12.8	–1.3	1,437.5	32.6	0.2
Due from customers	9,733.3	3.2	–302.0	8,177.9	323.3	205.6
Financial investments	1,066.0	36.4	–48.6	1,115.1	84.7	48.8
Financial assets measured at fair value through other comprehensive income						
Financial investments	1,425.6	6.6	–11.5	2,371.7	23.5	–1.0
Financial liabilities measured at amortised cost						
Due to banks	584.0	–17.6	22.7	662.0	5.1	–6.2
Due to customers	643.5	–17.0	28.2	641.7	10.8	–10.9
Securitised liabilities	1,044.7	–26.0	48.8	1,767.7	31.9	–37.9
Subordinated capital	271.1	–8.6	11.0	297.9	3.5	–3.1
Currency fair value hedges						
Bottom layer financial assets	10,994.1	–	632.8	10,678.5	–	–756.2
Total	**26,593.3**	**–10.1**	**380.1**	**27,150.0**	**515.4**	**–560.7**

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 a 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 bottom layer of this defined nominal amount.

The following table shows the composition of the bottom layers for currency fair value hedges on the balance sheet date:

€m	2021	2020	Change
Financial assets measured at amortised cost			
Due from banks	48.2	45.2	3.0
Due from customers	9,848.1	9,434.3	413.8
Financial investments	1,097.8	1,199.0	–101.2
Financial assets measured at fair value through other comprehensive income			
Financial investments	–	–	–

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, risk capacity essentially consists of equity under IFRS and income components, as adjusted to correct for certain capital components such as intangible assets or risks arising from pension obligations. As a formal overall risk limit, risk capacity serves to guarantee the Bank's 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 value 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 Minimum Requirement for Own Funds and Eligible Liabilities (MREL) ratio, the subordinated MREL requirements 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, which additionally includes a monthly comparison between the target and 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)

Regulatory capital and the capital ratios were calculated as at 31 December 2021 on the basis of the capital requirements currently applicable under the Capital Requirements Regulation (CRR), which is subject to certain transitional provisions. As the United Kingdom continues to apply the CRR even after leaving the EU, at least until the initial application date of Basel IV of 1 January 2025, the United Kingdom still has an equivalent supervisory regime in this respect. As a result, UK institutions are still considered to be institutions as defined by the CRR for the purposes of calculating RWA.

The figures presented below are shown in accordance with the transitional provisions set out in the CRR as well as pursuant to full application of the regulations. Own funds are 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 2021		31 Dec 2020	
€m	**CRR II (without transitional provisions)**	**CRR II (with transitional provisions)**	**CRR I (without transitional provisions)**	**CRR I (with transitional provisions)**
Subscribed capital	286	286	286	286
Less repurchased Common Equity Tier 1 items	95	95	95	95
Open reserves	5,113	5,113	4,909	4,909
Other comprehensive income	183	183	133	133
Prudential filters	145	145	121	121
Deductions from Common Equity Tier 1 items	260	260	409	409
Common Equity Tier 1 (CET 1) capital	**4,716**	**4,716**	**4,437**	**4,437**
Additional Tier 1 instruments	599	599	474	474
Silent capital contributions	–	–	–	10
Deductions from Additional Tier 1 items	–	–	–	–
Additional Tier 1 (AT 1) capital	**599**	**599**	**474**	**484**
Tier 1 capital	**5,314**	**5,314**	**4,911**	**4,921**
Subordinated liabilities	761	761	842	842
Deductions from Tier 2 items	–	–	–	–
Tier 2 (T2) capital	**761**	**761**	**842**	**842**
Own funds	**6,075**	**6,075**	**5,753**	**5,763**

The increase in Common Equity Tier 1 capital was mainly due to the inclusion of year-end effects from 2020 (profit retention and inclusion of the risk provisions set up in 2020 in the comparison of provisions), as well as the increase in the capital reserve in connection with the transformation of the atypical silent capital contributions. The Additional Tier 1 capital was strengthened by the issue of new AT1 capital in the amount of €125.0m. Tier 2 capital was affected by the reduced eligibility under the CRR in the last five years before maturity.

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:

	31.12.2021		31.12.2020	
€m	CRR II (without transitional provisions)	CRR II (with transitional provisions)	CRR I (without transitional provisions)	CRR I (with transitional provisions)
Credit risk	21,499	21,499	17,605	17,605
Market risk	5,588	5,588	9,578	9,578
Operational risk	3,500	3,500	3,485	3,485
CVA risk	358	358	638	638
Risk-weighted assets	**30,944**	**30,944**	**31,307**	**31,307**

The adequacy of the capital and reserves is to be calculated by expressing Common Equity Tier 1 capital (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:

	31.12.2021		31.12.2020	
%	CRR II (without transitional provisions)	CRR II (with transitional provisions)	CRR I (without transitional provisions)	CRR I (with transitional provisions)
Common Equity Tier 1 capital ratio	15.2	15.2	14.2	14.2
Tier 1 capital ratio	17.2	17.2	15.7	15.7
Total capital ratio	19.6	19.6	18.4	18.4

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 2021	31 Dec 2020	Change
Irrevocable lending commitments	1,412.0	1,341.6	70.4
Other liabilities	108.8	132.4	–23.6
Total	**1,520.8**	**1,474.0**	46.8

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 €53.1m (previous year: €79.6m). 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 €138.4m (previous year: €138.7m).

In a circular dated 9 July 2021, the Federal Ministry of Finance (BMF) presented revised 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) and that, in certain cases, beneficial ownership pursuant to section 39 of the German Tax Code does not pass to the recipient of the shares. Even in light of the above, DekaBank still sees no convincing reason to believe that the share trades it transacted around the dividend record date prior to 2016 will fall under the scope of section 42 of the German Tax Code. In the case of its share trades, DekaBank also believes that there was a transfer of beneficial ownership and therefore considers it more unlikely than not 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. 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 definitively ruled out that an adverse financial impact of €50.5m may arise in this regard. The increase in contingent liabilities by around €3m as against 31 December 2020 is due to the more specific information set out in the BMF circular of 9 July 2021 compared with the BMF circular of 17 July 2017 on relief from capital yields tax, including the solidarity surcharge (SolZ), as well as clearer legal consequences in the event of refusal to allow relief. On the other hand, payments made in January 2021 based on a corporation tax amendment notice for 2013 issued by the Frankfurt am Main V-Höchst tax authorities dated 30 December 2020 reduced these liabilities. As DekaBank continues to assume that its legal view will be confirmed in the final instance of fiscal court proceedings, tax refund claims of €127.4m are recognised in this context.

77 Assets transferred as collateral

Assets transferred as collateral for the Group's liabilities are shown in the following table:

€m	31 Dec 2021	31 Dec 2020	Change
Carrying value of transferred collateral			
Under Pfandbrief Act	5,498.3	5,471.3	27.0
For refinancing purposes with Deutsche Bundesbank	929.4	1,598.2	–668.8
From transactions on German and foreign futures exchanges	770.6	487.2	283.4
From repurchase agreements	241.1	495.9	–254.8
From securities lending agreements	2,428.8	4,110.6	–1,681.8
From tri-party transactions	4,259.4	3,279.9	979.5
From other transactions	204.9	478.0	–273.1
Loan and securities collateral	**14,332.5**	**15,921.0**	–1,588.5
Cash collateral relating to securities lending and repurchase agreements	136.4	144.8	–8.4
Cash collateral relating to derivative transactions	3,653.9	5,228.1	–1,574.2
Cash collateral	**3,790.3**	**5,372.9**	–1,582.6
Total	**18,122.8**	**21,294.0**	–3,171.2

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 €48.7bn (previous year: €47.2bn). Of this total, €34.7bn (previous year: €31.5bn) 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 repurchase agreements 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 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Genuine repurchase agreements						
thereof financial assets measured at amortised cost	63.1	57.6	62.5	57.2	0.6	0.4
thereof financial assets measured at fair value through other comprehensive income	–	44.9	–	44.9	–	–
thereof financial assets measured at fair value through profit or loss	107.7	367.8	107.4	365.7	0.3	2.1
Securities lending transactions						
thereof financial assets measured at amortised cost	154.6	68.2	–	–	154.6	68.2
thereof financial assets measured at fair value through other comprehensive income	16.2	24.5	–	–	16.2	24.5
thereof financial assets measured at fair value through profit or loss	530.5	2,346.9	9.8	75.9	520.7	2,271.0
Other transfers not constituting economical disposal						
thereof financial assets measured at amortised cost	175.0	170.3	175.0	170.5	–	–0.2
thereof financial assets measured at fair value through other comprehensive income	0.2	0.2	0.2	0.2	–	–
thereof financial assets measured at fair value through profit or loss	26.8	92.1	26.8	91.5	–	0.6
Total	**1,074.1**	**3,172.5**	**381.7**	**805.8**	**692.4**	**2,366.6**

80 Letter of comfort

Except in the case of political risk, DekaBank shall ensure that Deka Verwaltungsgesellschaft Luxembourg S.A. can meet its obligations. DekaBank Deutsche Girozentrale Luxembourg S.A. has in turn issued a letter of comfort in favour of Deka International S.A., Luxembourg.

81 Information on holdings in subsidiaries, joint ventures and associated companies

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]).

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 €406.8bn (previous year: €367.6bn). 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.

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, real estate and retail 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. Amounts in foreign currencies were translated at the mean spot rate as at the reporting date. This figure amounts to €2.4bn (previous year: €1.7bn).

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]	
€m	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Asset items				
Due from customers	1,680.8	2,154.4	469.6	484.9
Financial assets at fair value	998.0	1,148.3	111.9	188.2
Other assets	–	0.0	–	–
Total asset items	**2,678.8**	**3,302.7**	**581.5**	**673.1**
Liability items				
Due to customers	16,017.0	13,073.0	4.4	0.0
Financial liabilities at fair value	119.3	168.9	–	–
Other liabilities	5.5	4.2	–	–
Total liability items	**16,141.8**	**13,246.1**	**4.4**	**0.0**
Contingent liabilities and other obligations				
Irrevocable lending commitments	–	–	144.5	–
Other liabilities	–	–	5.1	5.1
Total contingent liabilities and other obligations	**–**	**–**	**149.6**	**5.1**
Maximum exposure to loss	**2,678.8**	**3,302.7**	**731.1**	**678.2**

[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.

As at the reporting date, one borrower classified as an unconsolidated structured entity is classified as non-performing and forborne. The carrying value of the exposures classified as non-performing and forborne comes to €20.7m.

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 DekaBank 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 2021, there were no sponsored unconsolidated structured 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 2021
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
Deka Verwaltungsgesellschaft Luxembourg S.A., Luxembourg	100.00
IQAM Invest GmbH, Salzburg	100.00[1)]
IQAM Partner GmbH, Vienna	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[2)]
WIV GmbH & Co. Beteiligungs KG, Frankfurt/Main	94.90

1) 25.5% is held by IQAM Partner GmbH.
2) 5.1% is held by WIV GmbH & Co. Beteiligungs KG.

Consolidated subsidiaries (structured entities):

Name, registered office	Share in fund assets % 31 Dec 2021
A-DGZ 2-FONDS, Frankfurt/Main	100.00
DDDD-FONDS, Frankfurt/Main	100.00
S Broker 1 Fonds, Frankfurt/Main	100.00

Joint ventures and associated companies accounted for under the equity method:

Name, registered office	Share of equity % 31 Dec 2021	Equity €'000 31 Dec 2021	Total of profit or loss €'000 31 Dec 2021
Joint ventures[1]			
S-PensionsManagement GmbH, Cologne	50.00	27,307.3	– 762.2
Dealis Fund Operations GmbH i.L., Frankfurt/Main	50.00	32,818.4	– 35.1

[1] Amounts reported in financial statements for the year ended 31 December 2020

Joint ventures and associated companies not accounted for under the equity method:

Name, registered office	Share of equity % 31 Dec 2021
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 2021
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
SWIAT GmbH, Frankfurt/Main	100.00
WIV Verwaltungs GmbH, Frankfurt/Main	94.90

Unconsolidated structured entities:

Name, registered office	Fund assets €m 31 Dec 2021	Share of equity/fund assets % 31 Dec 2021
Deka-MultiFactor Global Government Bonds, Luxembourg	13.49	100.00%
Premium Invest Chance, Luxembourg	5.10	100.00%
Premium Invest Chance Nachhaltigkeit, Luxembourg	5.11	100.00%
Premium Invest Ertrag, Luxembourg	4.98	100.00%
Premium Invest Ertrag Nachhaltigkeit, Luxembourg	4.98	100.00%
Deka-Immobilien PremiumPlus-Private Banking CF (T), Luxembourg	0.56	96.85%
Deka-MultiFactor Global Corporates, Luxembourg	37.11	92.80%
Deka-Institutionell Defensive Equity Europe, Frankfurt/Main	5.59	79.50%
Deka MSCI Europe ex EMU UCITS ETF, Frankfurt/Main	36.46	70.68%
Deka-MultiFactor Emerging Markets Corporates, Luxembourg	35.89	52.16%
Deka-MultiFactor Global Corporates HY, Luxembourg	46.14	50.69%
Deka Euro Corporates 0-3 Liquid UCITS ETF, Frankfurt/Main	101.88	38.25%
Deka Deutsche Boerse EUROGOV® Germany 1-3 UCITS ETF, Frankfurt/Main	215.67	27.55%
Deka Investors Spezial InvAG m.v.K. u. TGV (TGV Mittelstandskreditfonds I), Frankfurt/Main	20.46	23.00%
Deka Deutsche Boerse EUROGOV® Germany UCITS ETF, Frankfurt/Main	132.00	22.22%
Deka MSCI Japan UCITS ETF, Frankfurt/Main	108.56	21.87%

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 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Short-term benefits	4.1	2.8	1.0	0.9
Post-employment benefits	1.6	1.5	–	–
Other long-term benefits	2.9	1.8	–	–
Total	**8.6**	**6.1**	**1.0**	**0.9**

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 unconsolidated 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 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Asset items				
Due from customers	–	–	0.0	0.1
Financial assets at fair value	–	–	0.5	1.1
Other assets	–	–	0.1	0.3
Total asset items	**–**	**–**	**0.6**	**1.5**
Liability items				
Due to customers	49.0	60.4	2.9	40.9
Financial liabilities at fair value	–	–	–	0.2
Other liabilities	–	–	0.0	0.0
Total liability items	**49.0**	**60.4**	**2.9**	**41.1**

Business dealings with joint ventures, associated companies and other related parties:

	Joint ventures/ associated companies		Other related parties	
€m	**31 Dec 2021**	**31 Dec 2020**	**31 Dec 2021**	**31 Dec 2020**
Asset items				
Due from customers	115.8	0.3	0.1	–
Financial assets at fair value	4.4	0.9	–	0.0
Other assets	0.1	0.2	0.1	0.5
Total asset items	**120.3**	**1.4**	**0.2**	**0.5**
Liability items				
Due to customers	16.0	20.1	8.6	67.0
Financial liabilities at fair value	58.8	60.7	–	0.4
Total liability items	**74.8**	**80.8**	**8.6**	**67.4**

There are risk provisions of €46.4m for amounts due from customers.

Units in investment funds amounting to €6.6m are held by related parties in connection with the management of mutual funds in the DekaBank custody account (previous year: €4.4m).

85 Average number of staff

	2021			2020		
	Male	Female	Total	Male	Female	Total
Full-time employees	2,567	1,026	3,593	2,514	1,018	3,532
Part-time and temporary employees	278	811	1,089	246	766	1,012
Total	**2,845**	**1,837**	**4,682**	**2,760**	**1,784**	**4,544**

86 Remuneration of Board members

€	31 Dec 2021	31 Dec 2020
Total remuneration of active Board members		
Board of Management	5,737,186	5,347,339
Administrative Board	992,500	944,583
Total remuneration of former Board members and their surviving dependents		
Board of Management	4,343,518	4,304,177
Provisions for pensions for former Board members and their dependents	62,677,804	66,482,829

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 2021 financial year, variable remuneration elements that are dependent on future performance amounting to €2.1m (previous year: €2.8m) 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 €1.5m and to former members of the Board of Management amounting to €0.8m. The entitlement of active board members comprises €0.4m for the 2020 financial year, €0.5m for the 2019 financial year, €0.2m for the 2018 financial year, €0.2m for the 2017 financial year, €0.2m for the 2016 financial year and €0.1m for the 2015 financial year.

87 Fees for auditors

The following fees for the auditors of the consolidated financial statements were recorded as expenses in the reporting year:

€m	2021	2020	Change
Fees for			
Year-end audit services	4.0	4.1	–0.1
Non-audit services			
Other assurance services	0.9	0.9	–
Tax advisory services	0.6	0.0	0.6
Other services	–	–	–
Total	**5.5**	**5.0**	0.5

88 Additional miscellaneous information

Events after the reporting period

The military escalation of the conflict between Russia and Ukraine is creating geopolitical tensions, the impact of which is still impossible to fully predict. If, however, the implications of the conflict translate into long-term stress on the economy and capital markets, and the current situation continues for a prolonged period or is exacerbated further, it is impossible to rule out a scenario in which the earnings, risk and capital situation, as well as the corresponding key management indicators, show less favourable development than that presented in the forecast report. As a result, additional information has been included in the forecast report of the Group management report.

There was no gross loan volume and no country limit for counterparties in Ukraine and Belarus at the end of 2021. The gross loan volume for counterparties in Russia came to €75m. Due to the securing of loans through ECA guarantees for energy supply financing, the net loan volume attributable to Russia was substantially lower than the gross loan volume at around €4m.

Recommendation regarding appropriation of net profit

The proposed appropriation of the net profit for the 2021 financial year of €200,176,560.00 is as follows:

- Distribution of a dividend amounting to €200,176,560.00, i.e. 104.4% on existing shares in the Bank's subscribed capital (€191,740,000.00) that are entitled to dividends as at 31 December 2021.

The consolidated financial statements were approved for publication on 7 March 2022 by the Board of Management of DekaBank.

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, 7 March 2022

DekaBank
Deutsche Girozentrale

The Board of Management

Dr. Stocker Dr. Danne Dietl-Benzin

Kapffer Knapmeyer Müller

Note: This is a translation of the German original. Solely the original text in German language is authoritative.

Independent Auditor'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, the statement of financial position as at 31 December 2021, the statement of changes in equity and the statement of cash flows for the financial year from 1 January to 31 December 2021, and notes to the consolidated financial statements for 2021, including a summary of significant accounting policies. In addition, we have audited the group management report of DekaBank Deutsche Girozentrale AöR for the financial year from 1 January to 31 December 2021. 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 at 31 December 2021, and of its financial performance for the financial year from 1 January to 31 December 2021, 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)(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 judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January 2021 to 31 December 2021. 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 at 31 December 2021, the Deka Group recognised "financial assets valued at fair value" totalling EUR 17.7 billion. At 20.0% 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.

OUR AUDIT APPROACH

Based on our risk assessment and evaluation of the risks of material misstatement, we developed an audit approach which encompasses both control 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 unobservable 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, the following substantive audit procedures for portfolios of securities and derivatives selected based on risk as at 31 December 2021:

- 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 re-evaluation using independent valuation methods, parameters and models based on risk.
- 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 32.9% (EUR 29.2 billion) of the Deka Group's total equity and liabilities and includes certificate issuance measured on the basis of observable and unobservable inputs.

The financial statement risk could lie in particular in there being no appropriate 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 control 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 unobservable market data,
- the validation of the valuation methods and models, and
- 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 at 31 December 2021:

- Risk-based re-valuation using independent valuation methods, parameters and models. In this process, we covered the significant 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 34 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 2021 financial year, the Deka Group recognised commission income from the fund business of EUR 3.1 billion and commission expenses from the fund business of EUR 1.6 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 recognised 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 control 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 are used.

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

Commission income and expenses from the fund business have been properly determined and recognised by the Deka Group.

Other Information

Management and/or the Administrative Board are/is responsible for the other information. The other information comprises the separate non-financial report referred to in the group management report. 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 information audited for content 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 Management and the Administrative Board for the Consolidated Financial Statements and the Group Management Report

Management is responsible for the preparation of 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 Group's assets, liabilities, financial position and financial performance. In addition, 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, 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, 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, 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 judgement and maintain professional scepticism 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 controls.
- 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 management and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness 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 management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by 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

Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Group Management Report Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB

We have performed assurance work in accordance with Section 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the electronic file "dekabank_KA_KLB_ESEF-2021-12-31.zip" (SHA256 hash value: b4a50c9bb71fab6566a82bd2a5f6fcea2e0ee0015fe7168492abd139bba9295b) made available and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained in these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the electronic file made available, identified above and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from 1 January to 31 December 2021, contained in the "Report on the Audit of the Consolidated Financial Statements and the Group Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the file made available and identified above in accordance with Section 317 (3a) HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB (IDW AsS 410 (10.2021)). Our responsibility in accordance therewith is further described below. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The Company's management is responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the Company's management is responsible for such internal control that they have considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format.

The Administrative Board is responsible for overseeing the process of preparing the ESEF documents as part of the financial reporting process.

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB. We exercise professional judgement and maintain professional scepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e. whether the file made available containing the ESEF documents meets the requirements of Delegated Regulation (EU) 2019/815, as amended as at the reporting date, on the technical specification for this electronic file.
- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, as amended as at the reporting date, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as auditor at the Annual General Meeting on 24 March 2021. We were engaged by the Administrative Board on 25 June 2021. We have been the group auditor of DekaBank without interruption since 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 a review of the interim (half-year) financial report, voluntary annual audits of subsidiaries and project-based quality assurance. 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 a letter of comfort and other assurance services required by supervisory law as well as tax advisory services relating to investment funds and VAT issues, which were approved by the Audit Committee.

Other Matter – Use of the Auditor's Report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the examined ESEF documents. The consolidated financial statements and group management report converted to the ESEF format – including the versions to be published in the German Federal Gazette [Bundesanzeiger] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the examined ESEF documents provided in electronic form.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Thomas Beier.

Frankfurt am Main, 9 March 2022

KPMG AG
Wirtschaftsprüfungsgesellschaft

[signature] Beier
Wirtschaftsprüfer
[German Public Auditor]

[signature] Haider
Wirtschaftsprüfer
[German Public Auditor]

OTHER INFORMATION

Shareholders, subsidiaries and associated companies

Shareholders of DekaBank *(as of 1 March 2022)*

DSGV ö. K.[1]	**50%**
thereof:	
Sparkassenverband Baden-Württemberg	7.70%
Rheinischer Sparkassen- und Giroverband	6.56%
Sparkassenverband Niedersachsen	6.46%
Sparkassenverband Bayern	6.31%
Sparkassenverband Westfalen-Lippe	6.17%
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	0.90%
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	3.68%
Sparkassenverband Niedersachsen	2.04%
Sparkassenverband Rheinland-Pfalz	1.87%
Sparkassenverband Berlin / Landesbank Berlin	1.56%
Sparkassen- und Giroverband für Schleswig-Holstein	1.48%
Hanseatischer Sparkassen- und Giroverband	1.26%
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 2022)*

Asset Management Securities business division	
Deka Investment GmbH, Frankfurt/Main	100.0%
Deka International S.A., Luxembourg	100.0%
DekaTreuhand GmbH, Frankfurt/Main	100.0%
Deka Vermögensmanagement GmbH, Frankfurt/Main	100.0%
Deka Verwaltungsgesellschaft Luxembourg S.A., Luxembourg	100.0%
IQAM Invest GmbH, Salzburg	100.0%
IQAM Partner GmbH, Vienna	100.0%
IQAM Research der DekaBank GmbH (formerly: Privates Institut für quantitative Kapitalmarktforschung der DekaBank GmbH), Frankfurt am Main	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	1.7%
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%
SWIAT GmbH, Frankfurt am Main	100.0%
Deutsche WertpapierService Bank AG, Frankfurt am Main	2.5%
Asset Management Real Estate business division	
Deka Immobilien Investment 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, 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	12.2%
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 2022)

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 Risk and Credit Committee
Member of the Remuneration Supervision Committee

Michael Breuer
President of the Rhineland Savings Banks and Giro Association, Düsseldorf
Chairman of the Audit Committee
Member of the General and Nominating Committee

Ingo Buchholz
Chairman of the Management Board of Kasseler Sparkasse, Kassel
Deputy Chairman of the Audit Committee

Prof. Dr. Liane Buchholz
President of the Savings Banks Association Westfalen-Lippe, Münster
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee
Member of the Audit Committee

Dr. Michael Ermrich
(until 31 December 2021)
Managing President of the East German Savings Banks Association, Berlin

Ralf Fleischer
Chairman of the Management Board of Stadtsparkasse München, Munich

Andreas Fohrmann
(until 2 September 2021)
Chairman of the Management Board of Sparkasse Südholstein, Neumünster

Michael Fröhlich
(since 1 January 2021)
Chairman of the Management Board of Sparkasse Bielefeld, Bielefeld
Member of the Risk and Credit Committee

Gerhard Grandke
(until 31 December 2021)
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

Melanie Kehr
(since 1 January 2021)
Member of the Management Board of Kreditanstalt für Wiederaufbau, Frankfurt/Main
Member of the Risk and Credit Committee

Dr. Stefan Kram
(since 1 January 2022)
Chairman of the Management Board of Kreissparkasse Duchy of Lauenburg

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
Member of the Board of Management of Berliner Sparkasse, Berlin
Member of the Risk and Credit Committee

Stefan Reuß
(since 1 January 2022)
Managing President of the Savings Banks and Giro Association Hesse-Thuringia
Member of the General and Nominating Committee
Member of the Remuneration Supervision Committee

Prof. Dr. Ulrich Reuter
(since 1 January 2021)
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

Katrin Rohmann
Feelance Auditor, Birkenwerder
Member of the Audit Committee

Frank Saar
Chairman of the Management Board of Sparkasse Saarbrücken, Saarbrücken
Deputy Chairman of the Risk and Credit Committee

Peter Schneider
President of the Savings Banks Association Baden-Württemberg, 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

Ludger Weskamp
(since 1 January 2022)
Managing President of the East German Savings Banks Association

Burkhard Wittmacher
Chairman of the Management Board of Kreissparkasse 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
(until 31 July 2021)
Chairman of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

Edwin Quast
First Deputy Chairman of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

Barbara Wörfel
(since 1 August 2021)
Second Deputy Chairwoman of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

Representatives appointed by the Federal Organisation of Central Municipal Organisations (in an advisory capacity):

Dr. Uwe Brandl
Mayor of the City of Abensberg and First Deputy Chairman of the German Association of Towns and Municipalities, Berlin

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

Board of Management

Dr. Georg Stocker
Chairman of the Board of Management

Dr. Matthias Danne
Deputy Chairman of the Board of Management

Birgit Dietl-Benzin
Member of the Board of Management

Daniel Kapffer
Member of the Board of Management

Torsten Knapmeyer
Member of the Board of Management
(since 1 April 2021)

Martin K. Müller
Member of the Board of Management

Executive Managers

Manfred Karg

Torsten Knapmeyer
(until 31 March 2021)

Seats on supervisory bodies

Dr. Matthias Danne
Deka Investment GmbH,
Frankfurt/Main:
Chairman of the Supervisory Board

Deka Vermögensmanagement
GmbH, Frankfurt/Main:
Chairman of the Supervisory Board

Deka Immobilien Investment GmbH,
Frankfurt/Main:
Chairman of the Supervisory Board

WestInvest Gesellschaft für
Investmentfonds mbH, Düsseldorf:
Chairman of the Supervisory 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

Birgit Dietl-Benzin
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

WestInvest Gesellschaft für
Investmentfonds mbH, Düsseldorf:
Deputy Chairwoman of the
Supervisory Board

S Broker AG & Co. KG,
Wiesbaden:
Deputy Chairwoman of the
Supervisory Board

S Broker Management AG,
Wiesbaden:
Member of the Supervisory Board

FMS Wertmanagement AöR,
Munich:
Member of the Supervisory Board
and Chairwoman of the Audit
Committee

Daniel Kapffer
S Broker AG & Co. KG, Wiesbaden:
Chairman of the Supervisory Board

S Broker Management AG, Wiesbaden:
Chairman of the Supervisory Board

bevestor GmbH, Frankfurt/Main:
Deputy Chairman of the Supervisory
Board

Deka Verwaltungsgesellschaft
Luxembourg S.A., Luxembourg:
Deputy Chairman of
the Administrative Board

Torsten Knapmeyer
S Broker AG & Co. KG, Wiesbaden:
Member of the Supervisory Board

Martin K. Müller
Deka Verwaltungsgesellschaft
Luxembourg S.A., Luxembourg:
Chairman of the Administrative Board

Sparkassen Rating und
Risikosysteme GmbH, Berlin:
Member of the Supervisory Board
(until 31 December 2021)

Deka Treuhand Erwerbsgesellschaft
mbH, Frankfurt/Main:
Managing Director

Fund-related committees

Asset Management Securities business division

Advisory Board Retail
(as of 1 March 2022)

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

Antonius Bergmann
Chairman of the Management Board of Stadtsparkasse Mönchengladbach, Mönchengladbach

Jochen Brachs
Chairman of the Management Board of Sparkasse Hochschwarzwald, Titisee-Neustadt

Frank Brockmann
Member of the Management Board of Hamburger Sparkasse AG, Hamburg

Martin Bücher
Chairman of the Management Board of Kreissparkasse Biberach, Biberach

Martin Deertz
Member of the Management Board of Sparkasse Südholstein, Neumünster

Andreas Frühschütz
Chairman of the Management Board of Kreissparkasse München Starnberg Ebersberg, Munich

Andreas Götz
Excecutive Vice President of Landesbank Baden-Württemberg

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

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.

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

Michael Thanheiser
Chairman of the Management Board of Landessparkasse zu Oldenburg, Oldenburg

Advisory Board Institutional
(as of 1 March 2022)

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
Member of the Management Board of Hamburger Sparkasse AG, Hamburg

Markus Frei
Chairman of the Management Board of Kreissparkasse Ostalb, Aalen

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, Worbis

Stephan Scholl
Chairman of the Management Board of Sparkasse Pforzheim Calw, Pforzheim

Christoph Schulz
Chairman of the Management Board of Braunschweigische Landessparkasse, Braunschweig

Rolf Settelmeier
Chairman of the Management Board of Stadtsparkasse Augsburg, Augsburg

Franz Wittmann
Chairman of the Management Board of Sparkasse im Landkreis Cham, Cham

Corporate bodies of subsidiaries – Asset Management Securities business division

Deka Investment GmbH

Members of the Supervisory Board
(as of 1 March 2022)

Chairman

Dr. Matthias Danne
Deputy Chairman of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Birgit Dietl-Benzin
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 Ostsächsische Sparkasse Dresden, Dresden

Jörg Münning
Chairman of the Management Board of LBS Westdeutsche Landesbausparkasse, Münster

Peter Scherkamp
Munich

Board of Management

Spokesman

Dr. Ulrich Neugebauer

Members

Jörg Boysen
Thomas Ketter
Thomas Schneider

Deka Vermögensmanagement GmbH

Members of the Supervisory Board
(as of 1 March 2022)

Chairman

Dr. Matthias Danne
Deputy Chairman of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Birgit Dietl-Benzin
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Serge Demolière
Berlin

Wolfgang Dürr
Trier

Steffen Matthias
Berlin

Victor Moftakhar
Bad Nauheim

Board of Management

Chairman

Dirk Degenhardt

Members

Dirk Heuser
Thomas Ketter
Thomas Schneider

S Broker AG & Co. KG

Members of the Supervisory Board
(as of 1 March 2022)

Chairman

Daniel Kapffer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairpersons

Birgit Dietl-Benzin
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

Torsten Knapmeyer
General Manager 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 2022)

Chairman

Daniel Kapffer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairman

Dr. Olaf Heinrich
Head of Digital Multichannel Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Member

Birgit Dietl-Benzin
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 2022)

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 Management of Deka Vermögens-management GmbH, Frankfurt/Main

Board of Management

Members

Marco Lorenz
Carsten Kroeber

Asset Management Real Estate business division

Advisory Board Real Estate
(as of 1 March 2022)

Chairman

Dirk Köhler
Chairman of the Management Board of Sparkasse Uelzen Lüchow-Dannenberg, Uelzen

Deputy Chairman

Jürgen Wagenländer
Member of the Management Board of Sparkasse Mainfranken Würzburg, Würzburg

Members

Andrea Binkowski
Chairwoman of the Management Board of Sparkasse Mecklenburg-Strelitz, Neustrelitz

Toni Domani
Member of the Management Board of Sparkasse Regen-Viechtach, Regen

Dr. Alexander Endlich
Chairman of the Management Board of Sparkasse Hegau-Bodensee, Singen

Heinz Feldmann
Chairman of the Management Board of Sparkasse LeerWittmund, Leer

Dr. Jürgen Fox
Chairman of the Management Board of Saalesparkasse, Halle (Saale)

Markus Hacke
Chairman of the Management Board of Sparkasse Lüdenscheid, Lüdenscheid

Ulrich Kistner
Chairman of the Management Board of Sparkasse Rastatt-Gernsbach, Rastatt

Volker Knotte
Member of the Management Board of Sparkasse Mittelmosel – Eifel Mosel Hunsrück, Bernkastel-Kues

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

Thomas Schmidt
Member of the Management Board of Sparkasse Bamberg, Bamberg

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 Kreis-Sparkasse Darmstadt, Darmstadt

Rainer Virnich
Member of the Management Board of Sparkasse KölnBonn, Cologne

Bernd Zibell
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 2022)

Chairman

Dr. Matthias Danne
Deputy Chairman of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Birgit Dietl-Benzin
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Prof. Dr. Wolfgang Schäfers
C4 Professor at the 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

Thomas Schmengler
Nackenheim

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 2022)

Chairman

Dr. Matthias Danne
Deputy Chairman of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairwoman

Birgit Dietl-Benzin
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Prof. Dr. Wolfgang Schäfers
C4 Professor at the 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

Thomas Schmengler
Nackenheim

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
Marcus Rösch

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 regulatory ratios such as LR, NFSR, subordinated MREL requirements and MREL-ratios.

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 and contractual restrictions 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 expense (excluding restructuring expense) 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 quantification, 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 at 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 V 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 funds. Direct investments in co-operation 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.

Gross loan volume
In accordance with the definition set out in section 19 (1) KWG, the gross loan volume includes debt instruments issued by public authorities and bills of exchange, amounts due from banks and customers, bonds and other fixed-interest securities, shares and other non-fixed-interest securities including fund units, equity investments and shares in affiliated companies, equalisation claims against the public sector, items for which lease agreements have been concluded as the lessor, irrespective of their recognition in the balance sheet, other assets where they are subject to counterparty risk, sureties and guarantees, irrevocable lending commitments as well as market values of derivatives. In addition, the gross loan volume includes underlying risks from derivative transactions, transactions for the purposes of covering guarantee payments on guarantee funds, as well as the volume of off-balance sheet counterparty risks.

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 as well as 2018/1620 and the NSFR in accordance with the requirements of the CRR.

Number of (active) employees
The number of employees is the effective number of active full-time employees at the reporting date, with part-timers 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 V 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, which corresponds to the risk capacity.

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, third-party funds and liquidity master funds and advisory/management mandates and certificates.

Wertpapierhaus
The Deka Group is the securities service provider (the Wertpapierhaus) for the savings banks. It is made up of DekaBank and its subsidiaries. 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 and advisory 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.

Headquarters and addresses

DekaBank
Deutsche Girozentrale
Head Office Frankfurt/Main and Berlin
Mainzer Landstraße 16
60325 Frankfurt/Main
Postfach 11 05 23
60040 Frankfurt/Main
Phone: +49 (0) 69 71 47-0
Fax: +49 (0) 69 71 47-13 76
e-mail: konzerninfo@deka.de
Internet: www.dekabank.de

Branch Offices

DekaBank Deutsche Girozentrale
Succursale de Luxembourg
6, rue Lou Hemmer
1748 Luxembourg-Findel
Boîte Postale 5 04
2015 Luxembourg
Phone: (+352) 34 09-60 01
Fax: (+352) 34 09-30 90
e-mail: mail@deka.lu

DekaBank Deutsche Girozentrale
London Branch
Fifth Floor
Nash House
13a St. George Street
London W1S 2FQ
Phone: (+44) 20 76 45 90 70

DekaBank Deutsche
Girozentrale Paris Branch
34, rue Tronchet
75009 Paris
Phone: (+33) 1 44 43 98 02

Representative Office

Representative Office New York
1330 Avenue of the Americas
21st Floor
New York, NY 10019
Phone: (+1) 21 22 47 65 15

Deka Investment GmbH
Mainzer Landstraße 16
60325 Frankfurt/Main
Postfach 11 05 23
60040 Frankfurt/Main
Phone: +49 (0) 69 71 47-0
Fax: +49 (0) 69 71 47-19 39
e-mail: service@deka.de
Internet: www.deka.de

Deka Vermögensmanagement GmbH
Mainzer Landstraße 16
60325 Frankfurt/Main
Postfach 11 05 23
60040 Frankfurt/Main
Phone: +49 (0) 69 71 47-0
Internet: www.deka.de

Deka Vermögensmanagement GmbH
Niederlassung Luxemburg
6, rue Lou Hemmer
1748 Luxembourg-Findel
Boîte Postale 5 04
2015 Luxembourg

Deka Immobilien Investment GmbH
Taunusanlage 1
60329 Frankfurt/Main
Postfach 11 05 23
60040 Frankfurt/Main
Phone: +49 (0) 69 71 47-0
Fax: +49 (0) 69 71 47-35 29
e-mail: immobilien@deka.de
Internet: www.deka-immobilien.de

WestInvest Gesellschaft für Investmentfonds mbH
Königshof
Hamborner Straße 55
40472 Düsseldorf
Postfach 10 42 39
40033 Düsseldorf
Phone: +49 (0) 2 11 8 82 88-5 66
e-mail: vertriebsservice-duesseldorf@deka.de
Internet: www.westinvest.de

bevestor GmbH
Hamburger Allee 14
60486 Frankfurt/Main
Postfach 11 11 28
60046 Frankfurt/Main
Phone: +49 (0) 69 4 00 50 15-0
Fax: +49 (0) 69 4 00 50 15-99
e-mail: kontakt@bevestor.de
Internet: www.bevestor.de

S Broker AG & Co. KG
Carl-Bosch-Str. 10
65203 Wiesbaden
Phone: +49 (0) 6 11 20 44-19 00
Fax: +49 (0) 6 11 20 44-24 99
e-mail: service@sbroker.de
Internet: www.sbroker.de

IQAM Invest GmbH
Franz-Josef-Straße 22
5020 Salzburg
Phone: (+43) 5 05 86 86-0
Fax: (+43) 5 05 86 86-8 69
e-mail: office@iqam.com
Internet: www.iqam.com

Internet website
The 2021 Annual Report can be found at www.deka.de/deka-gruppe under the heading "InvestorRelations/ Publications and Presentations" and as an online version in German and English. The financial reports, presentations and other publications are also available for download.

Contact
External Reporting & Rating
e-mail: investor.relations@deka.de
Phone: +49 (0) 69 71 47 - 0

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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 Group management report and other parts of the Annual Report 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 events predicted. The English translation of the Annual Report is provided for convenience only. The German original is definitive.

Due to roundings, numbers and percentages may not add up precisely to the totals provided.

DekaBank
Deutsche Girozentrale
Mainzer Landstraße 16
60325 Frankfurt/Main
P.O. Box 11 05 23
60040 Frankfurt/Main

Phone: +49 (0) 69 71 47 - 0
Fax: +49 (0) 69 71 47 - 13 76
www.dekabank.de

Finanzgruppe