Deka Group
Annual Report 2022

22

Finanzgruppe

Deka Group at a glance

BUSINESS DEVELOPMENT INDICATORS		31 Dec 2022	31 Dec 2021	Change (%)
Total assets	€m	97,396	88,865	9.6
Total customer assets	€m	371,753	395,148	– 5.9
Retail customers	€m	188,490	196,485	– 4.1
Institutional customers	€m	183,263	198,662	– 7.8
Number of securities accounts	thousand	5,309	5,123	3.6
		2022	**2021**	
Net sales	€m	27,381	35,735	– 23.4
Retail customers	€m	20,754	25,032	– 17.1
Institutional customers	€m	6,627	10,703	– 38.1
PERFORMANCE INDICATORS				
Total income	€m	2,236.3	2,019.5	10.7
Total expenses	€m	1,251.5	1,171.8	6.8
Economic result	€m	984.8	847.8	16.2
Total of profit or loss before tax	€m	800.7	791.4	1.2
Return on equity before tax (balance sheet)	%	17.0	16.2	0.8%-Points
Cost/income ratio	%	55.0	58.6	– 3.7%-Points
RISK INDICATORS – NORMATIVE PERSPECTIVE		**31 Dec 2022**	**31 Dec 2021**	
Own funds	€m	6,751	6,075	11.1
Risk-weighted assets	€m	31,360	30,944	1.3
Total capital ratio	%	21.5	19.6	1.9%-Points
Common Equity Tier 1 capital ratio	%	17.4	15.2	2.2%-Points
Leverage ratio	%	7.1	6.2	0.8%-Points
MREL Ratio (RWA based)	%	52.0	59.7	– 7.7%-Points
MREL Ratio (leverage ratio exposure based)	%	19.1	21.7	– 2.7%-Points
Subordinated MREL requirements (risk-weighted assets based)	%	35.9	42.4	– 6.4%-Points
Subordinated MREL requirements (leverage ratio exposure based)	%	14.2	16.4	– 2.2%-Points
Net Stable Funding Ratio (NSFR)	%	118.1	118.9	– 0.8%-Points
Liquidity Coverage Ratio (LCR)	%	159.1	160.3	– 1.1%-Points
RISK INDICATORS – ECONOMIC PERSPECTIVE				
Risk appetite	€m	4,150	4,000	3.8
Total risk	€m	2,488	1,731	43.7
Utilisation of risk appetite	%	59.9	43.3	16.6%-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		A	AA	
ISS ESG		C+ (Prime)	C+ (Prime)	
Sustainalytics		16.5 Low Risk	17.4 Low Risk	
Moody's ESG Solutions		55/100 Robust	55/100 Robust	
KEY EMPLOYEE FIGURES				
Number of employees		5,084	4,854	4.7
Number of active employees		4,373	4,243	3.0

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

CONTENTS

Foreword by the Board of Management

Dear Shareholders and Investors,

We are looking back on a year that was far from easy for our company. The war in Ukraine sent energy prices spiralling and inflation rates soaring to new heights. At the same time, the consequences of the pandemic were still being clearly felt. In the eurozone, prices surged by almost 8% over the year, including the strongest price rises in Germany since the modern Federal Republic was founded in 1949. The European Central Bank threw all its might against the rising inflation and implemented a series of significant interest rate hikes. Although this is likely to ease the situation somewhat, inflation rates look set to remain relatively high for quite some time to come. For many investors, the difficult market environment in the past year resulted in a real-terms loss in the value of their assets. Investing money has become a particularly challenging business.

More positively, however, we have also seen in the past year that confidence in securities investing remains. Customers of the savings banks and Deka alike know that, when it comes to building long-term capital or providing for retirement, there is no ignoring the value of securities saving. In times of stock market volatility, regular saving over a longer period makes particular sense. In 2022, the number of Deka savings plans increased by some 368,000 (net figure), taking the total to 7.4 million contracts. While the pace of lump-sum investments in funds, by contrast, eased off from the middle of the year, we remain satisfied with our sales figures. Total net sales came to 27.4 billion, of which three-quarters was attributable to the retail business.

Its sound business performance enabled Deka to steer a safe course through the choppy waters. Given the favourable development in operating activities and positive valuation effects due to changed market parameters, Deka achieved an economic result of €984.8m. This was significantly higher than the previous year's €847.8m. At 17.0%, the return on equity before tax was at the upper end of the figures posted by the European peer group, while we maintained a low cost/income ratio of 55.0%.

With this result, we showed once again that our business model is working well and that we are a reliable partner to the institutions in the Sparkassen-Finanzgruppe. We have the financial strength and stability to make the investments needed, which will enable us to remain on track with our growth path using our own resources.

We have made significant progress in the strategically important areas of digitalisation, sustainability and "New Work". Key technologies such as blockchain, artificial intelligence and the cloud are part of our everyday working life and are here to stay. We are often playing a pioneering role in these areas: S-Invest-Manager – the new cloud-based platform we have developed for the savings banks – makes the securities business more efficient and transparent. With SWIAT, we offer a network for blockchain transactions that has the potential to set new standards in securities trading.

Our goal is to recognise trends early on and enable our customers to reap the benefits of them. We aim to strengthen our position as an innovation leader in the Sparkassen-Finanzgruppe and to act as a point of contact for the topics of the future.

We are also supporting the transformation of the German economy in our role as an asset manager. Our hard work and commitment to a sustainable economy is more important than ever. After all, it is vital that our planet remains liveable for future generations. With the capital entrusted to us, and through active engagement at shareholders' meetings and in regular dialogue with business, we aim to support the shift to a climate-friendly and resource-efficient economy in the best possible way.

The 2020s are proving to be a transformative decade – and not only when it comes to sustainability. Companies, including Deka, are having to rethink traditional processes and approaches. Technological change and new ways of working require digital expertise, agility and lifelong learning. This also comes in the context of demographic change. Millions of people are poised to leave the labour market by the end of the decade, and the financial sector is among those about to experience a generational shift.

This backdrop explains why we attach such high importance to attractive working conditions. For us, agility is not just a toolbox of methods but also a mindset that shapes the way we work together. Our new office building in Frankfurt-Niederrad, for example, offers ultra-modern workstations and spaces where some 3,500 employees can be creative and share ideas. In the coming year, we plan to move more people to Four, a new skyscraper in Frankfurt city centre. We are investing in the future and continuously offering training and development opportunities for the young talent at our company. In future, we plan to recruit 100 new trainees a year.

With its innovative capacity, financial strength and readiness for the future, Deka is well equipped for the challenges of the years ahead. Whatever continued uncertainty 2023 may bring, the return of inflation means that active asset management – our core task – is more important than ever.

Sincerely,

Dr. Georg Stocker

Dr. Matthias Danne

Birgit Dietl-Benzin

Daniel Kapffer

Torsten Knapmeyer

Martin K. Müller

Report of the Administrative Board for the 2022 financial year

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

Key issues of Administrative Board meetings
A total of four ordinary meetings took place in 2022, 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.

At the Administrative Board meeting on 31 March 2022, representatives from ECB Banking Supervision explained the contents of the 2021 SREP decision ("Supervisory Review and Evaluation Process") for the Deka Group and discussed it with the Administrative Board.

The Board of Management reported on the business and risk strategies and discussed these with the Administrative Board. The Administrative Board approved the mediumterm plan for the years 2023 to 2025 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 2021 financial year, were also submitted to the Administrative Board.

The Administrative Board was provided with regular reports about the implications of developments in the international capital markets for the Bank's earnings, liquidity and risk position, as well as management measures taken by the Board of Management. The Administrative Board looked at the progress of current projects, particularly the implementation of the strategic action programme 2025, and at regulatory issues. It also passed resolutions on matters relating to the Board of Management.

The Administrative Board also discussed the investigations by the public prosecutor's office in Cologne in relation to share trades transacted around the dividend record date in the period from 2007 to 2015 and a search of the Deka Group's premises in connection with this. A law firm is assisting the Administrative Board with regard to this matter.

Another key issue in 2022 was a capital injection for an equity investment. In addition, the Administrative Board adopted guidelines on succession planning for members of the DekaBank Administrative Board and Board of Management.

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 also held two extraordinary meetings in 2022 to deliberate on a matter relating to equity investments.

In addition to this, the Administrative Board held two training events in the 2022 financial year on the topics of "ESG risk management" and "digital securities".

The Administrative Board and its committees observed the rules on the handling of conflicts of interest. If Administrative Board members were exposed to a possible conflict of interest regarding individual matters, they did not take part in the discussion or vote on the topic concerned. The same applied to committee members.

Administrative Board Committees
The Administrative Board has a General and Nominating 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 Nominating Committee held four ordinary meetings in 2022, focusing primarily on the business model and the strategic development of the Deka Group. Another focus of its work again in 2022 was on matters relating to the Board of Management, including contractual and remuneration arrangements. It also discussed governance matters and issued recommendations for the election of new Administrative Board members.

The Remuneration Supervision Committee met four times in the reporting year. It discussed the remuneration report and the remuneration supervision report for 2021, 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 2022. It conducted a detailed review of the annual financial statements and consolidated financial statements. It monitored the requisite independence of the auditors and the quality of the audit, discussed and approved the additional services performed by the auditors, and engaged the auditors to perform their audit based on the key audit priorities established. The Audit Committee also concluded a fee agreement both for the existing auditors KPMG and for the future auditors Deloitte.

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, and on the resulting action to be taken. The committee discussed the report on the internal control system (ICS) and its effectiveness, 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). The Audit Committee also discussed the abovementioned investigations by the public prosecutor's office in Cologne in relation to share trades transacted around the dividend record date.

The members of the Risk and Credit Committee met five times during the reporting year. At its meetings, the committee held indepth discussions on DekaBank's risk situation, particularly in relation to the possible impacts of the war in Ukraine and a potential energy shortage. This examination included counterparty, market price, liquidity and operational risks in this context. These risks also encompass legal and reputational risks as well as 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 geopolitical crises and difficult global economic conditions, it received detailed reports and explanations on the development of loan portfolios, on the estimated risks for relevant exposures and selected counterparties in the capital markets business, and on the risk provisioning measures taken. The Risk and Credit Committee also discussed the business focus in the lending business with the Board of Management.

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 2022

The Shareholders' Meeting of DekaBank appointed KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG) as the auditors for financial year 2022. KPMG audited DekaBank's 2022 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.

The financial statements 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 2022 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 2022.

The Administrative Board also discussed the Group's separate non-financial report for the 2022 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.

In connection with the required change of auditor at regular intervals, the Shareholders' Meeting in July 2021 appointed Deloitte GmbH Wirtschaftsprüfungsgesellschaft as the auditors for the 2023 financial year.

Changes to the Board of Management and Administrative Board

At its meeting on 8 September 2022, the Administrative Board reappointed Mr Martin K. Müller as a member of the Board of Management for another five years. His reappointment will take effect on 1 May 2023.

Ms Beate Läsch-Weber and Ms Tanja Müller-Ziegler left the Administrative Board with effect from the end of 2022. With effect from 1 January 2023, Mr Thomas Hirsch, President of the Savings Banks Association Rhineland-Palatinate, was elected to the Administrative Board by the Shareholders' Meeting.

The Administrative Board would like to thank 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 very well in the 2022 financial year, despite considerable geopolitical and global economic headwinds, 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, 30 March 2023

The Administrative Board

Helmut Schleweis
Chairman of the Administrative Board

GROUP MANAGEMENT REPORT

As a securities service provider (Wertpapierhaus), the Deka Group is a key part of the Sparkassen-Finanzgruppe and looks back on a long history. The Deka Group's total net sales were well into positive territory at €27.4bn. Market conditions meant that total customer assets fell to €371.8bn. Given the favourable development in operating activities and positive valuation effects due to changed market parameters, the Deka Group achieved an economic result of €984.8m. 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

The Deka Group is looking back on a challenging 2022 for both the economy and the public. The war in Ukraine caused energy prices to rocket and inflation to hit historic highs, all while the consequences of the pandemic remained clearly noticeable. In the eurozone, prices surged significantly over the year – including the strongest price rises in Germany since the modern Federal Republic was founded. The European Central Bank threw all its might against the rising inflation and implemented multiple interest rate hikes with the aim of easing the situation somewhat. The rate hikes triggered very significant rises in yields in the space of just a few months.

For Deka, supporting the savings banks and institutional customers remained the focus despite this changed environment. The expert advice offered by the savings banks again helped customers to keep investing in 2022. The Deka Group's total net sales in the 2022 reporting period were well into positive territory at €27.4bn (previous year. €35.7bn). At €20.8bn, net sales in the retail customer segment fell €4.3bn short of the prior-year figure. Retail fund sales were down year-on-year at €8.1bn (previous year: €17.9bn). Sales of certificates to retail customers rose to €12.6bn (previous year: €7.1bn). Net sales to institutional customers came to €6.6bn as against €10.7bn in the previous year. The institutional investment fund business accounted for net sales of €5.9bn, compared with €8.8bn in 2021. While sales in master funds were well into positive territory, there were outflows of funds in the case of advisory/management mandates, partly due to a customer ending their mandate. Certificate sales to institutional customers came to €0.7bn (2021: €1.9bn). The positive overall net sales performance only partially offset the market-induced negative trend in total customer assets. Total customer assets declined by €23.4bn year-on-year to €371.8bn (year-end 2021: €395.1bn). This included distributions (from which customers benefited) and certificate redemptions of together €8.8bn.

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

Given the favourable development in operating activities and positive valuation effects due to changed market parameters, the Deka Group achieved an economic result of €984.8m. This was significantly higher than the previous year's €847.8m. Excluding the positive net income from own issues and other own credit quality effects in Treasury due to spread developments and actuarial gains on pension provisions (caused by a change in the actuarial interest rate), the economic result came to €741m.

We are satisfied with our business development and profit performance. Our financial strength is allowing us to make targeted investments in key areas for the future, such as digitalisation, turning the Deka Group into an even more customer-focused, innovative and sustainable *Wertpapierhaus*. The result will also ensure that DekaBank is able to distribute profits and also to retain part of these profits to further strengthen its Common Equity Tier 1 capital. Income rose by 10.7% year-on-year to €2,236.3m (2021: €2,019.5m). At €1,251.5m, expenses were 6.8% higher than in the previous year (€1,1 71.8m) due to moderate increases in personnel and other administrative expenses including depreciation and amortisation.

The cost/income ratio was 55.0% (2021: 58.6%). The return on equity before tax (balance sheet) in 2022 was 17.0% (2021: 16.2%). Excluding positive valuation effects, the cost/income ratio came to 61.6%. The corresponding return on equity before tax (balance sheet) was 12.8%.

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. DekaBank continued to have a very sound capital base in 2022. At year-end, the Common Equity Tier 1 capital ratio stood at 17.4% (year-end 2021: 15.2%). At 59.9%, utilisation of risk appetite was higher than at year-end 2021 (43.3%) but remained at a non-critical level.

Information about the Deka Group

Deka Group profile and strategy

The Deka Group consists of DekaBank Deutsche Girozentrale (DekaBank) and its subsidiaries in Germany and other countries. DekaBank is a systemically important European commercial bank. As the securities service provider (the *Wertpapierhaus*) for the German savings banks, it is part of the *Sparkassen-Finanzgruppe* and looks back on a long history. The Deka Group managed approximately €372bn of customer assets at the reporting date, making it one of the largest providers in Germany.

Legal structure

DekaBank is a German federal institution incorporated under public law with registered offices in Frankfurt am Main and Berlin. It 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.). DekaBank and thus the entire Deka Group are a key part of the *Sparkassen-Finanzgruppe*.

DekaBank is a member of the *Sparkassen-Finanzgruppe* deposit guarantee system. The deposit guarantee system of the *Sparkassen-Finanzgruppe* protects deposits with a savings bank, a state bank (*Landesbank*), DekaBank or a state building society (*Landesbausparkasse*).

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, Private Banking & Wealth Management, and Institutional Customer Sales – serve as the interface with sales partners and customers. The corporate centres perform essential functions and 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 Vermögens-management 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.

In Luxembourg, the Deka Group is represented in particular by DekaBank Deutsche Girozentrale Niederlassung Luxemburg and the investment management companies Deka International S.A. and Deka Vermögensmanagement GmbH (Luxembourg branch). The Austrian fund manufacturer IQAM Invest GmbH is headquartered in Salzburg.

Corporate management and supervision

As an institution incorporated under public law, DekaBank 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* (Savings Banks Association), DekaBank 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.

DekaBank is managed collectively by the Board of Management. The Board of Management takes a holistic approach to managing the Deka Group, always considering 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 responsibilities are as follows:

- 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 2022, DekaBank's Administrative Board extended the appointment of Martin K. Müller as a member of the Board of Management for a further five years to 2028. As the DekaBank Board member responsible for the banking business divisions, his remit encompasses Capital Markets, Financing and the Depositary.

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 Nominating 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 statutes. 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, succession planning for members of the DekaBank Administrative Board and Board of Management, the induction and training of new members and the promotion of diversity on the DekaBank Administrative Board and 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.

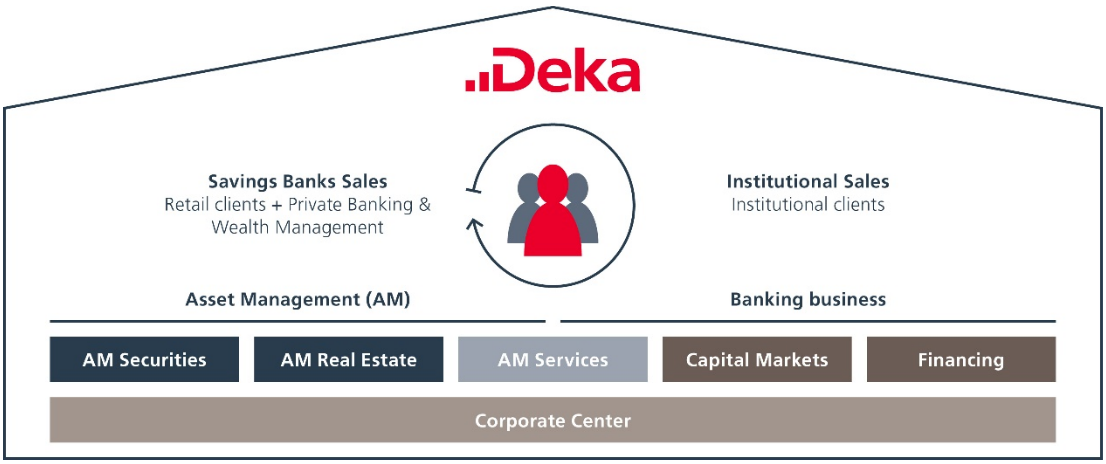
Business model as the *Wertpapierhaus* for the savings banks

The Deka Group is the securities service provider (the *Wertpapierhaus*) for the savings banks. Through its asset management and banking activities, it acts as a service provider for the investment, administration and management of assets, supporting its customers at every stage in the investment and advisory process within the securities business. It also offers comprehensive advice and solutions around investment, liquidity and risk management, and refinancing.

The Deka Group acts as an all-round solution provider, serving customers' needs without bias towards particular products. 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 to the savings banks.

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.

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 depositary business, custody account business and 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 (Treasury function).

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 other 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 is to provide suitable investments in securities and real estate as well as supplementary services throughout the investment and asset management value chain. In this regard, the Deka Group acts as finance provider, issuer, structurer, trustee and depositary.

In addition to investment products such as securities and real estate funds or certificates, the Deka Group also provides execution of securities trading, custody accounts (DekaBank custody account and S Broker's *DepotPlus* and *DirektDepot*), asset servicing and depositary services. It also offers capital market services for savings banks, such as securities lending or the procurement and settlement of securities and financial derivatives. 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 the cross-divisional sales units: Savings Banks Sales, Private Banking & Wealth Management, and Institutional Customer Sales.

Deka takes an all-round approach to helping savings banks sell 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 historical development of the Deka Group's predecessor institutions, together with its ownership structure, make it a key part of the *Sparkassen-Finanzgruppe* (Savings Banks Association).

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: changed customer behaviour, digitalisation, sustainability, growing competitive pressure and a continued high level of regulation demand innovative and future-proof solutions, ongoing evolution and a business model consistently focused on customer utility.

The strategic action programme 2025 sets the direction of travel to enhance the Deka Group's position as a customer-oriented, innovative and sustainable *Wertpapierhaus*. This development is focusing on the following elements:

- To address increasing competition and changes in customer behaviour, the Deka Group will continue to position itself as a customer-oriented provider and consistently aim its sales, products and solutions at changing customer needs.

- Digitalisation and targeted innovation are building blocks for customer utility, and the Deka Group aims to lead such innovation in the *Sparkassen-Finanzgruppe*. Consistently capitalising on new technological possibilities and opportunities will make it an innovative partner to its customers for securities-based solutions in the age of digitalisation.

- The Deka Group will continue to actively drive sustainability as a fundamental principle of its work. 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 employee recruitment and systematic continuing professional development are an important part of successfully 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 is evolving as a modern and versatile organisation for the future, geared towards customer needs and efficient processes.

Digitalisation

With customer requirements growing further and digital technologies developing at a rapid pace, the Deka Group has further stepped up its digitalisation activities. As the savings banks' *Wertpapierhaus*, the Deka Group is also a key partner for the savings banks in this context when it comes to all aspects of securities services. 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 activities have three strategic thrusts:

- Digitalising the end-to-end (E2E) customer journey: The Deka Group sees its role as helping the savings banks provide and secure their customer interface in the securities business throughout the value chain. Central to its success here is making its services simpler and easier to use and enabling digital customer journeys that work across a customer's different devices and locations. This involves not only a modern customer front end but also the provision of seamless end-to-end processes for transactions and other services, making it easier for savings banks and their customers to access the securities business digitally. The savings banks' offering for their end customers is being constantly improved with this aim in mind. This particularly includes the S-Invest app but also the "internet branch" and other customer channels such as S Broker and bevestor. The collaboration between the savings banks and Deka has also been put on a completely new footing with the new S-Invest Manager sales platform. The platform supports the savings banks with securities business, all the way from planning to sales and controlling. S-Invest-Manager is based on a cloud solution developed by Deka itself, which was built on the existing core IT architecture. Similar platform services are already available for the Deka Group's institutional customers.

- Digitalising products and services: With the development of distributed ledger technology, digitalisation has well and truly reached the product itself and no longer relates solely to the sales channel. Digital assets have the potential to make a wide range of investments easier and cheaper for customers to access, to substantially streamline value chains and to overcome the fragmentation of capital markets in Europe. The Deka Group therefore sees digital or "tokenised" assets as a growth market for the future. Given its business model as the *Wertpapierhaus* for the savings banks, Deka's focus here is on digital or "tokenised" securities. The European Central Bank (ECB) puts the value of euro-denominated securities (excluding equities) in circulation at more than €20 trillion. Digitalisation even of just a part of this market therefore has enormous financial significance. Deka is also working intensively on the tokenisation of real assets (e.g. real estate).

  The Deka Group is therefore leading the redesign of products, processes and IT platforms within the *Sparkassen-Finanzgruppe*. In digital products and digital product development, the focus is on building and expanding digital assets and their infrastructure and on providing corresponding offerings and solutions for customers. In 2022, for example, DekaBank applied for approval to maintain a crypto securities register and offer custody of crypto assets.

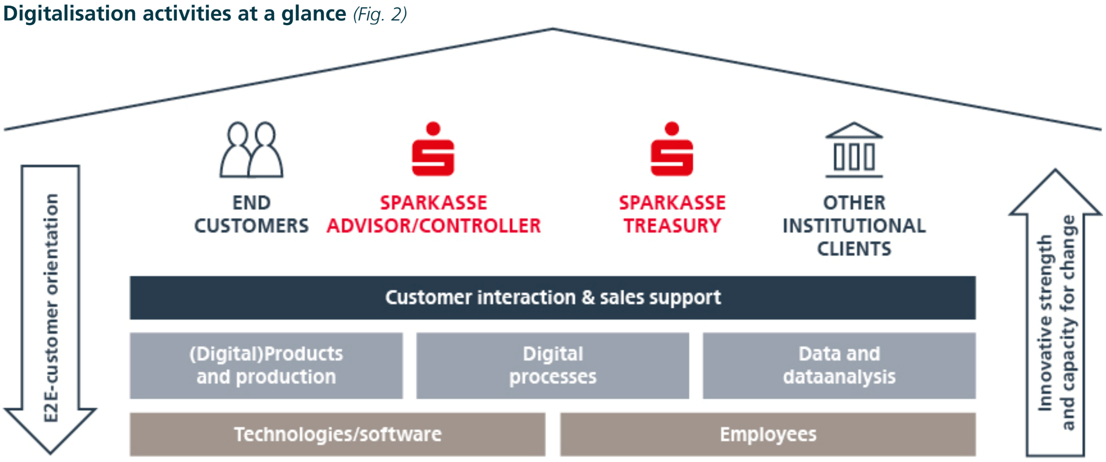
  With SWIAT (Secure Worldwide Interbank Asset Transfer), the Deka Group has a major involvement in a new company developing a blockchain-based decentralised financial infrastructure. SWIAT aims to develop an international network for digital assets, traditional securities and digital services, which it will use to develop a standardised, scalable and decentralised settlement and custody infrastructure for blockchain transactions. SWIAT GmbH began operations on 1 February 2022 as a wholly owned DekaBank subsidiary.

  Alongside digital assets, the Deka Group is also exploring the use of artificial intelligence in the context of investment decisions.

  Deka is currently building the Dekaverse, its virtual presence in Decentraland – a metaverse in which many international companies are represented. The goal is to gather experience at the earliest possible stage so as to strengthen Deka's position and act as a point of contact within the *Sparkassen-Finanzgruppe* for the topics of the future.

- Digitalising business processes and infrastructure: The digitalisation of existing business and IT processes – including core, management and support processes – is being driven both by the development of digital business models and the desire to improve these processes' efficiency and resilience. Moreover, process digitalisation is essential to offering completely digital customer journeys that do away with complex, paper-based processes. A technology services kit has been created for use in digitalising processes. Key digital technologies such as cloud computing are also creating more modern and efficient IT processes.

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



Sustainability

As the *Wertpapierhaus* for the savings banks, the Deka Group is helping the *Sparkassen-Finanzgruppe* to get ready for the future. The "Target vision 2025 – Guidelines on sustainability in savings banks" (*Zielbild 2025 – Leitfaden zur Nachhaltigkeit in Sparkassen*) provides a comprehensive roadmap for implementing more sustainability. In keeping with regulatory requirements, the Deka Group understands sustainability as an ongoing process to fully integrate ESG criteria (climate and environmental (E), social (S), and governance (G) aspects) into the business model. This applies in equal measure to customers, to Deka's expectations of itself and to its public engagement.

In its role as the *Wertpapierhaus* for the savings banks, the Deka Group puts customers' needs front and centre. Using a wide range of products with sustainability characteristics, from investments in securities and real estate to financing solutions, it helps its customers achieve their ambition of financing and investing in a climate-friendly and sustainable way.

The Deka Group's sustainable positioning as an organisation enables it to respond to risks and opportunities. This involves integrating sustainability considerations into structures and workflows in line with ESG criteria. Potential sustainability risks in relevant business processes are systematically identified and managed. Regulatory requirements are reliably implemented with a long-term focus. The Deka Group wants to be perceived by all its staff as a fair, flexible and attractive employer and has an open and participatory management culture. It values the diversity of its teams. Employees are actively involved in shaping Deka's future as a sustainable organisation.

The Deka Group's sense of social responsibility is reflected in its actions. It is supporting the transformation to more climate-friendly and sustainable ways of doing business. As an active investor, it follows this through by engaging in dialogue with investors, businesses and issuers to help them with the steps to achieving their sustainability goals in close alignment with its own guidelines. Following in the tradition of the savings banks and their focus on the greater good, the Deka Group supports social, environmental and cultural projects.

The Deka Group's positioning in terms of sustainability, which Deka has been building on continuously since 2009, continues to be rated very highly by sustainability rating agencies.

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

MSCI ESG Ratings		ISS ESG Corporate ESG Performance Prime		Sustainalytics		Moody's ESG Solutions
2020	2021	2018	2019	2020	2021	2020
AA	AA	C+	C+	17.8	17.4	41/100
2022		**2020**		**2022**		**2021**
As of 2022, Deka received an MSCI ESG Rating of **A***		**C+ (prime)** „Industry Leader“		**16.5** „Low Risk“**		**55/100** „Robust“

Status of sustainability ratings according to annual ESG ratings reports: MSCI: 10 June 2022; ISS-ESG: 22 June 2020; Sustainalytics: 10 August 2021; update 21 December 2022; MOODY'S ESG (rebranding following acquisition of V.E): May 2021

Further information on sustainability is available in the Deka Group's 2022 sustainability report.

Reference to the non-financial statement in the sustainability report

The sustainability report, which is audited by AGIMUS GmbH Umweltgutachterorganisation & Beratungsgesellschaft, contains detailed information on the Deka Group's ESG reporting. 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: 2022 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 123 ff.

There is a clear separation in the Deka Group at Board of Management level between asset management and banking. Nevertheless, the business divisions, sales units and corporate centres work closely together in operational terms, reflecting the integrated business model. The business divisions 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 private and institutional investors in every market environment with the goal of lasting value and sustainable growth. Responding to the customer requirements identified via the central sales units, the business division creates solutions to meet these needs for all sales channels, increasingly including digital sales.

Customers can choose from the following range of products for one-off investments or, where available, for savings plans:

- actively managed mutual funds and special funds following fundamental and quantitative strategies as well as advisory mandates in all major asset classes (equities, bonds, money market, mixed funds, capital protected funds and any combination of these),
- passively managed index funds (exchange-traded funds – ETFs),
- asset management products and services: asset management funds using both actively managed target funds and indexed funds, fund-based asset management, savings bank asset management, individual security-based asset management and robo-advisory asset management in partnership with bevestor,
- pension products (e.g. fund-based private and company pension products),
- asset servicing, which enables savings banks and institutional investors to combine various asset classes in master funds.

The business division also offers a wide range of solutions for sustainable investments and engagement services. This includes mutual fund solutions and individual services for institutional mandates such as sustainability portfolio management. The business division also works to promote good and responsible corporate governance and helps institutional investors comply with regulatory engagement and reporting requirements. The Asset Management Securities business division incorporates sustainability aspects into fund, investment and business risk processes.

The products offered by the fund manufacturer IQAM Invest GmbH (IQAM) expand the range of quantitative asset management products, particularly for institutional customers. The well-known IQAM brand will continue. Joint research by Deka and IQAM is conducted at the IQAM Research institute and is used in depth in order to improve quality.

The business division's product range also features bespoke and standardised securities services. These involve macro, individual-stock and fund research, support with designing investment strategies and processes, order desk and fund reporting services. These are also offered to external customers in some cases.

Asset Management Real Estate business division

The Asset Management Real Estate business division is the Deka Group's real estate investment specialist. It provides fund products and advisory services relating to real estate, infrastructure 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 and infrastructure 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. It thereby positions 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 products with sustainable features and taking sustainability aspects into account in fund and investment processes.

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' sales with the provision of multichannel solutions to managing custody accounts for customers and providing custodial services for investment funds.

The Asset Management Services business division is divided into the Digital Multichannel Management and Depositary subdivisions.

- 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 produces solutions for the online securities business. bevestor GmbH acts as the savings banks' central robo-advisory product for retail customers.

- 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. Depositary acts as a one-stop shop for its customers. If required, it combines depositary services with other offerings from the Deka Group: the master KVG for a comprehensive asset servicing solution and services from the capital markets business such as commission business with securities and exchange-traded derivatives, foreign exchange trading, repo/lending transactions and collateral management. The subdivision offers its 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 target markets are Germany and Luxembourg.

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 range of services relating to securities repurchase transactions, securities lending and foreign exchange trading, the business division also acts as 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. Customers benefit from synergy effects and economies of scale.

The business division also designs solutions for sustainable (ESG) investment and trading products in proprietary and customer business and works on developing and brokering a selection of carbon offset projects for customers and savings banks.

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

- The Collateral Trading & Currency subdivision brings together all securities lending products, securities repurchase transactions, their derivative equivalents 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) and for all types of derivatives that are used in investment funds and in the Depot A securities account of the savings banks or by other customers. The unit also runs the structured issuance business (Deka certificates and partner certificates) and debt capital markets business (third-party issues business), i.e. supporting other companies as they issue financial instruments.
- 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*.

Deka is constantly enhancing its own platform solutions to support its business activities:

- The main product remains the Deka Easy Access (DEA) information, management and trading 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 2022, 302 savings banks used this established tool.
- finledger is a platform jointly developed with other market participants for processing digital promissory notes using distributed ledger technology (DLT).
- SWIAT (Secure Worldwide Interbank Asset Transfer) is a blockchain-based decentralised financial infrastructure. It was developed to combine financial transactions for traditional and digital securities, other assets and digital financial market instruments such as securities lending transactions, repos, purchase/sale, derivatives and smart contracts in a single network. SWIAT opens up the use of blockchain technology to the Deka Group and the *Sparkassen-Finanzgruppe*, creating an infrastructure that savings banks can use for proprietary and customer business.

Financing business division

The Financing business division concentrates on specialised and real estate financing and supports the savings banks with refinancing. 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*. There is the possibility to participate in loans arranged by third parties.

The Financing business division actively implements the sustainability strategy by specifically providing sustainable financing and contributes to achieving the United Nations Sustainable Development Goals,

Specialised Financing and Real Estate Financing are subdivisions of the Financing business division.

- 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. Savings bank refinancing comprises financing for German savings banks in all maturity ranges and financing for the public sector in Germany in the interests of the *Sparkassen-Finanzgruppe*.
- 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.

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. With regard to the savings banks, the approach to sales and service provision varies depending particularly on the different end customer groups being served. Holistic strategies are used to address each target group, and this is reflected by the organisational division of Sales into three pillars: Savings Banks Sales & Marketing, Private Banking & Wealth Management, 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's marketing activities are also aimed directly at end customers to raise their awareness of Deka's offering.

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 and on the investment process. In addition, the savings banks have access to Deka sales managers to support their operations (advisory process). 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.

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. The services are being continuously improved as digital technology develops. For example, there are plans to integrate the tools with all their current and future functionality into S-Invest Manager. The new S-Invest Manager platform reconceives the present-day information and transaction platform DekaNet and will expand the current service range, including innovations and improvements throughout the securities process at the savings banks.

Together with the savings banks, Deka aims to be a market leader in terms of its comprehensive coverage of the securities culture in market and brand communications and to draw attention to the work of the *Sparkassen-Finanzgruppe* in this area. Ethical asset structuring, future-proof securities saving and future trends such as digitalisation are also important issues and 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 primarily marketed under the Deka Investments sales brand.

Private Banking & Wealth Management
Reflecting its strategic importance, private banking was restructured in a dedicated Private Banking & Wealth Management sales unit in mid-2022.

Private Banking & Wealth Management will gain additional personnel over the next few years and invest in training and processes. A combination of services and products will further enhance the broad range of support offered by Deka Private Banking and tailored to its target group. This will include more wealth management services in future.

In private banking, too, the savings banks have sole responsibility for directly contacting, advising and serving the end customers. In wealth management, customer acquisition and customer service is shared with the savings banks.

Bespoke solutions for high net worth private clients were provided under the Deka Private Banking sales brand in 2022. In February 2023, the brand name was changed to Deka Private & Wealth.

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. 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 perform essential functions, support Sales and the front office units in operational processes and business management, and take on administrative tasks. As at the reporting date, these comprised the Corporate Office & Communications, Internal Audit, Legal, Compliance, Strategy & HR, 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, the 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 2022) of €142.3bn and a market share of 12.4%, Deka is the fourth largest provider of mutual securities funds in Germany. It is Germany's second-placed provider of mutual property funds with fund assets (according to the BVI, as at 31 December 2022) of €40.5bn and a market share of 30.9%.

Deka's consistently good performance was confirmed once again in the Capital-Fonds-Kompass 2022 awards organised by the business magazine Capital together with the fund analysis firm Scope Analysis and the service experts at Tetralog Systems. Deka achieved the top score of five stars for the tenth time in a row. This year saw Deka build on its strong ratings from the previous year and improve its overall ranking to fourth place out of 100 companies. Among those providers with at least 31 funds distributed in Germany (universalists), Deka made it into the top three again.

The best fund companies for private investors in five categories – equities, bonds, mixed funds, ESG/sustainability and ETFs – were named German Fund Champions 2023. Deka was crowned Fund Champion from 20 companies in the bond funds (active management) category.

At the Scope Alternative Investment Awards in November 2022, Deka Immobilien Investment GmbH was again honoured as Best Asset Manager in the Retail Real Estate Europe category. Deka Investment GmbH was also crowned Best Asset Manager in the Bond Fund category, repeating the previous year's success.

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 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 in second place in the segment for the financing of German federal states.

The Structured Retail Products (SRP) finance portal presents its SRP awards each year for the European certificates market in various categories. Deka was nominated for the first time and was the winner in three categories: "Best House, Germany & Austria", "Best Distributor Germany" and "Best Distributor Germany & Austria".

In October 2022, the German Certificate Prize was awarded for the first time. Organised by Feingold Research together with Börse Frankfurt, Börse Stuttgart, gettex and n-tv, the prize gives private investors an extensive insight into the range, quality and services offered by the certificates industry. Deka won three awards: best primary market issuer, best express certificates offering and best sales support.

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 26.1% market share by market volume at the end of December 2022.

At the Scope Zertifikate Awards 2022, presented in November 2022, DekaBank was recognised as the best certificate issuer in the primary market for the seventh time.

For the sixth time in a row, Deka received the top score of AAA in the Scope Zertifikate Management Ratings. This followed an evaluation process by the rating agency Scope, which looked at Deka's corporate profile, market position, product range, and sales and investor services.

See also: Economic report: page 30 ff.

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.

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 growing customer assets under management.

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). The return on equity and cost/income ratio are also integral to internal management.

See also: Glossary: page 260 ff.

Return on equity is defined at Group level as the ratio of the economic result to balance sheet equity. It shows the return on capital. For the purposes of operational management at business division level, the return on equity is used as the ratio of the economic result to regulatory capital employed. The cost/income ratio is an indicator of cost efficiency. These two management indicators – return on equity and cost/income ratio – result in a focus on profitability and efficiency and thereby directly support the strategic outcomes.

The economic result, calculated based on the IFRS figures, 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.

See also: Segment reporting: page 123 ff.

The economic result has been used in external reporting at Group and business division level since 2007. A reconciliation of the economic result to profit 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.

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, RWAs 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. In the economic perspective, risk appetite and its utilisation is the key management indicator. 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 and calculating the level of utilisation. This makes it possible to establish whether risk limits have been adhered to at Group and divisional level.

See also: Capital adequacy: page 84 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.

See also: Liquidity adequacy: page 88 ff.

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 Deka 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

Russia's invasion of Ukraine in late February 2022 fundamentally changed the business environment. Consumer uncertainty grew and significant inflationary processes took off, pushing central banks around the world into a cycle of interest rate hikes. The policy of zero or negative interest rates came to a remarkably decisive end. The central banks reversed their expansionary monetary policy so rapidly and thoroughly that the impact on global economic development was impossible to ignore.

Despite all this, global gross domestic product (GDP) grew by 3.1% in 2022. The expansion was driven by further catch-up effects following two years of noticeable COVID-19 restrictions. Particularly in western industrialised nations, unlike in China, the service sector reaped the benefits, for example in tourism and hospitality. Strong labour markets with falling unemployment rates, rising wages and job growth generally boosted economic activity.

Various different factors in the major economies played a role. In the United States, the first significant central bank interest rate hike came in early March 2022, which aimed to dampen domestic demand-driven inflation. This curbed demand significantly, particularly in the housebuilding sector. In China, the extensive lockdowns in the second quarter slowed growth. The Chinese government kept its zero-COVID strategy in place until December. Combined with the more infectious Omicron variant, this resulted among other things in a shutdown of the major port in Shanghai, which lasted several weeks. Problems in the real estate sector were another reason why, at 2.9%, China's GDP growth fell short of the country's own target by an unexpectedly significant margin.

The ramifications of the Russian war of aggression were strongest in Europe. The outbreak of war in Ukraine was immediately followed by rising energy prices. This directly reduced the purchasing power of private households, causing a fall in consumer spending. The heavy reliance on Russian oil and gas supplies had negative implications primarily for the German economy. The diverse, repeatedly tightened sanctions on Russia led to spreading fears about energy availability. The need for savings, particularly in gas and electricity consumption, was felt by both private households and businesses, whose activity was constrained by supply-side factors. War-related uncertainty included the risk of a gas shortage, primarily in Germany. Against this backdrop, sentiment indicators in Germany, as in many European countries, fell to extremely low levels. This meant that global economic activity was weak overall at the end of 2022.

The fact that a severe economic slump was averted in the reporting year was partly due to the fiscal support provided by governments. Most countries spent considerable sums on easing the burden of rising energy prices, particularly for private households. There was also noticeably higher wage growth than in previous years, which helped to prop up aggregate demand.

Sector-related conditions

After the initially deflationary impact of the coronavirus pandemic, upward pressure on prices was already growing as 2021 progressed. This was mainly the result of macroeconomic imbalances, which caused aggregate demand to recover very quickly while shortages persisted on the supply side and disrupted logistics. Sharp price rises, for both commodities and important intermediate products, continued into 2022. With Russia's attack on Ukraine, inflation rose further. Prices for energy commodities increased considerably. Given their dependence on Russian gas and oil, the eurozone and particularly Germany were more heavily affected than other regions. Consumers also faced an exceptionally sharp rise in food prices. This was partly because the war left Ukraine unable to export as much agricultural produce as in previous years, and partly because of the energy-intensive nature of food production. Starting from the middle of the year, there were mounting signs of a gradual easing of global supply chain problems. The rise in commodity prices partly reversed and producer price inflation levelled off. Despite this, strong upward pressure on consumer prices continued towards the end of the year as higher costs were passed on to consumers.

While these global factors drove higher inflation to a greater or lesser extent in all regions of the world, there were significant differences in terms of cyclical inflation. In the context of a stronger economic recovery, wages and consumer prices (excluding food and energy) in the United States increased more strongly than in the eurozone. Nevertheless, the exceptionally high inflation rates and historically low unemployment levels left the ECB Governing Council members fearing that a wage-price spiral could take off in future.

The pace at which inflation accelerated and the diverse causes behind it presented the central banks with major challenges. Their forecasts about the extent and duration of the inflationary surge were repeatedly revised upwards. The central banks therefore gradually accelerated their monetary policy adjustments. The US Federal Reserve (Fed), for example, began with a key rate rise of 25 basis points in March, which it followed with a series of rate hikes of up to 75 basis points. In line with its monetary policy strategy, the ECB initially left key interest rates unchanged and concentrated on terminating its asset purchase programmes. It had already announced back in December 2021 that it would end its net bond purchases under the Pandemic Emergency Purchase Programme (PEPP) in March. The remaining purchases under the Asset Purchase Programme (APP) were modest in scale but sent an important signal that the ECB was explicitly ruling out key interest rate hikes for as long as net bond purchases continued. The termination of the APP in mid-2022 thus marked an important turning point, after which the ECB began a series of large hikes in its key rates. In December, both the Fed and the ECB slowed the pace of monetary policy tightening somewhat, putting their key rates up by 50 basis points. Nevertheless, their communications left no doubt that they still see the need for further adjustments given the upward inflationary risks. The differences in the timing of the central banks' monetary tightening caused significant movement in the euro/US dollar exchange rate. The more aggressive moves by the Fed caused the euro to further depreciate against the US dollar. At one point in September, the euro hit a 20-year low of $0.96. It recovered to $1.07 by year-end amid the prospect of declining interest rate differentials between the two major currency areas.

After lifting the deposit rate significantly into positive territory, the ECB changed its approach to asset purchases and longer-term refinancing operations. With effect from November, it recalibrated the conditions of its long-term tenders (TLTRO III), as banks that had made considerable use of these funds would have otherwise been largely shielded from the monetary policy tightening. In December, it also announced that it would begin to reduce its holdings of securities under the APP in March 2023 by not reinvesting all the principal from maturing bonds.

Similarly to the central banks, money market participants also had to gradually correct their inflation predictions upwards. This inflation and the gradual monetary policy response meant that the market expectations contained in money market futures were repeatedly revised almost throughout the year to accommodate higher future key rates. Meanwhile, shorter-term money market rates in the eurozone were closely aligned with key rates of interest. Early repayments of the now less attractive long-term tenders (TLTRO III) resulted in a decline in surplus reserves later in the year. Surplus reserves were, however, still high enough to exert considerable downward pressure on money market rates. For example, the €STR overnight rate traded below the ECB deposit rate by a relatively consistent margin, while the somewhat longer-term EURIBOR rates largely followed €STR swaps with matching maturities. A temporary widening of money market spreads due to fear of economic downside risks and an overly abrupt monetary policy tightening reversed in the second half of the year.

Capital markets had to come to terms with a paradigm shift in 2022. Initially thought to be temporary and driven by one-off effects, the inflationary trend proved increasingly persistent and exorbitant. Russia's invasion of Ukraine further accelerated this process. As the central banks also recognised the scale of the problem and began a series of increasingly sharp interest rate hikes, yields spiked. Inverted yield curves, first in the United States and later also in Europe, confirmed market fears of an impending recession. By also announcing that they would begin reducing their vast holdings of securities, the central banks reinforced the movement of capital out of riskier assets. This led to a sharp rise in spreads on sovereign bonds from the eurozone periphery and on corporate bonds. While concentration on particularly high-margin products often allowed revenue and profit growth at many companies to surprise on the upside even into the fourth quarter, the looming recession increasingly worsened business prospects. This shifted the view of the major rating agencies, and downgrades began to outnumber upgrades in the rating outlook. Starting in the autumn, however, amid signs that the gas supply situation was stabilising and that rationing in the winter would likely be avoided, sentiment began to improve again.

Despite this, the major central banks – Fed, ECB and Bank of Japan – yet again issued surprisingly hawkish outlooks shortly before the end of the year. But although this triggered another sharp rise in sovereign bond yields, taking them to new heights at the end of 2022, spreads for riskier assets soon stabilised.

The global stock markets came under strong downward pressure from heavy inflation rates, a multitude of supply and production difficulties, and in particular the large-scale withdrawal of monetary policy support. Stock market valuations fell noticeably due to significantly higher interest rates – the discount rate for equities. Extensive lockdown measures in China were an additional factor constraining global trade flows. Russia's war of aggression and the associated risks to energy supplies also had an impact particularly in Europe. The Euro Stoxx 50, S&P 500 and MSCI World Developed Markets saw major losses of more than 20% over the course of 2022. The NASDAQ-100, which largely comprises technology stocks, even lost more than 30%. A countermovement began in most leading share indices starting in the autumn. In the United States, there were signs that inflation had peaked and that the Fed would at least slow its rate hikes. In Europe, investors were reassured particularly by the successful filling of gas storage facilities and the prospect that the looming recession would likely be milder than initially feared.

Real estate funds continued to offer an advantageous risk/reward ratio. On the real estate markets, the turnaround in interest rates was reflected in a significant rise in financing costs, significantly lower activity in the investment market and a general rise in initial yields. The sharp rate rises curbed the business activities of investors that bring in a large proportion of the debt capital for property acquisitions. Such conditions give competitive advantages to investors who purchase property with a large proportion of equity capital and have a high level of market expertise. Even here, however, purchase decisions are taking longer, with buyers and sellers adopting a cautious approach in price negotiations. In the markets for office space, the rise in vacancies slowed further. Rental growth accelerated strongly due to inflation linking. The high inflation cut consumers' purchasing power. This adversely affected the retail sector, which is experiencing ongoing structural change. The hotel sector is seeing a trend towards significant recovery due to the increase particularly in non-business travel. The logistics market continued to benefit from online shopping and the increased demand for space, which was needed to safeguard supply chains. The global transaction volume in 2022 was noticeably down on the previous year.

The financial assets of private households saw a slight fall of around €149bn versus year-end 2021 to €7,475.5bn (30 September 2022), with valuation losses on securities outpacing new inflows. The end of custodial fees at numerous banks resulted in slightly higher inflows for demand deposits and cash. Compared against year-end 2021, the share of equities and investment funds in the total financial assets of private households declined by around two percentage points to approximately 17% due to the noticeable valuation losses.

The market performance seen in 2022 was also reflected in the investment statistics of the German Investment Funds Association BVI. Net assets in open-ended mutual funds amounted to €1,280.3bn as at 31 December 2022 (year-end 2021: €1,471.4bn), while the net assets of open-ended special funds stood at €1,943.1bn (year-end 2021: €2,187.6bn). As of 31 December 2022, net inflows for open-ended mutual funds were in negative territory at €–4.2bn and thus significantly below the comparative figure for the previous year (€118.5bn). Bond funds in particular saw a high level of redemptions and maturities. At €62.2bn, the sales figure for open-ended special funds for institutional investors was significantly below the comparative figure for the previous year (€131.4bn).

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 2022 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 COVID-19 pandemic, supervisory authorities and regulators enacted the following relief measures, among others. However, DekaBank continued not to apply them in the reporting year.

- 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 relief measures relating to the capital conservation buffer and P2G expired at the end of 2022 and the measures relating to the LCR at the end of 2021.

- 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, these measures would still not offer significant relief for DekaBank.
- The ECB announced in June 2021 that central bank deposits could be excluded from the leverage ratio exposure. The relief applied for a limited period until 31 March 2022.

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. Implementation was completed by 31 December 2022.

After exiting the European Union (EU), the United Kingdom is continuing to apply the CRR until the initial application date of Basel III (also known as Basel IV) on 1 January 2025. The United Kingdom thus continues to have an equivalent supervisory regime to the EU with respect to CRR application. UK institutions are therefore still considered to be institutions as defined by the CRR for the purposes of calculating risk-weighted assets (RWAs).

In October 2021, the European Commission published its draft CRR III to implement the finalised Basel III rules (also known as Basel IV) in the EU. 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. DekaBank currently uses an internal model (IRB approach) to measure credit risk 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 credit valuation adjustment risk (CVA risk) and operational risk, which may also considerably 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. At EU level, the reporting obligation for the FRTB standardised approach has already been in place since 30 September 2021, creating a relatively long parallel run with the current partial use. By 28 June 2023, the rules on internal risk transfers and reclassifications between the trading and banking book, which were already part of CRR II, must be implemented. The new regulations on the definition of the trading book, which were first contained in the draft CRR III, will apply from 1 January 2025. The new market risk capital requirements at EU level are expected to begin at the same time.

A further stress test by the European Banking Authority (EBA) is planned for 2023, which, as in 2021, will cover all risk types. The results are scheduled for publication in July 2023. DekaBank is not among the banks taking part in the EBA stress test. As a bank subject to ECB supervision, however, it will be subjected to a stress test by the ECB in 2023 which will be carried out in accordance with EBA methodology. The results of the ECB stress test feed into the calculation of the Supervisory Review and Evaluation Process (SREP) ratios.

Sustainability-related regulatory proposals
Adopted in 2018, the EU Action Plan on Financing Sustainable Growth aims to reorient capital flows towards sustainable investment, manage financial risks stemming from climate change and foster transparency regarding the consideration of ESG aspects in financial and economic activity. The expectations associated with this EU Action Plan are constantly being addressed through various legal standards for the financial sector. The key standards are described below.

See also:
2022 sustainability report;
CRR disclosure report as of 31 Dec 2022

Various regulatory initiatives in the context of sustainable reporting were relevant to DekaBank in 2022. These concerned the renewed disclosure of seven key performance indicators relating to the taxonomy eligibility of new and existing business (in accordance with Article 8 of the EU Taxonomy Regulation) in the sustainability report. Linked to this are preparations for the taxonomy conformity review, which is geared towards the publication of additional quantitative and qualitative ESG information, including the Green Asset Ratio, in the sustainability report and CRR disclosure report, starting from the 2023 reporting year. Starting with the 2022 reporting year, DekaBank will also publish detailed quantitative and qualitative ESG information on the Bank's lending business in the disclosure report for the first time in accordance with the requirements of Article 449a CRR II. Not least, further elements of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations will be published within the sustainability report. In addition to this, DekaBank is preparing to comply with the provisions of the Corporate Sustainability Reporting Directive (CSRD) in future reporting years. Institutions covered by the Non-Financial Reporting Directive (NFRD), which include DekaBank, must adhere to these starting from the 2024 reporting year.

In the first half of 2022, DekaBank together with another 103 European banks participated in the 2022 ECB climate stress test. A total of 41 banks underwent the complete stress test. DekaBank was not part of this group. The ECB climate stress test sought to evaluate how well prepared SSM (Single Supervisory Mechanism) banks were to deal with the financial and economic shocks arising from climate risks. The aggregated results of the stress test were published in July 2022. Overall, the ECB recognised the progress achieved by banks on integrating climate risk into their stress-testing frameworks and internal models. However, it concluded that further efforts to improve the management of climate risks were necessary. The results for individual institutions were not published; however, these feed into the SREP process for the relevant banks.

In light of the ECB Guide on climate-related and environmental risks, the implementation status first disclosed to the supervisory authority in 2021, including the measures planned, was updated as required. This formed the basis for intensive dialogue with the supervisory authority in the reporting year as part of a thematic review. Constructive suggestions from the concluding ECB feedback letter and the findings of the "Good practices for climate-related and environmental risk management" report published by the ECB will be taken into account in the further management of climate and environmental risks at DekaBank.

Of relevance from investors' perspective is the Sustainable Finance Disclosure Regulation (SFDR). This comprises a range of sustainability-related disclosure obligations at product and entity level with the aim of improving transparency and comparability for investors regarding the sustainability of their investments. To take account of ESG criteria and sustainable investment objectives, additional, taxonomy-related information on the investment policy was added to the pre-contractual information for products with sustainability characteristics in the reporting year. Using standardised templates, preparations were made to implement the detailed disclosure of sustainability characteristics under Level 2, starting from January 2023. Starting from 2022, regular reports on the financial products included, for the first time, information on how the environmental and social characteristics or sustainable investment objectives are being met, in accordance with the Level 1 disclosure requirements. Here, too, implementation was prepared for the more detailed Level 2 disclosures using standardised templates, for reports from January 2023 onwards. Additional preparations were also made in 2022 for managing and preparing the quantitative PAI (principal adverse sustainability impacts) statements at entity level, which must be published by June 2023, and for managing and measuring sustainable investments in the portfolios.

Product- and service-related regulatory proposals

The EU directive on deposit guarantee schemes (Deposit Guarantee Schemes Directive) was implemented in Germany as part of the European banking union in 2015. Under the more wide-ranging ideas put forward by the European Commission, national deposit guarantee systems would create a reinsurance system via a single European Deposit Insurance Scheme (EDIS) and centralise deposit insurance at European level in future. The design of this scheme, the role of institutional guarantee systems and the timetable have not yet been determined.

Business development and profit performance in the Deka Group

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

The Deka Group is looking back on a challenging year for the economy and the wider public. The war in Ukraine caused energy prices to rocket and inflation to hit historic highs, all while the consequences of the pandemic remained clearly noticeable. In the eurozone, prices surged significantly over the year, including the strongest price rises in Germany since the modern Federal Republic was founded. The European Central Bank threw all its might against the rising inflation and implemented multiple interest rate hikes with the aim of easing the situation somewhat. The rate hikes triggered very significant rises in yields in the space of just a few months.

For Deka, supporting the savings banks and institutional customers remained the focus despite this changed environment. The expert advice offered by the savings banks again helped customers to keep investing in 2022.

See also: Segment reporting: page 123, ff.

Given the favourable development in operating activities and positive valuation effects due to changed market parameters, the Deka Group achieved an economic result of €984.8m. This was significantly higher than the previous year's €847.8m. Excluding the positive net income from own issues and other own credit quality effects in Treasury due to spread developments and actuarial gains on pension provisions (caused by a change in the actuarial interest rate), the economic result came to €741m.

We are satisfied with our business development and profit performance. Our financial strength is allowing us to make targeted investments in key areas for the future, such as digitalisation, turning the Deka Group into an even more customer-focused, innovative and sustainable *Wertpapierhaus*. The result will also ensure that DekaBank is able to distribute profits and also to retain part of these profits to strengthen its Common Equity Tier 1 capital.

Income rose by 10.7% year-on-year to €2,236.3m (2021: €2,019.5m). Net commission income remained the main component of the Deka Group's income, accounting for €1,591.8m. At €1,251.5m, expenses were 6.8% higher than in the previous year (€1,171.8m) due to moderate increases in personnel and other administrative expenses including depreciation and amortisation.

The Deka Group's total net sales in the 2022 reporting period were well into positive territory at €27.4bn (2021. €35.7bn). At €20.8bn, net sales in the retail customer segment in 2022 fell €4.3bn short of the prior-year figure (€25.0bn). Retail fund sales were down year-on-year at €8.1bn (previous year: €17.9bn). Equity fund sales in the reporting period came to €6.0bn, real estate fund sales to €1.9bn and mixed fund sales to €1.0bn. Bond funds saw outflows of €2.1bn. Sales of certificates to retail customers increased to €12.6bn (2021: €7.1bn) in 2022, of which €8.7bn was attributable to Deka certificates and €4.0bn to partner certificates. Net sales to institutional customers came to €6.6bn in 2022 as against €10.7bn in the previous year. The institutional investment fund business accounted for net sales of €5.9bn, compared with €8.8bn in 2021. While sales in master funds were well into positive territory, there were outflows of funds in the case of advisory/management mandates, partly due to a customer ending their mandate. Certificate sales to institutional customers came to €0.7bn (2021: €1.9bn).

Deka Group net sales *in €m (Fig. 4)*

	2022	2021
Net sales	**27,381**	**35,735**
by customer segment		
Retail customers	20,754	25,032
Institutional customers	6,627	10,703
by product category		
Mutual funds and fund-based asset management	7,065	18,721
Special funds and mandates	6,174	6,736
Certificates	13,320	9,002
ETFs	822	1,277

Investors signed up to around 368,000 (net figure) new Deka investment savings plans in 2022 (year-end 2021: approximately 1,238,000), meaning that the Deka Group managed a total of approximately 7.4 million contracts at the end of 2022, compared with around 7.0 million at the end of the previous year.

The appeal of securities was also reflected in the number of DekaBank securities accounts, which came to 5.3 million (year-end 2021: 5.1 million). There was a significant positive trend in the number of transactions, which rose by around 21% as against year-end 2021 to 120.0 million.

The positive overall net sales performance only partially offset the market-induced negative trend in total customer assets. Total customer assets declined by €23.4bn year-on-year to €371.8bn (year-end 2021: €395.1bn). This included distributions (from which customers benefited) and certificate redemptions of together €8.8bn.

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

	31 Dec 2022	31 Dec 2021	Change	
Total customer assets	**371,753**	**395,148**	–23,395	–5.9%
by customer segment				
Retail customers	188,490	196,485	–7,995	–4.1%
Institutional customers	183,263	198,662	–15,399	–7.8%
by product category				
Mutual funds and fund-based asset management	181,863	195,877	–14,014	–7.2%
Special funds and mandates	154,009	161,553	–7,544	–4.7%
Certificates	24,506	24,498	8	0.0%
ETFs	11,375	13,220	–1,845	–14.0%

See also: Capital adequacy: page 84 ff.

The Common Equity Tier 1 capital ratio at the close of 2022 stood at 17.4% (year-end 2021: 15.2%). Both Common Equity Tier 1 capital and RWAs increased over the course of the year. In accordance with Article 26 (2) CRR, the 2022 year-end profit less foreseeable charges and dividends was recognised for the first time in Common Equity Tier 1 capital as at 31 December 2022 (dynamic approach). The regulatory requirement was exceeded at all times.

Compared with the previous year, Common Equity Tier 1 capital increased by €746m to €5,462m. The increase was a result of the inclusion of year-end effects from 2021 and 2022 (mainly profit retention).

RWAs increased overall by €415 m from the year-end 2021 figure of €30,944m to €31,360m. Compared with the end of 2021, credit risk dropped by €506m to €20,993m. This was caused by a decline in RWAs from lending business due to improvements in creditworthiness. Lower RWAs also resulted from the smaller shortfall in cover for guarantee products, mainly due to the higher (discounting) yield curve. At €5,645m, market risk was almost unchanged from the previous year (€5,588m). There was a drop in general market risks (internal model), while specific market risks (standardised approach) were almost unchanged. RWAs from operational risk amounted to €4,139m (2021: €3,500m). The increase was mainly due to a remodelling of loss scenarios (ex-ante perspective). CVA risk increased by €225m to €583m due to the higher volumes of derivative transactions to be included.

At 7.1%, the leverage ratio exceeded the previous year's figure of 6.2%. The increase was due to higher Tier 1 capital combined with a significantly smaller increase by comparison in leverage ratio exposure. The minimum leverage ratio of 3.0% was thus adhered to at all times.

The MREL requirements are calculated using an RWA- and LRE-based method in accordance with supervisory requirements. As at the reporting date, the MREL ratio in line with the RWA-based approach amounted to 52.0% (year-end 2021: 59.7%), while the figure under the LRE-based approach came to 19.1% (year-end 2021: 21.7%). Both ratios were significantly above the minimum ratios applicable since 1 January 2022.

The subordinated MREL requirements are also calculated using an RWA- and LRE-based method in accordance with supervisory requirements. As at 31 December 2022, the subordinated MREL requirements in line with the RWA-based approach came to 35.9% (year-end 2021: 42.4%), while the figure under the LRE-based approach was 14.2% (year-end 2021: 16.4%). Both ratios were significantly above the minimum ratios applicable since 1 January 2022.

See also: Liquidity adequacy: page 88 ff.

The Deka Group had ample liquidity, measured using the liquidity balances and liquidity coverage ratio (LCR), throughout 2022. Compared with the end of 2021 (160.3%), the LCR declined by 1.1 percentage points to 159.1%. In percentage terms, the decline in holdings of high-quality liquid assets was slightly stronger than the decline in net cash outflows. The LCR in the reporting period was always significantly above the applicable minimum limit of 100%.

The net stable funding ratio (NSFR) was almost unchanged and stood at 118.1% at the end of 2022 (year-end 2021: 118.9%), putting it significantly above the minimum of 100%.

Economic risk-bearing capacity was at a non-critical level overall as at the end of 2022. The utilisation of risk appetite (59.9%) was up significantly on the end of the previous year (43.3%) due to higher total risk. This was chiefly attributable to significantly increased counterparty, market price, business and operational risks. At 47.6%, utilisation of risk capacity was also significantly above the level seen at the end of 2021 (32.6%).

Comparison of forecast and actual growth

Expectations regarding the Deka Group's key performance indicators in 2022, as set out in the forecast report of the 2021 Group management report and updated in the 2022 interim financial report, materialised as predicted.

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

		31 Dec 2021	Forecast 2022 in the Annual Report 2021	Forecast 2022 in the Interim Report 2022	31 Dec 2022	Change	
Economic result	€m	847.8	Around 550	Slightly above the result for the first half of 2022	984.8	137.0	16.2%
Total customer assets	€bn	395.1	Moderately above the previous year	Moderately below the previous year	371.8	−23.4	−5.9%
Net sales	€bn	35.7	Around 30	Slightly below 30	27.4	−8.4	−23.4%
Common Equity Tier 1 capital ratio	%	15.2	Above 13	Above 13	17.4	2.2%-points	
Utilisation of risk appetite	%	43.3	At a non-critical level	At a non-critical level	59.9	16.6%-points	

Profit performance of the Deka Group

The Deka Group achieved another very strong economic result of €984.8m in 2022. This was significantly up on the previous year's figure (€847.8m), due in particular to the favourable development in operating activities and positive valuation effects given changed market parameters.

Income rose by a total of 10.7% to €2,236.3m (2021: €2,019.5m).

As a result of higher interest rates, net interest income for the reporting year came to €249.4m (previous year: €161.8m). The increase resulted from the Treasury function. Total net interest income from real estate financing and specialised financing together was close to the previous year's figure. Net interest income includes refinancing gains totalling €18.2m from the ECB's TLTRO III programme (previous year: €20.1m).

Risk provisions in the lending and securities business saw a net increase of €41.0m in 2022. The negative risk provisioning result resulted particularly from the application of post-model adjustments due to energy prices and inflation for the corporates and commercial real estate modules as well as rating downgrades. In the previous year, allocations to and reversals of risk provisions almost balanced each other out with a risk provisioning result of €0.6m. Risk provisions in the lending business amounted to €–36.3m (2021: €–18.5m). The Specialised Financing subdivision accounted for a net allocation of €5.3m, while the Real Estate Financing subdivision accounted for a net allocation of €30.6m. The securities business also saw allocations amounting to €4.7m. The reversal of provisions that were no longer required led to a positive risk provisioning result of €19.1m as at year-end 2021.

Net commission income remains the main component of the Deka Group's income and was almost unchanged year-on-year at €1,591.8m (previous year: €1,623.0m). Commission from investment fund business fell moderately overall. Portfolio-related commission was stable year-on-year, while income from sales-related commission and purchasing and construction fees declined. Commission from banking business was up slightly, partly thanks to higher income in the Commission Business unit. Commission from custody account business was moderately down overall on the equivalent figure for the previous year.

Net financial income came to €276.5m, a significant increase on the previous year's figure (€139.9m). 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 €336.6m, net financial income from the trading book in the reporting period was significantly higher than the comparative figure for the previous year (€266.5m). A key component was income from the Trading & Structuring unit (€12.6bn compared with €7.1bn 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 previous year's figure.

Net financial income from banking book portfolios in 2022 was €–60.0m (2021: €–126.6m). This included positive net income from own issues and other own credit quality effects in Treasury due to spread developments. An amount of €100.0m was also added to the general provision for potential risks (2021: €105.0m). 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 in 2022 came to €159.5m (2021: €94.2m). Actuarial gains of €167.1m on pension provisions owing to an increase in the actuarial interest rate to 3.95% (year-end 2021: 1.15%) had a positive impact. This development was set against a decline in plan assets due to market conditions. Actuarial gains, amounting to €141.4m, were also recognised on provisions for pensions in the same period of the previous year. Actuarial effects are not included in the IFRS profit or loss as they are posted directly to equity (revaluation reserve). However, they are reported in the economic result as part of the profit or loss for the period.

At €1,251.5m, expenses in the reporting period were 6.8% higher than in the previous year (€1,171.8m) due to moderate increases in personnel and other administrative expenses including depreciation and amortisation.

Personnel expenses increased by 6.1% in 2022 to €612.2m (2021: €576.7m). Increases stemmed particularly from effects related to the improved business performance, wage and salary rises under collective agreements, the compensation paid for inflation, and a moderately larger workforce, due among other things to investments in the business model.

Other administrative expenses including depreciation and amortisation rose slightly in the reporting period from €527.1m in the previous year to €557.4m. The increase resulted chiefly from higher consultancy expenses for strategic and regulatory projects and greater expenditure for computer equipment and machinery as well as from depreciation of property, plant and equipment.

The annual contribution to the deposit guarantee scheme of the *Landesbanken* and *Girozentralen* increased by €3.2m in 2022 to €21.7m (previous year: €18.5m). At €60.3m, the bank levy was virtually on a level with the previous year (€61.0m).

There were no restructuring expenses in the reporting period. The previous year's figure included a net reversal of restructuring provisions in the amount of €11.5m.

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 55.0% (2021: 58.6%). The return on equity before tax (balance sheet) in 2022 was 17.0% (2021: 16.2%).

Excluding the positive net income from own issues and other own credit quality effects in Treasury due to spread developments and actuarial gains on pension provisions (caused by a change in the actuarial interest rate), the cost/income ratio came to 61.6%. The corresponding return on equity before tax (balance sheet) was 12.8%.

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

	2022	**2021**	Change	
Net interest income	249.4	161.8	87.6	54.1%
Risk provisions in the lending and securities business	−41.0	0.6	−41.6	(< −300%)
Net commission income	1,591.8	1,623.0	−31.1	−1.9%
Net financial income	276.5	139.9	136.6	97.7%
Other operating profit	159.5	94.2	65.3	69.3%
Total income	**2,236.3**	**2,019.5**	216.8	10.7%
Administrative expenses (including depreciation and amortisation)	1,251.5	1,183.3	68.2	5.8%
Restructuring expense	0.0	−11.5	11.5	100.1%
Total expenses	**1,251.5**	**1,171.8**	79.7	6.8%
Economic result	**984.8**	**847.8**	137.0	16.2%

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 €550.3m (previous year: €606.3m). The political and economic situation, the inflationary trend and the resulting effects on the securities markets created a challenging environment for the business division. As expected in the current market environment, net sales of €11.5bn remained below the high prior-year figure of €23.0bn. Market conditions meant that total customer assets of €293.5bn were short of the previous year's €320.4bn.

Net sales and total customer assets

The business division's net sales totalled €11.5bn (previous year: €23.0bn). Business with retail customers performed less well than in the previous year due to the difficult market environment. Sales of mutual securities funds reached €5.3bn (previous year: €16.5bn). Sales of equity and mixed funds were particularly positive again. Bond funds recorded negative net sales, putting them significantly below the previous year's figures. In fund-based asset management, there were only slight net redemptions and maturities of €0.1bn, compared with the higher levels (€–0.6bn) seen in the previous year. Business with institutional customers amounted to €5.3bn (previous year: €7.6bn). Net sales of special funds and mandates stood at €5.5bn (previous year: €5.8bn). There was a particular decline in sales of advisory/management mandates, and special funds were also unable to match the previous year's figures. However, inflows into master funds virtually compensated for this. Demand for ETFs came to €0.8bn (previous year: €1.3bn).

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

	2022	2021
Net sales	**11,503**	**23,032**
by customer segment		
Retail customers	6,234	15,440
Institutional customers	5,269	7,593
by product category		
Mutual funds and fund-based asset management	5,210	15,919
ETFs	822	1,277
Special funds and mandates	5,471	5,837

Despite a positive sales performance, total customer assets came to €293.5bn (previous year: €320.4bn) due to market-induced negative investment performance.

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

	31 Dec 2022	31 Dec 2021	Change	
Total customer assets	**293,533**	**320,419**	–26,885	–8.4%
by customer segment				
Retail customers	131,111	143,952	–12,841	–8.9%
Institutional customers	162,423	176,467	–14,044	–8.0%
by product category				
Mutual funds and fund-based asset management	140,086	156,369	–16,284	–10.4%
thereof: equity funds	55,585	59,409	–3,824	–6.4%
thereof: bond funds	22,510	29,072	–6,562	–22.6%
thereof: mixed funds	22,642	24,726	–2,084	–8.4%
ETFs	11,375	13,220	–1,845	–14.0%
Special funds and mandates	142,072	150,830	–8,757	–5.8%

Profit performance in the Asset Management Securities business division

As expected, the business division's economic result of €550.3m was down on the high prior-year figure of €606.3m. This was principally due to lower net commission income, with performance fees in particular significantly down year-on-year. Moreover, market-induced provisions for guarantee products were higher than in the previous year. Expenses totalled €411.3m (previous year: €371.7m). Project expenses in particular, but also personnel and other administrative expenses, exceeded the previous year's level. This was primarily due to investments in measures and projects to implement strategic priorities.

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

	2022	2021	Change	
Net commission income	967.7	999.9	–32.2	–3.2%
Other income	–1.6	–10.0	8.4	83.9%
Total income	**966.1**	**989.9**	–23.8	–2.4%
Administrative expenses (including depreciation and amortisation)	411.3	370.9	40.4	10.9%
Restructuring expense	0.0	0.9	–0.8	–94.8%
Total expenses	**411.3**	**371.7**	39.6	10.6%
Economic result before income distribution of Treasury-function	**554.8**	**618.2**	–63.4	–10.2%
Income distribution of Treasury function	–4.6	–11.9	7.3	61.6%
Economic result	**550.3**	**606.3**	–56.0	–9.2%

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

At €166.0m, the economic result in the Asset Management Real Estate business division remained below the previous year's figure of €188.6m. Net sales of €2.6bn did not match the previous year's high figure. Thanks in part to the solid investment performance, the business division's total customer assets climbed to €53.7bn. Real estate assets under management grew by €2.9bn to €50.1bn.

Net sales and total customer assets

As a result of the war between Russia and Ukraine, the strong rise in inflation and the associated turnaround in interest rates, retail and institutional customers alike showed significant investment restraint. The business division's net sales therefore declined to €2.6bn (previous year: €3.7bn). The tried-and-tested quota system for sales to retail customers was nevertheless maintained, allowing the inflow of funds into the products to be managed effectively, even amid high demand, and the funds' liquidity resources to be limited. This also helps to prevent excessive investment pressure. The sales quotas that had been set were largely though not completely met by the end of the year.

Mutual funds accounted for around 73% of the business division's net sales. WestInvest InterSelect, which focuses on Europe, and the Deka-ImmobilienMetropolen fund, distributed since 2020, continued to register particularly high demand.

At €0.7bn, net sales in open-ended mutual property funds for institutional customers, special funds, individual property funds, credit funds and mandates were significantly below the previous year's figure of €1.2bn due to customers' investment restraint. 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)*

	2022	2021
Net sales	**2,559**	**3,701**
by customer segment		
Retail customers	1,906	2,506
Institutional customers	653	1,195
by product category		
Mutual property funds	1,856	2,802
Special funds, individual property funds and mandates	703	899

Total customer assets in the Asset Management Real Estate business division increased by 6.9% in the reporting year, despite distributions of €1.0bn, to reach €53.7bn. Of the total customer assets, mutual property funds accounted for €41.8bn, of which approximately 90% was from products for retail customers. Euro-denominated mutual property funds achieved an average volume-weighted return of 2.8% (previous year: 2.1%).

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

	31 Dec 2022	31 Dec 2021	Change	
Total customer assets	**53,714**	**50,231**	3,482	6.9%
by customer segment				
Retail customers	38,267	35,986	2,281	6.3%
Institutional customers	15,447	14,246	1,201	8.4%
by product category				
Mutual property funds	41,777	39,507	2,270	5.7%
Special funds, individual property funds and mandates	11,937	10,724	1,213	11.3%

Pricing on national and international real estate markets currently remains fraught with uncertainty. This, along with the high price level on supply markets for real estate, left the volume of real estate purchase and sale transactions short of the previous year's level (€4.4bn) at €3.1bn. Around 79% of the overall transaction volume concerned a total of 28 contractually secured property purchases. There were 19 disposals, representing 21% 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 Europe's most important 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 €166.0m at the end of 2022 compared with €188.6m in the previous year. Income did not reach the previous year's level. Portfolio-related commission increased year-on-year, while commission income from purchasing and construction fees remained short of the prior-year figure. At €166.7m, expenses were up on the previous year's figure of €149.7m). Along with higher project expenses, this was mainly due to increased operating and personnel expenses.

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

	2022	2021	Change	
Net interest income	0.4	0.9	–0.5	–56.1%
Net commission income	334.6	334.3	0.3	0.1%
Net financial income	–0.6	0.3	–0.9	–294.4%
Other operating profit	–1.8	3.6	–5.3	–149.2%
Total income	**332.6**	**339.1**	–6.5	–1.9%
Administrative expenses (including depreciation and amortisation)	166.7	149.7	17.0	11.4%
Total expenses	**166.7**	**149.7**	17.0	11.4%
Economic result before income distribution of Treasury-function	**165.9**	**189.4**	–23.5	–12.4%
Income distribution of Treasury function	0.1	–0.8	0.9	113.2%
Economic result	**166.0**	**188.6**	–22.6	–12.0%

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

The economic result for the Asset Management Services business division was €–1.0m (previous year: €21.4m). There was a renewed increase in the number of securities accounts in Digital Multichannel Management. In contrast, custody account volume fell slightly due to market developments. In the Depositary subdivision, however, assets under custody remained virtually unchanged over the course of 2022.

Business development in the Asset Management Services business division

The number of custody accounts for which the division is the legal provider increased by around 185,000 in the reporting year to 5.3 million. At 120.0 million, the number of securities transactions was also up on the previous year's figure of 99.1 million. This was due to the sales figures for savings agreements, with more than 368,000 additional savings agreements in 2022. Given the adverse market trend starting from early 2022, custody account volume in the Digital Multichannel Management subdivision fell to €170.2bn (previous year: €174.5bn). At S Broker, the investment volume declined slightly year-on-year to €12.6bn (previous year: €13.5bn). The number of securities accounts rose by around 6% to approximately 194,000. As of year-end 2022, the robo-advisory service bevestor GmbH has been integrated into the sales of 325 savings banks (previous year: 324) as part of the cooperation partner model. bevestor had arranged an investment volume of €207m (previous year: €175m) and managed around 34,000 customer custody accounts as of year-end 2022 (year-end 2021: around 23,000 custody accounts).

Despite a market-induced negative investment performance in asset management for both mutual funds and special funds, assets under custody in the Depositary subdivision remained virtually level with the previous year at €269.0bn (previous year: €270.3bn), particularly thanks to the contributions of special funds in custody.

Profit performance in the Asset Management Services business division

The economic result for the Asset Management Services business division was €–1.0m (previous year: €21.4m). Net commission income of €224.1m (previous year: €220.7m) remained the main component of income. The increase resulted from higher commission from the banking and investment fund business as well as greater customer activity and customer acquisition at S Broker. Other operating profit includes the partial reversal of a provision recognised in the previous year for the implementation of a ruling by the German Federal Court of Justice (BGH) on the mechanism for amending general terms and conditions of business. Expenses came to €238.7m. This was up on the previous year's figure of €194.5m, particularly as a result of higher settlement costs due to increased volumes and higher project costs for the expansion of digital sales infrastructure.

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

	2022	2021	Change	
Net interest income	10.1	5.8	4.3	73.3%
Risk provisions in the lending and securities business	−0.1	1.0	−1.1	−114.9%
Net commission income	224.1	220.7	3.4	1.5%
Net financial income	−5.5	0.3	−5.8	(< −300%)
Other operating profit	8.8	−11.1	19.8	179.3%
Total income	**237.3**	**216.8**	20.5	9.5%
Administrative expenses (including depreciation and amortisation)	238.7	194.5	44.2	22.7%
Total expenses	**238.7**	**194.5**	44.2	22.7%
Economic result before income distribution of Treasury-function	**−1.4**	**22.3**	−23.7	−106.4%
Income distribution of Treasury function	0.4	−0.9	1.3	150.4%
Economic result	**−1.0**	**21.4**	−22.4	−104.6%

Business development and profit performance in the Capital Markets business division

At €176.4m, the economic result for the Capital Markets business division was significantly up on the previous year's figure of €122.8m. The business division continued to fulfil its important role as the Deka Group's provider of products, solutions and infrastructure.

Business development in the Capital Markets business division

The Collateral Trading & Currency subdivision remains well positioned in the repo/lending business. Business in 2022 remained at around the previous year's level due to the high market liquidity provided by ECB programmes such as TLTRO (targeted longer-term refinancing operations).

The Commission Business subdivision significantly exceeded its prior-year figures in business with shares, bonds, exchange-traded derivatives and supplementary services in 2022, driven by higher turnover.

In the Trading & Structuring subdivision, business was significantly up on the previous year. At €13.3bn, net sales of certificates at year-end 2022 exceeded the previous year's figure of €9.0bn. At €12.6bn, retail customers accounted for the lion's share of demand (previous year: €7.1bn). The figure for the reporting year includes partner certificates of €4.0bn. Net sales of certificates to institutional customers totalled €0.7bn (previous year: €1.9bn). Sales were boosted by the high level of volatility and interest rate rises, which made certificates more attractive. Derivatives trading also benefited from the certificate sales.

Profit performance in the Capital Markets business division

The business division achieved an economic result of €176.4m in financial year 2022 (previous year: €122.8m). Net commission income matched the previous year's figure, while net interest income declined. However, net financial income was significantly higher than in the previous year. Other operating profit was negatively affected by expenses of €42.2m for settlement agreements with business partners in connection with share trades around the dividend record date transacted in the past. Expenses of €193.2m were slightly below the previous year's level due to a reduction in other administrative expenses.

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

	2022	2021	Change	
Net interest income	0.9	3.0	–2.1	–69.8%
Net commission income	53.8	53.4	0.4	0.7%
Net financial income	337.8	267.8	70.0	26.1%
Other operating profit	–38.4	1.6	–40.1	(< –300%)
Total income	**354.1**	**325.8**	28.3	8.7%
Administrative expenses (including depreciation and amortisation)	193.2	204.2	–11.0	–5.4%
Total expenses	**193.2**	**204.2**	–11.0	–5.4%
Economic result before income distribution of Treasury-function	**160.9**	**121.6**	39.3	32.3%
Income distribution of Treasury function	15.5	1.2	14.3	(> 300%)
Economic result	**176.4**	**122.8**	53.6	43.6%

Business development and profit performance in the Financing business division

The Financing business division generated an economic result of €128.6m (previous year: €94.9m). The business division’s gross loan volume increased slightly from the end of 2021 (€25.7bn) to reach €27.1bn.

Business development in the Financing business division

Gross loan volume in the Specialised Financing subdivision amounted to €15.7bn (year-end 2021: €14.4bn). At the end of 2022, infrastructure financing accounted for €4.0bn (year-end 2021: €4.1bn), of which €1.4bn related to renewable energy. Public sector financing amounted to €3.5bn (year-end 2021: €3.5bn), export financing to €1.2bn (year-end 2021: €1.4bn) and transport financing to €3.8bn (year-end 2021: €3.7bn). The transport financing segment largely comprised aircraft financing of €2.3bn (year-end 2021: €2.4bn and ship financing of €1.3bn (year-end 2021: €1.3bn). Gross loan volume for savings bank financing increased significantly by €1.4bn compared with the end of 2021 to €3.1bn.

Gross loan volume in the Real Estate Financing subdivision increased to €11.5bn (year-end 2021: €11.3bn). The volume of commercial property loans declined slightly to €8.4bn (year-end 2021: €8.6bn). In relation to the gross loan volume in the Real Estate Financing subdivision, around 7% was attributable to the retail use type (year-end 2021: 8% and around 2% to the hotel use type (year-end 2021: 4%). Financing volume in open-ended real estate funds came to €3.0bn, compared with €2.7bn at the end of 2021.

The development of the business division's gross loan volume include repayments and other effects in the amount of approximately €4.4bn.

The average rating for the loan portfolio as a whole according to the DSGV master scale was unchanged versus the end of the previous year and remained at 7. This corresponds to a rating of BB on S&P’s external rating scale. The average rating for Specialised Financing was also unchanged from the end of 2021 and stood at 7 (S&P: BB). The rating for Real Estate Financing improved by one notch from 6 at the end of the previous year to 5 (S&P: from BB+ to BBB–). Taking account of collateralised assets, the average rating for Real Estate Financing (on the DSGV master scale) improved from A– (S&P: A–) to A (S&P: A–).

At €6.7bn, the volume of new business in the Financing business division in the reporting year was up by a significant €1.6bn on the year-end 2021 figure of €5.1bn, particularly due to a strong increase in savings bank financing. At €3.4bn, new business in Specialised Financing was €1.2bn higher than in the previous year. The prior-year figure was also exceeded in Real Estate Financing at €3.3bn (year-end 2021: €2.9bn). Loans to savings banks accounted for 31% of total new business in the division (previous year: 2%). At €0.8bn, the total volume of placements was above the previous year's figure of €0.5bn. Around a third of this total was placed within the *Sparkassen-Finanzgruppe*.

Profit performance in the Financing business division

The Financing business division closed the 2022 financial year with an economic result of €128.6m (previous year: €94.9m). Net interest income was on a level with the previous year, due in part to increased financing volumes in Real Estate Financing and Specialised Financing and to renewed refinancing gains (tenders). The risk provisioning needs of €–35.0m (previous year: €–15.1m) were in line with expectations and higher than the prior-year figure. The increase was caused by the application of post-model adjustments due to energy prices, inflation for the corporates and commercial real estate modules, and rating downgrades. Net commission income of €15.6m, which was mainly driven by new business, was below the comparative figure for the previous year (previous year: €18.1m). Net financial income of €–0.4m was generated, mainly comprising effects from the disposal of an equity investment, early redemption penalties and earnings effects from loans measured at fair value. Expenses totalled €77.9m and were up by €8.0m year-on-year, partly due to increased project and other administrative expenses.

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

	2022	2021	Change	
Net interest income	150.2	151.8	–1.6	–1.1%
Risk provisions in the lending and securities business	–35.0	–15.1	–19.9	–131.7%
Net commission income	15.6	18.1	–2.5	–13.9%
Net financial income	–0.4	–1.0	0.6	57.0%
Other operating profit	0.9	0.7	0.3	43.6%
Total income	**131.3**	**154.5**	–23.2	–15.0%
Administrative expenses (including depreciation and amortisation)	77.9	69.9	8.0	11.5%
Total expenses	**77.9**	**69.9**	8.0	11.5%
Economic result before income distribution of Treasury-function	**53.4**	**84.6**	–31.2	–36.9%
Income distribution of Treasury function	75.2	10.3	64.9	(> 300%)
Economic result	**128.6**	**94.9**	33.7	35.5%

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 manages group liquidity and Deka Group refinancing across all maturities and is responsible for asset-liability management. Treasury also heads the Management Committee for Assets and Liabilities (*Managementkomitee Aktiv-Passiv* – MKAP), which manages the strategic position of the Bank as a whole and makes recommendations for action in this regard to the Board of Management.

Treasury manages the liquidity management portfolio with a view to compliance with regulatory requirements and safeguarding the Bank's liquidity at all times. This portfolio comprises the liquidity buffer, which contains securities held to ensure liquidity in stress situations and liquidity shortages, other liquid assets (e.g. securities for cover registers) 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. Refinancing is carried out in a diversified manner using domestic and international money market and capital market instruments. This includes issues of covered bonds, bearer bonds based on the commercial paper (CP) programme and 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 daily and time deposits to raise and invest liquidity, and participates in the various central bank tenders (including TLTROs) as necessary.

See also: Green bonds

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.

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.

See also: Consolidated financial statements: page 111 ff.

Changes in the Deka Group balance sheet

The increase in deposits on the liabilities side at DekaBank resulted partly from the positive net sales and associated increase in liquid funds within the Deka investment funds. In addition, to meet the increased financing needs of savings banks through money market transactions, DekaBank increased its bond issuing, including for *Pfandbriefe* (covered bonds). Moreover, the sharp rise in interest rates led to an increase in the fair values of interest rate derivatives held for hedging purposes. These effects in particular caused total assets to rise by 9.6% to €97.4bn (previous year: €88.9bn).

Amounts due from banks and customers saw a significant increase in the period under review, rising by a total of €23.3bn to €67.6bn. The increase resulted from deposits (overnight money) with the Deutsche Bundesbank in the form of a deposit facility reported as amounts due from banks on demand. It also partly reflected increased money market transactions due to greater demand, principally from savings banks. Financial assets reported at fair value also declined slightly by €0.2bn to €17.6bn. Financial investments fell by €0.8bn year-on-year to €10.1bn.

Collectively, amounts due to banks and customers saw a slight rise of €1.8bn to €42.3bn. This movement resulted mainly from higher customer deposits. Securitised liabilities increased by €1.6bn to €11.2bn. The increase was caused by the issue of bonds. Financial liabilities reported at fair value increased significantly to €34.4bn (previous year: €29.2bn). This was due in particular to the rise in interest rates in the reporting year, which resulted in a higher fair value for derivatives held for hedging purposes.

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

	31 Dec 2022	31 Dec 2021	Change	
Total assets	**97,396**	**88,865**	8,531	9.6%
Selected asset items				
Due from banks and customers	67,629	44,378	23,250	52.4%
Financial assets at fair value	17,567	17,738	– 172	– 1.0%
Financial investments	10,073	9,291	782	8.4%
Selected liability items				
Due to banks and customers	42,318	40,485	1,833	4.5%
Securitised liabilities	11,169	9,543	1,626	17.0%
Financial liabilities at fair value	34,353	29,194	5,159	17.7%

Capital and liquidity adequacy

Full details of capital and liquidity adequacy in the 2022 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 2022, 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. For example, DekaBank has an issuer rating of A from S&P and Aa2 from Moody's and a stable outlook with both agencies.

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	A2 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

In November 2022, Moody's downgraded its rating for DekaBank's non-preferred senior unsecured debt by one notch from A1 to A2. This rating adjustment resulted from Moody's Advanced Loss Given Failure analysis, which looks at the structure of liabilities. All other ratings and DekaBank's outlook were unaffected by this change.

S&P and Moody's include ESG factors in their credit ratings. With their respective credit indicators for ESG factors, the rating agencies aim chiefly to increase transparency around the rating criteria and highlight the potential impact of ESG factors on credit ratings.

S&P's 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.

The ESG Credit Impact Score (CIS) from Moody's for DekaBank is also neutral (CIS-2). Moody's therefore also currently sees no impact of ESG factors on the credit rating.

Human resources report

The total number of employees at the end of 2022 stood at 5,084 and was slightly up on the previous year (year-end 2021: 4,854). 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. At 4,373, the number of earnings-relevant full-time equivalents as at 31 December 2022 was slightly higher than at the end of 2021 (4,243). 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 45.5 years (previous year: 45.3 years). Further key indicators regarding sustainable HR management can be found in the sustainability report.

See also: 2022 sustainability report

The implementation of topics from the strategic action programme 2025 had an impact on structures, processes, roles and tasks throughout the Group. For example, interdisciplinary teams worked on enhancing talent management and on the organisational focus. The updated understanding of leadership is being gradually implemented across the departments. 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 August 2022 survey backed up previous findings. It showed that 86% are happy or very happy at the Deka Group and that 78% of employees believe that Deka will remain an attractive employer in future.

The world of work is fundamentally changing: digitalisation and demographic change are resulting in a shift from an employer's market to an employee's market. While demographic change is reducing the available workforce, digitalisation is changing the nature of the skills required. The tasks for long term-oriented HR management thus include the successful recruitment, long-term retention and ongoing professional development of employees, as well as placing them in roles where they can realise their full potential. It also involves creating a healthy working environment fit for the future and promoting a diverse workforce and an inclusive corporate culture. The Equality Plan and the mainstreaming of diversity management within the Deka Group are two measures that contribute to achieving these objectives. In 2022, the Deka Group also launched a special new trainee programme for the topics of the future, which recruits trainees specifically in the fields of "blockchain/DLT/agile development (cloud)", "ESG/sustainability" and "digitalisation, processes and innovation". These and other measures are accompanied by attractive working conditions that are being constantly enhanced for both new employees and those who have already been at Deka for many years. The new office building in Frankfurt-Niederrad, for example, offers ultra-modern workstations and spaces for creativity and sharing ideas.

Since 2020, Deka has been making increased use of mobile working. This allowed the infection risk to be significantly reduced to protect employees during the coronavirus pandemic. Hybrid working has now become the new normal in the Deka Group. More than 70% of employees on average used mobile working in 2022. Mobile working also promotes work-life balance, as do a wide range of options such as part-time working, flexible working hours and support for those with family obligations. Irrespective of the mobile working arrangements, teams can also choose at any time to work from the office and meet in person whenever they need to.

In the context of the pandemic, the increasing complexity of the working environment and demographic change, employees' health is further growing in importance. The Deka Group aims to further improve the working conditions and health services it provides, tailoring these according to people's age, gender and other factors. Various offerings are available to support people's physical and mental health, including via the "machtfit" digital health platform. In 2022, this commitment to our employees was recognised by the Corporate Health Award: The Deka Group won the special prize in the Digital category for its particularly modern and innovative health management services. The initiators also judged the Deka Group to have an outstanding corporate health management system and awarded us their seal of excellence.

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 2023 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 ff.

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 2023 financial year. Conversely, opportunities may result in expectations being exceeded. The opportunities for the Deka Group are set out in the opportunities report.

The consequences of the war between Russia and Ukraine remain impossible to fully predict in 2023. If the war in Ukraine worsens further or other geopolitical tensions escalate, this may hit economic growth and the capital markets. It also cannot yet be predicted how changes in supply chains and structural changes in energy prices will be reflected in corporate profitability. As a result, estimates of the development of growth and inflation are subject to change. This would also have implications for the monetary policy environment set by central banks. Future market developments therefore remain highly uncertain, and the earnings, risk and capital situation, as well as the corresponding key management indicators, may show less favourable development than that presented in the forecast report.

Expected macroeconomic trends

DekaBank expects a slowdown in most regions of the world in 2023. A host of industrialised countries will experience a slight recession in the winter months. The subsequent recovery is likely to be sluggish. Overall, global gross domestic product is predicted to rise by 2.3% year-on-year in 2023. In the United States, the restrictive monetary policy will be the main factor holding growth back. In China, the coronavirus pandemic will continue to play a noticeable negative role early in the year, while economic activity in Europe will be hit by the war in Ukraine and high energy prices.

Economic upheaval will shape 2023. Given the need to tackle inflation, economic actors will need to grapple with further interest rate hikes. As the cost of servicing debt rises, this will have consequences for consumer spending. Companies will need to review their business models and more closely examine whether new investment plans will still pay off. Added to this is the fact that while digitalisation, decarbonisation and demographic change all have far-reaching and long-term implications, many structural challenges for businesses are already arriving in 2023. The reorganisation of supply chains, some of which have been broken by the war and pandemic, continues. The uncertainty associated with the structural changes in the economy, which are under way and intensifying, will allow only limited growth momentum in the coming year.

If central banks continue their restrictive monetary policy, fiscal and wage policy will seek a more supportive stance. Nevertheless, real incomes are expected to fall again in the coming year, meaning that little growth impetus will come from consumer spending. On the other hand, labour markets will remain relatively healthy. Widespread corporate insolvencies and significant increases in unemployment are not expected. However, the war in Ukraine and concerns about energy supplies will continue to weigh on consumer sentiment in Germany and Europe.

Expected sector-related conditions

The monetary policy of the major central banks is likely to be influenced by highly elevated inflation levels again in 2023. The fact that energy prices have dropped again means that overall inflation rates can be expected to fall significantly due to base effects. However, they are set to remain well above the 2% target even towards the end of the year in both the United States and the eurozone. This will mainly be due to the persistence of core inflation, which does not include consumer prices for food and energy. The passing-on of higher costs for energy, other commodities and intermediate products is likely to gradually wane in significance. The above-average price rises for those services that benefited from pent-up demand after the end of the pandemic are also likely to ease over time. Nevertheless, wage rises are expected to accelerate somewhat further, especially in the eurozone. Even if employees are only partially compensated for their loss in purchasing power and a wage-price spiral is avoided, the passing-on of higher wage costs will likely permit no more than a gradual decline in core inflation.

In response to this picture, the US Federal Reserve (Fed), the ECB and central banks in other industrialised countries are likely to tighten their monetary policy somewhat further and then maintain it at this more restrictive level until the general trend of rising wages and prices has eased sufficiently strongly. As monetary tightening in the United States is already more advanced, the Fed is likely to keep further key rate rises small. At the same time, however, it is likely to clearly communicate that it does not intend to cut rates any time soon. The ECB signalled after its Governing Council meeting in December 2022 that it regards significantly higher key rates as necessary in the near future. Further rate hikes are therefore expected in 2023.

In addition to lifting key interest rates, the ECB will work on reducing its balance sheet, which has expanded considerably in recent years through long-term refinancing operations and asset purchases. A majority of the still outstanding long-term tenders under the TLTRO III programme will be due for repayment in the course of this year. Banks are also likely to repay some of the remaining funds due to the less attractive terms and conditions. In addition, the ECB will begin in March to reduce its holdings under the Asset Purchase Programme (APP) by not fully reinvesting the principal from maturing bonds. In the second half of the year, it can be expected to up the run-off pace from the initial €15bn per month. However, the maturity profile of the APP portfolio is a limiting factor, as the ECB has so far ruled out selling bonds. As it also plans to reinvest proceeds from the Pandemic Emergency Purchase Programme (PEPP) until at least 2024, a still very high level of surplus reserves is likely to remain at year-end despite a considerable reduction in the balance sheet.

Money market futures are already assuming significant key rate hikes at the next ECB Governing Council meetings, which means there is limited scope for surprises on this front. Moreover, money market rates are unlikely to diverge appreciably from key rates. In the context of still high levels of excess liquidity in the banking system, the overnight rate (Euro Short-Term Rate (€STR) in particular is likely to remain just below the ECB deposit rate. Only in the case of the longer-term EURIBOR rates is the no longer quite so abundant supply of liquidity likely to lead to a slight widening of maturity premiums.

In their most recent interest rate decisions in 2022, the Fed, ECB and Bank of Japan again signalled surprisingly hawkish outlooks to the capital markets for the 2023 trading year. This resulted in an upward shift in the expected key rate paths for these central banks, and there is still potential for them to rise further. Accordingly, volatility will remain high in 2023. Prices for securities with long maturities will also remain under pressure from the announced reduction in central bank securities portfolios. This will be especially the case for sovereign bonds from countries in the eurozone periphery. Increased financing programmes, such as those put in place by the German Finance Agency (*Bundesfinanzagentur*) for the German government and by the EU for its recovery programmes, are also hitting the bond markets.

On credit markets, too, volatility will remain high. Corporate results may prove worse than expected under the influence of the recession in the winter quarters. Like many analysts, the credit rating agencies will then review their forecasts and potentially adjust them downwards. The ratings trend for the major agencies is thus likely to remain negative, and default rates for companies in the high-yield segment may well increase further. The increase in credit defaults is expected to be relatively moderate, however, as many large companies took advantage of the remarkably favourable financing conditions in previous years to increase their liquidity. For corporates, risk premiums on the credit markets are therefore likely to go up. In general, however, many negative expectations are already priced in, which could allow yield levels to partially compensate for unwelcome surprises.

For global equity markets, the announcements of further interest rate hikes by the major central banks represent an additional challenge. The difficult environment in the real economy has already led increasingly to poorer corporate results. Businesses have more and more been unable to translate the still high nominal revenue growth into corresponding profit growth – a trend that could continue or even worsen somewhat in the coming months. Aggregate demand is weak, and inflation rates are at levels where the corporate sector has found it increasingly difficult to maintain profitability in the past. This is compounded by rising wage, energy and interest costs. Profit expectations of market participants with regard to corporate results are therefore likely to be corrected downwards. The development of the pandemic in China poses another risk. The relaxation of the strict lockdown measures initially fuelled hopes of a noticeable improvement in global trade flows. On the flip side, however, excessive infection rates threaten to put a heavy brake on this by causing large-scale disruption to production.

Given the many negative factors affecting the global economic outlook, stock market valuations at the start of 2023 can be categorised as neutral. This applies to Germany, the eurozone and the emerging markets. Strong rises in stock prices are not expected in 2023 given the new competition from corporate bonds. Investable risk capital on the part of investors is likely to be increasingly split between the two investment forms.

Real estate asset management remains an appealing asset class. The recovery on global office rental markets is likely to be hampered by the weak economic growth. The supply side will act as a market stabiliser. High construction and financing costs will force developers to rebudget or abandon planned construction projects. The construction cycle is likely to have peaked in 2022. We expect robust but less dynamic rent rises in 2023. As a result of the expected continuing monetary tightening, further significant changes to initial yields can be anticipated in 2023 both for office buildings and for retail, hotel and logistics properties. As real interest rates are likely to be negative even over the long term, real estate is set to remain an attractive asset class.

Overall assessment of the expected economic trends

DekaBank expects a challenging economic environment overall in financial year 2023 due to the uncertain developments in economic growth and the capital markets. The high levels of financial assets held by private households, the investment needs of institutional investors and the negative real interest rates offer potential for fund and certificate sales. This is set against what is still noticeable caution among investors. How far interest rates continue to rise and whether this triggers a structural change in customers' investment behaviour will also be crucial factors. The financing business will benefit from the increased demand from savings banks; in the other segments, however, it may face reticence and increased risk provisioning needs given the economic trend.

Expected business development and profit performance

The strategic action programme 2025 continues to set the direction of travel to make the Deka Group a customer-oriented, innovative and sustainable *Wertpapierhaus*. This agenda remains focused on the broad themes of digitalisation and sustainability.

The consequences of the war between Russia and Ukraine remain impossible to fully predict in 2023. If the war in Ukraine worsens further or other geopolitical tensions escalate, this may hit economic growth and the capital markets. It also cannot yet be predicted how changes in supply chains and structural changes in energy prices will be reflected in corporate profitability. As a result, estimates of the development of growth and inflation are subject to change. This would also have implications for the monetary policy environment set by central banks. Future market developments therefore remain highly uncertain, and the earnings, risk and capital situation, as well as the corresponding key management indicators, may show less favourable development than that presented.

Based on another good performance for operating activities, and excluding the positive valuation effects, the Deka Group achieved an economic result of €741m in 2022. In the context of the current geopolitical and economic risks and the exceptionally high uncertainty in the planning assumptions for 2023, we expect an economic result slightly above €500m. The Deka Group is aiming for a return on equity before tax (balance sheet) of over 8% in financial year 2023. The cost/income ratio should come to less than 70%.

Net commission income is forecast to remain the main component of income, accounting for over 80%. This is based on the anticipated positive development of total customer assets and a net sales performance well into positive territory. The expected 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 slight year-on-year rise in total customer assets in 2023. As part of our forecast for the retail customer business, we expect net sales of between €20bn and €25bn. Due to the loss of an institutional securities mandate, net sales for business with institutional customers in 2023 are expected to be significantly below the prior-year figure.

The Asset Management Securities business division will continue its proven strategic direction in 2023 and concentrate on continuing to develop its range of high-quality products and services in close coordination with the sales departments. Digitalising processes all along the value chain to further improve quality, efficiency and service levels is key to this. Sustainability aspects, taking into account the Group strategy and regulatory requirements, will remain a focus. In the retail segment, we will concentrate on an investment fund business that maintains lasting value and on products for regular saving. Starting from summer 2023, Deka-Connect+ will be a major component of this as a new fund-based asset management service in Germany. We will continue to expand digital sales channels and strengthen the product focus for institutional sales. In the retail business, the business division expects net sales to exceed the 2022 level. Net sales in the institutional business will be down on the previous year due to one-off effects. An overall increase in total customer assets is expected.

Risks for the investment fund business in the Asset Management Securities business division may arise from a expansion of the war between Russia and Ukraine, changing supply chains, and structural changes in energy prices with a knock-on effect on corporate profits. Fundamental changes involving spiralling inflation and contractionary monetary policy may also adversely affect the securities markets and thus the investment fund business. In the medium term, other political and geopolitical conflicts and significantly more volatile economic development may also bring risks. This and other factors 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's mission in 2023 is to provide the savings banks with high-quality real estate- and real estate financing-based investment products with sustainable features for their customer business and proprietary investments. The business division wants to be the preferred partner for savings banks and their customers when investing in commercial real estate. 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 business division plans to build on what is already an excellent market position without compromising on quality or stability and is aiming for a year-on-year increase in net sales. In the institutional business, it is seeking to improve its market position despite the current investment restraint among customers. Existing and new products, such as the newly launched infrastructure fund of funds, *Deka Infrastruktur Selektion*, will support this goal. The business division expects a higher transaction volume than in 2022 and thus an increase in real estate assets and total customer assets. 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 be gradually expanded. The business division will also 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 consequences of the war between Russia and Ukraine. Persistent inflation and the resulting higher interest rates may result in a downward trend in property values. This effect will probably be only partially compensated by indexed rents. When interest rates increase, the appeal of real estate funds can diminish in comparison to possible substitute products, even when real estate portfolios are conservatively valued. Further uncertainties are the difficult situation and high costs affecting gas supplies, along with the unpredictable effects on tenants and resulting economic upheaval. The business division's continued aim is to respond to each individual situation of its business partners and find viable long-term solutions that enable the funds to maintain profitable rental relationships. Pricing on national and international real estate markets currently remains fraught with uncertainty. The continued high price level currently means a difficult market environment for transaction planning. Risks are also expected from continued strong regulatory pressure.

For 2023, 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. It aims to realise efficiencies through its multichannel offering, which involves the seamless 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, this will ensure and expand access to the customer interface in the *Sparkassen-Finanzgruppe*. Innovative solutions, ideas and trends in the securities business, such as the use of blockchain technology, artificial intelligence and data analytics, will also be trialled.

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, 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. To enable these services to be offered to the Depositary subdivision's customers in future, the introduction of a depositary system for digital assets is planned.

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 war between Russia and Ukraine may also trigger a pronounced correction on stock markets, negatively impacting assets under custody and thus the income achievable in this subdivision.

In 2023, 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, net sales for retail customers will remain front and centre in 2023. After an unusually high figure for 2022, net sales are expected to return to the levels seen in previous years in 2023.

Risks to the development of the Capital Markets business division arise particularly from negative capital market developments and recessionary fears, accompanied by persistently high inflation, resulting in lower customer activity levels. The unpredictable consequences of the war between Russia and Ukraine, the energy crisis, global trade conflicts and supply chain difficulties are central to this. 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 2023, 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 size of the financing portfolio is expected to remain at around the previous year's level. The business division will maintain its stability-focused and risk-conscious strategy.

Risks for the Financing business division currently arise from the continuing war in Ukraine and persistently high inflation. This may adversely affect the quality of loan exposures, leading to higher risk provisions and increased capital requirements due to rating downgrades. Further risks may arise from specific creditworthiness risks on the part of borrowers, which could adversely affect the economic outlook for lending segments in which we operate. This could also lead to a need for higher risk provisions, or to increased capital adequacy requirements as a result of a downgrading of our credit ratings. A worsening of other global political crises may have similar effects. Business performance may also 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 2023. 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 around €100bn at year-end 2023.

The Deka Group expects to maintain an adequate capital and liquidity base in both the normative and economic perspective for 2023. 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%.

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.

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 2022	Forecast 2023 in the Annual Report 2022
Economic result	€m	984.8	Slightly above 500
Return on equity before tax (balance sheet)	%	17.0	Above 8
Cost/income ratio	%	55.0	Below 70
Total customer assets	€bn	371.8	Up slightly year-on-year
Net sales	€bn	27.4	
Retail customers	€bn	20.8	20 to 25
Institutional customers	€bn	6.6	Down significantly on the previous year due to a one-off effect
Common Equity Tier 1 capital ratio	%	17.4	Above 13
Utilisation of risk appetite	%	59.9	At a non-critical 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 strategic action programme 2025, which is designed to put the *Wertpapierhaus* strategy into practice. Positive effects linked to these measures 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 projects in the efficiency portfolio.

Current opportunities

The assumptions on economic trends made in the forecast report represent the most likely scenario from the point of view of the Deka Group. Nevertheless, economic trends may turn out to be better than the baseline scenario assumes. The positive macroeconomic scenario described below is considered rather unlikely, however. A rapid reversal of the restrictive monetary policy, 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 significant than expected rise in equity and bond indices could lead to stronger growth in total customer assets and have a positive impact on net commission income. A steepening yield curve could improve the conditions for investing own funds and managing liquidity.

Opportunities from market developments could also be generated by an even stronger customer 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 strategic action programme 2025. The resultant effects have already been incorporated into the planning for 2023, 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. Noteworthy developments in risk management are explained in the report. 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 ff.

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 material 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

The Deka Group refined parts of its risk management and control in the reporting year, taking due account of regulatory requirements.

Two further indicators were added to the internal processes for managing and monitoring liquidity in the year 2022. The EBA Guidelines on recovery plan indicators published in 2021 require the recovery plan to use an indicator for available, central bank-eligible, unencumbered assets. As part of the implementation of this requirement, additional thresholds, monitored daily, were therefore added for available, central bank-eligible, unencumbered assets, and the liquidity emergency plan was enhanced in line with this. To limit the risks from unstable sources of funding, thresholds were introduced for the issue of commercial papers, setting the maximum volume of debt due within each maturity band. In addition, the method for calculating liquidity needs for intraday liquidity risks was developed into a scenario-based quantitative modelling approach. A new methodology based on tiered stress scenarios was introduced to evaluate the significance of climate and environmental risks. This was used to quantitatively analyse the materiality of risk drivers.

The correlation assumptions between industries and segments used in the credit portfolio model were adjusted at the end of May 2022 as part of the regular update process, and the representativeness of the crisis correlation estimate was improved through a stronger inclusion of crisis phases. The updated correlation assumptions resulted in an increase in economic counterparty risk. Risks were also increased by the greater consideration of double-default risks for securities received as collateral, which was implemented at the end of October 2022. The updates to the migration matrices, which were carried out at the same time, had a risk-reducing effect.

The revised model for quantifying business risk went live for the Capital Markets and Financing business divisions at the end of February. At its core, the revised model switches the relevant planned figure to the net income contribution for the following year included in internal capital, thereby bringing this into alignment with the other business divisions. This contribution is based on the economic result expected for the next 12 months but with a focus on earnings components that are achievable on an economically sustainable basis. Under the revised model, the business risk in these two business divisions is immaterial. It is therefore not explicitly included in the quantification of business risk at present.

For the purposes of developing a holistic reputational risk management system, guidance for the management of reputational risks was put together and implemented across the Group at the end of 2021. This was based on the methods, processes and responsibilities refined during a trial stage. A scenario-based approach to separately quantifying reputational risk is being developed as part of a project in the current year. This is intended to transparently show and quantify the chain of reputational effects.

Since reputational risk is regarded as a Group-level issue whose causes cannot be clearly allocated to an individual business division, it is impractical to break down the risk amount for reputational risk by business division. For 2023, it is therefore intended to integrate reputational risks into the risk-bearing capacity calculation as a deduction from internal capital.

Implementation of the vision adopted by the Board of Management for the establishment of an integrated management system for non-financial risks (NFR) continued as planned. This involved completing an initial assessment of all risk sub-types falling under operational risk, taking into account the minimum requirements defined for the measurement of non-financial risks. In addition, risk type-specific NFR Indicators were chosen to monitor compliance with the qualitative risk tolerance rules using the thresholds set and to ensure transparency about the risk situation. Building on this, NFR reporting encompassing all risk sub-types took place for the first time. In future, this will form the basis for applying standardised risk management and escalation processes.

In 2022, the Deka Group continued its activities for integrating sustainability risks into management in a structured and targeted manner. This relates to the areas business strategy, governance, risk management and disclosure. In order to consistently factor in climate and environmental risks at the Deka Group, the risk taxonomy was refined further and a catalogue of the drivers of climate and environmental risks (C&ER risk driver universe) developed. The latter describes the basic chains of effects and the channels by which these are transmitted to market participants and the Deka Group's business operations and business activities. Analysis of the significance of sustainability risks, first performed in 2021, was systematically enhanced so as to systematically identify and measure sustainability risks. Given the importance of climate change and the associated impacts, this analysis continued to focus on climate and environmental risks. A risk-driver analysis was performed to identify the significant drivers of climate and environmental risk for the Deka Group. This examines business model-specific vulnerabilities and impacts on the material risk types. The current risk-driver analysis examined a time horizon of at least five years, thereby identifying short- and medium-term climate and environmental risks. In 2023, those climate and environmental risk drivers classified as significant will continue to be gradually integrated into risk management tools.

In the time horizon examined, the climate and environmental risk drivers identified in the risk driver analysis for the material risk types were predominantly classified as insignificant. With regard to business risk, climate and environmental transition risks can, under stressed assumptions, represent significant drivers irrespective of the probability of occurrence of such events and developments. In addition, it should be noted with regard to operational risks that the significance of climate and environmental transition risks is set to rise in future in light of the growing portfolio of sustainability products combined with the increase in regulatory requirements. Given the results of the risk driver analysis described above, there is currently no need to allocate capital for climate and environmental risks or to cover the risks with liquidity.

To examine the impacts of climate and environmental risks, two climate stress scenarios were also calculated in the first quarter of 2022 as part of the stress tests. Their impacts were initially calculated for selected indicators as of 31 December 2021. The scenarios included both a delayed economic transition and a flood scenario. Further key indicators were added as part of another calculation as of 30 September 2022. This was based on new scenarios (delayed transition and drought and aridity). In a further step, dynamic portfolios will be used for the analysis next year so as to take account of any strategic and customer-specific adjustment processes.

With regard to the inclusion of sustainability aspects in DekaBank's lending process, the ESG scorecards developed in the previous year in line with the EBA Guidelines on loan origination and monitoring were used in the course of lending decisions (for setting, increasing and extending limits). The ESG scorecards were rolled out to the entire loan portfolio by the end of 2022.

It should be noted that the instruments used to identify and measure climate and environmental risks are based on the reporting date in question. The instruments are therefore continuously refined (e.g. extension of the period covered by the risk driver analysis) to take ample account of the dynamics of advancing climate change and accompanying political initiatives. For monitoring purposes, suitable risk ratios (key risk indicators) are to be chosen in future that enable regular assessment of the potential impact of climate and environmental risks.

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 in the fund rating module as part of the TRIM, which were all reported as completed in the first half of 2022. An on-site audit of the market risk model as part of the TRIM was conducted back in 2017, and all measures to fulfil the requirements were implemented in 2020. 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 exposures, further IRB reviews were carried out in 2021 and 2022 for a total of six modules in connection with the corresponding model change notifications. In the coming years, more of these reviews will be conducted until all IRB rating modules in use 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 needed to meet the requirements of the new FRTB standardised approach have already been implemented. Their implementation has been followed by the required quarterly reporting 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 material 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 material, 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 material 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 broader 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 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 unexpected 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 for accounting purposes 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 accounting purposes and to business partners, despite the absence of a contractual obligation to do so.

The identification and evaluation process as part of the 2022 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 is defined as the risk that the standing of the Deka Group will be damaged. Every business activity that harms the credibility of the Deka Group's commitment to its stakeholders (primarily shareholders, sales partners, customers, employees, financial and real estate markets and the public) can result in reduced profitability, capital or liquidity.

Reputational risks may arise directly or as a result of events connected to other risk types and manifest themselves through their effects on business and liquidity risk.

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. In part, these risks are inherent in the models and thus unavoidable, as it is not normally possible for the chosen model to capture the situation with complete accuracy. Model uncertainties can lead to unforeseen financial losses and shortcomings in the ICAAP or ILAAP, and thus to flawed decisions or other damage. These risks 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 uncertainties. 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 uncertainties combined with model risks in the narrower sense (i.e. the totality of potential negative effects resulting from the use of models) is also summarised under the term model risk in the broader sense.

In the economic perspective, annual capital and risk planning uses a buffer when setting risk appetite in order to take account of uncertainties in the modelling of risks affecting profit and loss. In the context of liquidity risk, model uncertainties are mitigated using the liquidity buffer. In the normative perspective, model uncertainties from valuation models are 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 via the Deka Group's own business operations, or indirectly via customers and business partners, in a deterioration in capital or liquidity levels. Sustainability risks in connection with the climate and environment are also referred to as climate and environmental risks and include physical, transition and other climate and environmental risks. Physical climate and environmental risks comprise the impacts of individual extreme weather events and their consequences (acute) as well as long-term changes in climatic and environmental conditions (chronic), but also natural disasters not caused by the climate. Climate and environmental transition risks comprise impacts that may occur directly or indirectly as a result of the transition to a lower-emission, more environmentally sustainable economy. Other climate and environmental risks comprise impacts of climate- and environment-related events and developments that are not attributable to physical climate and environmental or transition risks. They include, for example, the loss of biodiversity or the spread of tropical diseases.

Sustainability risks act as drivers of relevant risk types that are material 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 as well as by means of segment-specific minimum standards and ESG scorecards. ESG scorecards are used as part of the lending process for the targeted analysis of sustainability aspects. The analysis uses an ESG traffic light system, which classifies the level of sustainability risk for financing and borrowers from low to high. Business classified as high-risk is generally declined in accordance with the blacklist for the credit risk strategy. Existing financing or borrowers with high sustainability risks according to the ESG scorecard are identified as part of the early warning process. The next steps for this sort of business are decided case by case. 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 material 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 customers, that sustainably add value to the Deka Group, that involve limited risks and that match Deka's expertise. As part of the 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 associated services and products or when they serve risk management purposes. In addition, risks are incurred if they are conducive to liquidity management or if they are required to realise synergies along the Deka Group's value chain. 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. These include, for example, the regional focus on Germany, which is a result of the focus on German savings banks and their customers, and the concentration on certain groups of counterparties, for example in the savings banks segment or public sector, and on counterparties in the financial market. 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. The Deka Group also makes use across the business divisions of global custodians and central counterparties, which involves a conscious exposure to concentrations, not least of counterparty risk. To conduct its business, the Group mainly uses established products and markets with adequate market liquidity and market depth due to their international acceptance. No business is conducted involving physical delivery of precious metals and goods.

The Deka Group's business activities are organised into five 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
In combining securities fund business with the provision of high-quality asset management solutions for every market environment, this business 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 the provision of fund products related to real estate or (real estate) financing. 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 risks arising from options, 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 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. General interest rate risks, currency 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 as well as the heads of Compliance, Legal, IT, Business Services, Treasury, Corporate Office & Communications, Strategy & HR, Sales/Product Management & Marketing, Digital Multichannel Management, Institutional Customer Sales, Organisational Development, Information Security Management, Capital Markets, 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 Board of Management members responsible for Treasury, Finance, Risk Control and Capital Markets and the heads of the Treasury, Finance and Risk Control corporate centres as well as and the head of the Capital Markets business division.

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 90 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 for analysing and discussing the internal rating procedures (see counterparty risk).

The duties of the Risk Talk are to regularly analyse, discuss and make decisions regarding matters in connection with the risk management and monitoring processes in the Capital Markets business division's operational processes. The emphasis is on the assessment, in relation to market 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 Strategy & HR 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 material 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, setting limits for trading and capital market counterparties, and analysing, preparing and/or approving ratings (except for transaction ratings in the case of new business in the Financing business division). Credit Risk Management is also responsible for ongoing management of exposures for certain financing, verifying and approving collateral, early-stage risk identification (acting as the administrative office), risk monitoring and the management of non-performing and troubled loans (work out).

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 under the German Money Laundering Act (*Geldwäschegesetz* – GwG) and to the "Central Office" under the KWG and ensures that there is the possibility to submit anonymous tip-offs to an external ombudsman. In addition to this, the Compliance corporate centre performs the functions of the officer for the safeguarding of client assets. Alongside the provision of training and advice on relevant issues, the corporate centre assesses the controls and procedures implemented by the operational units to determine whether they are appropriate and effective, with the aim of minimising compliance risk for the Deka Group.

The Information Security Management department, which reports directly to the Board of Management, performs the function of the Information Security Officer, Business Continuity Management Officer, Outsourcing Officer and operational Data Protection.

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.

In addition, in all business divisions and corporate centres, the respective heads of department are responsible for ensuring that operational risks are identified, measured and managed on a decentralised basis. There are specialist functions for monitoring selected non-financial risks in the Compliance, Information Security Management, Strategy & HR, Organisational Development, Legal and Finance units. The Risk Control corporate centre is responsible for key components of operational risk control, such as refining methodologies and reporting.

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 (Management-komitee Risiko – MKR)	- Assists the Board of Management in matters relating to material 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, monitors and manages 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 (Management-komitee 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 division	- Conducts transactions in line with strategic guidelines	●	●		●	●		●
AM Services 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
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 - Monitors selected non-financial risks as a specialist function	●	●	●	●	●	●	●
Credit Risk Management (Corporate Centre)	- Market-independent second recommendation - Sets limits for trading and capital market counterparties - Analyses, 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	●						
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 - Single Officer (Officer for safeguarding of client assets) under section 81 (5) WpHG - Monitors selected non-financial risks as a specialist function			●				
Information Security Management (ISM) (reports directly to the Board of Management)	- ISM Officer, BCM Officer, Outsourcing Officer and operational Data Protection - Monitors selected non-financial risks as a specialist function			●			●	
Strategy & HR (Corporate Centre)	- Manages equity investment portfolio - Monitors selected non-financial risks as a specialist function			●		●	●	
Organisational Development (Corporate Centre)	- Monitors selected non-financial risks as a specialist function			●				
Legal (Corporate Centre)	- Monitors selected non-financial risks as a specialist function			●				
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 2022 for the Tier 1 capital ratio, the total capital ratio, the leverage ratio, the RWA- and LRE-based MREL ratios, the RWA- and LRE-based 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 RWA- and LRE-based MREL ratios, the RWA- and LRE-based 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 and sustainability risk.

See also: Individual risk types: page 90 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 risk types. 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 cannot be taken into account. Based on the risk appetite, the Board of Management also allocates capital to the individual risk types and business divisions and to Treasury. 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, the RWA- and LRE-based MREL ratios and the RWA- and LRE-based 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 (baseline plan), 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 baseline plan.

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

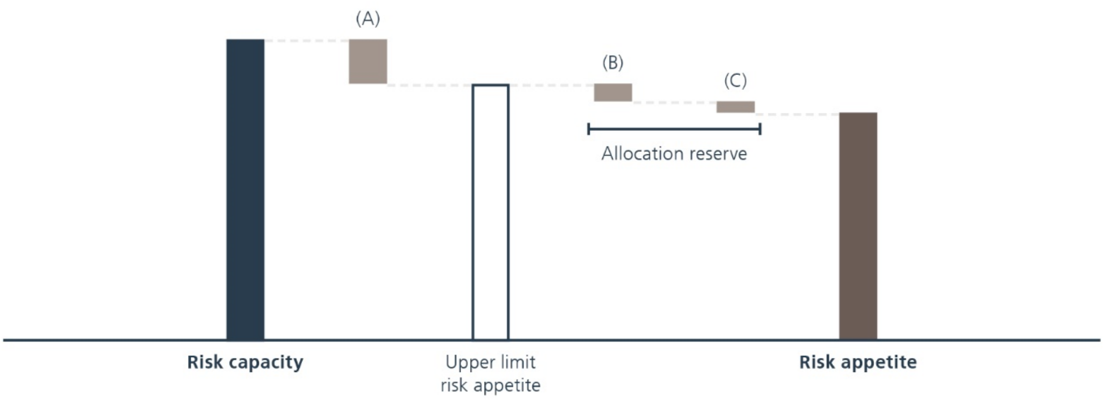
As a basic principle, internal capital is used to determine the maximum level of risk that can be incurred (impacting the income statement), taking into account risk concentrations. Risk capacity is analysed monthly. In the course of the risk-bearing capacity analysis, the risk capacity (in the form 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 material 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 at the end of each quarter and also include forecast values. 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 of Management 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, the Treasury corporate centre and the Finance corporate centre 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, the RWA- and LRE-based MREL ratios, and the RWA- and LRE-based 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, are assessed and reported annually and focus in greater depth on specific aspects.

The regular annual review of the macroeconomic scenarios was carried out in the fourth quarter of 2022. In the light of current global economic and regulatory developments, the scenarios were updated and augmented 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.

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 measures for regulatory purposes are the liquidity coverage ratio (LCR) 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 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 fundamentally available. It thus corresponds to the positive liquidity balance of the FM for ordinary business operations. For liquidity risk, the Deka Group has defined its risk appetite in the economic perspective such that an unlimited survival horizon exists under a 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 relevant maturity bands for periods of up to 20 years.

In the normative perspective, thresholds are set that take into account the regulatory requirements. It is decisive that the chosen thresholds provide a sufficient amount of time for the preparation and initiation of management measures. Escalation and information processes are triggered as part of governance purposes when the thresholds are reached. The thresholds are also reviewed and adjusted if 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 willing to accept is the amber thresholds for the LCR and NSFR used for internal management purposes. These are comprised of the red threshold used for internal management purposes plus a management buffer. The management buffer has been determined taking into account the ECB guide to the ILAAP and is essentially based on the results of the annual risk inventory process and strategic considerations to ensure 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 haircuts 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 material, 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 maturity bands 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. In the case of the latter, both short-term (LCR) and medium-to-long-term liquidity adequacy (NSFR) are examined under adverse scenarios. The liquidity subgroup is included in the Deka Group perspective.

Economic perspective: Funding matrices

Funding matrices (FMs) are the main measure of liquidity risk in the economic perspective. 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 band 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 ordinary 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 specific and market-wide stress factors. The MaRisk requirements for liquidity management, including those 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 unlimited 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 these 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 LCR for DekaBank Deutsche Girozentrale (which, together with S Broker, forms the liquidity subgroup). This enables proactive management of the LCR. An NSFR is prepared on a monthly basis at Group and sub-Group level along with an 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 level of Deka Group and in the individual business divisions (including the Treasury corporate centre).

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

Further overall reports also include the quarterly stress testing report, which particularly includes the results of macroeconomic stress tests and performs a crucial early warning function in this respect.

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 2022

The outbreak of the war in Ukraine fundamentally changed the macroeconomic environment. The rise in inflation, which began in 2021, not least as a consequence of the pandemic, continued unexpectedly sharply in the reporting year, partly in light of rising energy prices. The significant inflationary processes pushed central banks around the world into a cycle of interest rate hikes. The remarkably decisive end to the policy of zero or negative interest rates had an unmistakeable effect on developments in the global economy. The rate hikes caused yields to spike. By also announcing that they would start reducing their vast holdings of securities, the central banks reinforced the movement of capital out of riskier assets. This led to a sharp rise in spreads on sovereign bonds from the eurozone periphery and on corporate bonds. Meanwhile, the global stock markets came under strong downward pressure from heavy inflation rates, a multitude of supply and production difficulties, and in particular the large-scale withdrawal of monetary policy support. A countermovement began in most leading share indices starting in autumn. The interest rate gap between the United States and Europe, which opened up due to the Fed’s earlier moves on rate hikes, led to a depreciation of the euro against the US dollar, during which the euro fell below parity in September. After the more significant rate hikes by the ECB in autumn 2022, the euro recovered and rose back above parity.

Implementation of the benchmark reform initiated by the Financial Stability Board made further progress in 2022. Following the successful transition for pound sterling, the Japanese yen and the Swiss franc in 2021, the focus is now primarily on preparing to transition the existing US-dollar LIBOR-based positions. With Term SOFR, which is being actively sought after by customers, the market now has an established true alternative to compounded SOFR. DekaBank is among the first European banks to have issued Term SOFR-based loans.

Alongside the US dollar transition, the expansion of the product range for the new risk-free rates (RFRs) is the second big issue. As well as linear products such as swaps, RFR option markets are emerging in various currency areas. DekaBank is monitoring this development and will adjust its product range accordingly once the necessary market data becomes available.

As expected, the transition to date has had no appreciable effect on the risk ratios overall.

Looking at the Deka Group, market development in 2022, which was characterised by rising interest rates and credit spreads, sharply fluctuating share prices (which recovered noticeably towards the end of the year) and, above all, sharply increasing volatility, posed challenges for the management of trading and banking book portfolios. Active risk management enabled the Group to maintain its essentially neutral position in equities and interest rates in the trading book portfolios. In credit spreads, too, more conservative positioning meant that there was only a small increase in risk. In non-trading book portfolios, an increase in risk was seen for both interest rates and credit spreads. This was mainly driven by the higher volatility. Share price risk from these portfolios is affected by maturity effects to a greater extent than by market developments. Despite the various crises, the certificates business continued on a par with the previous years. Alongside share certificates, which have been in high demand in recent years, the rising interest rates also made interest rate certificates more attractive again. Rising interest rates and credit spreads were partly cancelled out by recovering share prices towards the end of the year in terms of the risks from Riester products and pension obligations. Overall, there was a slight reduction in these risks.

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, VaR; confidence level 99.9%, holding period of one year) at the 2022 reporting date was €2,488m, a significant increase of €757m on the 2021 reporting date (€1,731m). This was attributable to significantly increased counterparty, market price, business and operational risks. In contrast, there was a reduction in investment risk, which is not material overall.

At the same time, risk capacity remained almost unchanged year-on-year at €5,231m (year-end 2021: €5,308m), as movements in the individual items largely offset each other. Changes in various correction and deduction items, such as for deferred tax assets, had a particularly negative effect, which was offset chiefly by increases in retained earnings and the revaluation reserve. As a result of the developments described, the utilisation of risk capacity increased significantly as against the end of 2021 (32.6%) to 47.6%, although it remains at a non-critical level.

The development of risk capacity also particularly reflects interest rate-induced unrealised gains and losses on loans (on the asset side), liabilities (securities and loans) and other balance sheet items measured at cost, which have been additionally included since the end of September 2022 in order for internal capital to better capture economic value. The previous methodology only included the securities in the investment portfolio. Utilisation of allocated risk capital was non-critical both at Deka Group level and in all business divisions. The risk appetite of €4,150m (slight increase on the end of 2021) was 59.9% utilised as at the 2022 reporting date (year-end 2021: 43.3%).

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

	31 Dec 2022	31 Dec 2021	Change	
Counterparty risk	1,169	819	350	42.8%
Investment risk	23	30	−7	−21.9%
Market price risk	576	426	149	35.0%
Operational risk	331	280	51	18.3%
Business risk	388	176	212	120.4%
Total risk	**2,488**	**1,731**	757	43.7%

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. In accordance with Article 26 (2) CRR, the 2022 year-end profit less foreseeable charges and dividends was recognised for the first time in Common Equity Tier 1 capital as at 31 December 2022 (dynamic approach).

The Deka Group's regulatory own funds as of 31 December 2022 stood at €6,751m (year-end 2021: €6,075m).

Compared with the previous year, Common Equity Tier 1 capital increased by €746m from €4,716m to €5,462m. The increase was a result of the inclusion of year-end effects from 2021 and 2022 (mainly profit retention).

Additional Tier 1 capital was unchanged year-on-year. Compared with the previous year, Tier 2 capital was down by €71m to €690m. This was primarily due to the reduced eligibility of Tier 2 capital instruments under the CRR in the last five years before maturity. There were positive effects from the comparison of provisions.

RWAs increased overall by €415 m from the year-end 2021 figure of €30,944m to €31,360m. Compared with the end of 2021, credit risk dropped by €506m to €20,993m. This was caused by a decline in RWAs from lending business due to improvements in creditworthiness. Lower RWAs also resulted from the smaller shortfall in cover for guarantee products, mainly due to the higher (discounting) yield curve. At €5,645m, market risk was almost unchanged from the previous year (€5,588m). There was a drop in general market risks (internal model), while specific market risks (standardised approach) were almost unchanged. RWAs from operational risk amounted to €4,139m (2021: €3,500m). The increase was mainly due to a remodelling of loss scenarios (ex-ante perspective). CVA risk increased by €225m to €583m due to the higher volumes of derivative transactions to be included.

At 31 December 2022, the Common Equity Tier 1 capital ratio stood at 17.4% (year-end 2021: 15.2%). The Tier 1 capital ratio as of the reporting date was 19.3% (year-end 2021: 17.2%). The total capital ratio increased from 19.6% as of 31 December 2021 to 21.5%.

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 8.29% as at 31 December 2022. 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 0.20% as at year-end 2022) and the capital buffer for other systemically important banks (0.25%). The capital requirement for the Tier 1 capital ratio was 10.07%. For the total capital ratio, it was 12.45%. These requirements were clearly exceeded at all times. The SREP Pillar 2 requirements remain unchanged for 2023.

Deka Group own funds in accordance with the CRR *in €m (Fig. 23)*

	31.12.2022	31 Dec 2021	Change	
Common Equity Tier 1 (CET 1) capital	5,462	4,716	746	15.8%
Additional Tier 1 (AT 1) capital	599	599	0	0.0%
Tier 1 capital	**6,061**	**5,314**	**746**	**14.0%**
Tier 2 (T2) capital	690	761	−71	−9.3%
Own funds	**6,751**	**6,075**	**675**	**11.1%**
Credit risk	20,993	21,499	−506	−2.4%
Market risk	5,645	5,588	57	1.0%
Operational risk	4,139	3,500	640	18.3%
CVA risk	583	358	225	62.7%
Risk-weighted assets	**31,360**	**30,944**	**415**	**1.3%**
%				
Common Equity Tier 1 capital ratio	**17.4**	**15.2**		**2.2%-points**
Tier 1 capital ratio	**19.3**	**17.2**		**2.2%-points**
Total capital ratio	**21.5**	**19.6**		**1.9%-points**

Since the end of 2021, the transitional provisions in the CRR have no longer been relevant for DekaBank. The table above therefore no longer distinguishes between figures with and without transitional provisions.

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 7.1% as at 31 December 2022 (year-end 2021: 6.2%). The increase was due to higher Tier 1 capital combined with a significantly smaller increase by comparison in leverage ratio exposure. The applicable minimum leverage ratio of 3.0% was thus exceeded at all times.

The MREL requirements are calculated using an RWA- and LRE-based method 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 52.0% (year-end 2021: 59.7%), while the figure under the LRE-based approach came to 19.1% (year-end 2021: 21.7%). Both ratios were well above the applicable minimum ratios. As at 31 December 2022, own funds and MREL-eligible liabilities came to €16.3bn. As of the reporting date, this figure was composed of own funds of €6.8bn, senior non-preferred issues of €6.0bn, senior preferred issues of €4.1bn and unsecured subordinated liabilities of €0.3bn. The repurchases recently approved in accordance with the CRR were deducted for the calculation of the MREL ratios.

The subordinated MREL requirements are also calculated using an RWA- and LRE-based method 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 2022, the subordinated MREL requirements in line with the RWA-based approach came to 35.9% (year-end 2021: 42.4%), while the figure under the LRE-based approach was 14.2% (year-end 2021: 16.4%). Both ratios were well above the applicable minimum ratios.

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.

The implications for the Deka Group of the escalating conflict between Russia and Ukraine were also closely followed. With the outbreak of the war, the need to calculate a specific ad hoc scenario was identified. In the reporting year, this scenario was continuously adjusted to the changing circumstances and the impact on capital adequacy assessed. As part of the annual scenario review, the scenario was added as of 31 December 2022 to the list of scenarios calculated on a quarterly basis. This scenario does not present threat to capital adequacy.

In the context of further geopolitical developments, an ad hoc scenario was also calculated to address a possible escalation of the China-Taiwan conflict. This, too, has not identified any immediate need for action.

Liquidity adequacy in financial year 2022

The refinancing markets were heavily affected in 2022 by Russia's war against Ukraine and the associated rises in inflation and interest rates. Refinancing markets reacted to the outbreak of war with tension and volatility, as was evident, for example, in the market-wide increase in interest rates and liquidity spreads that followed the start of the conflict. DekaBank had access to ample liquidity on the money and capital markets. The higher interest rates boosted the attraction for investors of interest rate linked products again. DekaBank also benefited from the flight-to-quality effect.

The Deka Group had sufficient liquidity, measured using the liquidity balances and normative indicators, throughout the reporting period. 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 2022 financial year, at both Deka Group and liquidity subgroup level.

As at 31 December 2022, 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 €8.2bn (year-end 2021: €9.4bn). In the maturity band of up to one month, the liquidity surplus totalled €8.0bn (year-end 2021: €9.2bn), and in the medium-term range (three months) it amounted to €10.5bn (year-end 2021: €6.2bn).

As in previous years, a substantial part of the Group's liquidity generation and provision was attributable to business with savings banks and funds. In relation to the net cash flows of approximately €5.5bn on day 1, the Deka Group has a high liquidity potential (around €2.7bn) 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.

"Combined stress scenario" funding matrix of Deka Group as at 31 December 2022 *€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)	2,717	3,316	2,977	2,062	−1,324	−473	−132	−17
Net cash flows from derivatives (accumulated)[1]	−277	−271	−230	463	791	1,139	755	750
Net cash flows from other products (accumulated)	5,753	5,151	5,302	7,963	17,360	13,646	3,921	−669
Liquidity balance (accumulated)	**8,193**	**8,197**	**8,049**	**10,489**	**16,826**	**14,312**	**4,544**	**64**
For information purposes:								
Net cash flows from derivatives by legal maturity (accumulated) [1]	−277	−273	−315	−346	−534	−463	−604	1,035
Net cash flows from other products by legal maturity (accumulated)	−9,438	−11,663	−11,700	−10,706	−9,839	−2,296	−2,190	−576
Net cash flows by legal maturity (accumulated)	**−9,715**	**−11,936**	**−12,016**	**−11,052**	**−10,373**	**−2,759**	**−2,794**	**460**

[1] Including lending substitute transactions and issued CLNs

As at 31 December 2021, 56.3% (year-end 2021: 55.0%) of total refinancing related to repo transactions, daily 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 73% of total capital market issues. The volume of commercial paper issued reduced from €2.5bn to €1.1bn year-on-year and thus remains 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 35.5% (year-end 2021: 39.6%), while other financial institutions accounted for 19.8% (year-end 2021: 23.5%), savings banks for 18.1% (year-end 2021: 10.3%) and central banks for 3.5% (year-end 2021: 9.1%).

Some 57.2% of total refinancing was obtained in Germany and other eurozone countries. Approximately 36.4% 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 2022 stood at 159.1% (year-end 2021: 160.3%). The LCR at Deka Group level declined by 1.1 percentage points compared with 31 December 2021. In percentage terms, the decline in holdings of high-quality liquid assets was slightly stronger than the decline in net cash outflows. The average LCR for the reporting year was 178.3% (previous year's average: 160.2%). The LCR fluctuated within a range from 144.4% to 214.9%. It was thus always significantly above the applicable minimum limit of 100%.

The net stable funding ratio (NSFR) came to 118.1% (year-end 2021: 118.9%) and, at the end of December 2022, was thus significantly above the required 100%. Required stable funding increased more strongly in percentage terms compared with available stable funding. 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 "back office" particularly include providing a second opinion independent of front office operations, ongoing management of exposures for certain financing, 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 loan-loss provisioning). Responsibility for applying risk classification procedures, and for establishing, reviewing and monitoring those procedures, is also classified as a back office function.

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

The Management Committee for Assets and Liabilities (*Managementkomitee Aktiv-Passiv* – MKAP) and the Risk Management Committee (*Managementkomitee Risiko* – MKR) are responsible for strategically managing 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.

Capital allocation for counterparty risks

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 S Broker's Lombard lending business for retail customers, 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). The Bank has requested to return the IRBA approval and hence apply permanent partial use in accordance with Article 150 CRR for the models for public authorities outside Germany, the DSGV joint liability scheme and insurance companies.

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.

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 credit portfolio model is appropriate.

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 by CVaR, 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 the liquidity management portfolio managed by 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. Due to the business model, these comprise by far the largest share of the collateral portfolio as compared to the lending business.

The Group's collateral policy sets minimum requirements for securities borrowed by counterparties or received as collateral in repo lending transactions and OTC/CCP derivatives 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. In addition, an analysis of collateral received is reported to the Risk Talk.

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. In particular, this includes specifying early warning indicators and criteria to allocate exposures to different monitoring levels.

Operational responsibility for identifying defaults and 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, increased significantly in the reporting year to €1,169m (year-end 2021: €819m). Risk capital allocated to counterparty risk stood at €1,460m (year-end 2021: €1,595m) and was 80.1% utilised (year-end 2021: 51.3%). The level of risk capacity utilisation therefore remained non-critical.

The risk development was due predominantly to spread widening, particularly in the second half of the year, as well as to an increase in exposures and rating downgrades. The updates to the correlation assumptions in May also resulted in a significant increase in risk.

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

Gross loan volume increased by €5.5bn from the end of 2021 to reach €129.4bn. Money market transactions, bonds and leases in the savings banks risk segment made the largest contribution to this increase. Gross loan volume in the commercial banks risk segment increased due to a higher volume of securities and repos. In the funds risk segment, risk was increased by the higher volume of securities issued as collateral as part of borrowing transactions. Meanwhile, a reduced bond volume and changes in the value of derivative hedging instruments in the public sector risk segment had a risk-reducing effect. In the insurance companies risk segment, a reduction in repo lending transactions caused the gross loan volume to decline. The lending business volume (particularly in the conventional energies and infrastructure risk segment) was down on the figure for year-end 2021. The ship portfolio's share of gross loan volume stood at 1.0%, unchanged from year-end 2021. The aviation segment had a share of 1.9% (year-end 2021: 2.2%).

Gross loan volume *€m (Fig. 25)*

	31 Dec 2022	31 Dec 2021
Commercial banks	20,878	16,834
Other financial institutions	26,050	26,114
Savings banks	12,742	5,957
Insurance companies	724	1,881
Industrial sector	4,779	5,671
Service sector	2,256	2,837
Public sector	6,839	10,193
State-affiliated and supranational institutions	19,453	19,395
Transport sector	4,031	4,364
Renewable energies	1,434	1,497
Conventional energies and infrastructure	4,483	5,055
Real estate sector (including real estate funds)	11,669	11,531
Retail sector	76	124
Funds (transactions and units)	13,988	12,460
Total	**129,403**	**123,913**

Net loan volume increased by 12.9% as against the end of 2021 (€64.0bn) to reach €72.2bn and outpaced gross loan volume. Collateralisation meant that the changes in gross loan volume observed in relation to both repo lending volume (especially in the commercial banks, other financial institutions, insurance companies, state-affiliated and supranational institutions, and funds segments) and share price risks from securities (especially in the commercial banks, industrial and service sector segments) had relatively small effects on the net loan volume. A higher bond volume in the commercial banks risk segment and a larger volume with other financial institutions and savings banks had a particular risk-increasing effect in net loan volume. Declines were seen particularly in the net bond portfolio in the public sector and state-affiliated and supranational institutions risk segments.

Net loan volume *€m (Fig. 26)*

	31 Dec 2022	31 Dec 2021
Commercial banks	10,311	6,373
Other financial institutions	5,438	4,144
Savings banks	12,624	5,772
Insurance companies	191	208
Industrial sector	2,376	2,196
Service sector	1,389	1,401
Public sector	4,976	7,986
State-affiliated and supranational institutions	17,153	18,450
Transport sector	536	791
Renewable energies	1,434	1,497
Conventional energies and infrastructure	3,420	3,472
Real estate sector (including real estate funds)	3,213	2,937
Retail sector	76	124
Funds (transactions and units)	9,064	8,603
Total	**72,199**	**63,955**

The gross loan volume in the eurozone rose by a total of €4.9bn. This was due to increased repo lending transactions with counterparties in Germany and France and to increased financial transactions with savings banks. Lower securities volumes with German and Dutch counterparties had a risk-reducing effect. As a result, the percentage of gross loan volume increased from 78.0% at the end of 2021 to 78.5%. The volume movements in America resulted mainly from greater exposure to repo lending business with US counterparties and an increased securities volume with Canadian counterparties.

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

	31 Dec 2022	31 Dec 2021
Eurozone	101,561	96,642
Europe excluding eurozone	13,579	13,811
America	10,870	9,622
Asia	2,864	2,926
Other countries	529	913
Total	**129,403**	**123,913**

The gross loan volume attributable to Germany increased by €5.5bn to €68.1bn and equated to 52.6% of the overall portfolio at year-end. In the eurozone, €13.4bn or 10.4% of the gross loan volume was attributable to counterparties in Luxembourg. Counterparties in France accounted for 7.0% of the gross loan volume, and counterparties in Belgium accounted for 4.0%.

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

	31 Dec 2022	Percentage of Gross loan volume
Germany	68,110	52.6%
Luxembourg	13,422	10.4%
United Kingdom	9,067	7.0%
France	9,021	7.0%
Belgium	5,234	4.0%
Spain	2,092	1.6%
Netherlands	1,448	1.1%
Italy	427	0.3%
Other	20,582	15.9%
Total	**129,403**	**100.0%**

The gross loan volume relating to counterparties in Spain and Italy fell to €2.5bn, from €3.3bn at the end of 2021. 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 37% of gross loan volume. The share of gross loan volume for counterparties in China totalled 0.3%. The figure for Hong Kong was 0.4%. In both cases, the counterparties were mostly in the transport sector. There was no gross loan volume attributable to counterparties in Taiwan. The gross loan volume for counterparties in Russia came to €43m. 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 €2m. There remained no gross loan volume attributable to counterparties in Ukraine or Belarus at year-end 2022 and no country limit.

Gross loan volume by risk segment for selected countries as at 31 December 2022 *€m (Fig. 29)*

	Germany	Luxembourg	UnitedKingdom	United States	France
Commercial banks	5,450	807	1,305	1,764	5,191
Other financial institutions	7,218	7,578	4,366	1,728	198
Savings banks	12,742	-	-	-	-
Insurance companies	332	-	5	-	225
Industrial sector	2,526	15	513	452	298
Service sector	181	35	176	935	516
Public sector	4,694	7	226	188	742
State-affiliated and supranational institutions	19,365	1	-	-	5
Transport sector	493	-	279	705	128
Renewable energies	158	-	103	-	255
Conventional energies and infrastructure	1,716	135	248	126	300
Real estate sector (including real estate funds)	4,145	0	1,847	2,545	1,162
Retail sector	76	0	-	-	-
Funds (transactions and units)	9,015	4,843	-	-	-
Total	**68,110**	**13,422**	**9,067**	**8,444**	**9,021**
Change vs. previous year					
Commercial banks	–166	360	755	–54	2,198
Other financial institutions	–891	1,144	–569	882	–154
Savings banks	6,785	-	-	-	-
Insurance companies	58	-	4	-	–396
Industrial sector	–768	–7	9	30	–39
Service sector	–173	1	19	–243	106
Public sector	–2,595	7	–149	–326	199
State-affiliated and supranational institutions	196	–2	-	-	–122
Transport sector	–148	-	–20	32	–22
Renewable energies	–24	-	–16	-	29
Conventional energies and infrastructure	–191	–23	–104	–32	–30
Real estate sector (including real estate funds)	260	0	–205	162	–52
Retail sector	–48	0	-	-	-
Funds (transactions and units)	3,225	–1,615	-	-	–7
Total	**5,519**	**–135**	**–276**	**450**	**1,711**

The gross loan volume remained focused primarily on the short-term segment at the end of 2022. The proportion of transactions with a time to maturity of less than one year was 44.1% (year-end 2021: 40.2%). The proportion of maturities longer than ten years was 4.5%, compared with 6.2% at 31 December 2021. The average legal residual term of gross lending was 2.8 years (year-end 2021: 3.3 years).

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

	31 Dec 2022	31 Dec 2021
Up to 1 year	57,083	49,844
1 to 2 years	13,894	12,268
2 to 5 years	17,199	15,242
5 to 10 years	10,294	10,231
10 to 15 years	2,336	3,170
15 to 20 years	945	1,466
>20 years	2,534	3,048
No maturity	25,118	28,643
Total	**129,403**	**123,913**

There was no significant change in the level of risk concentration in the loan portfolio during the reporting year. As at 31 December 2022, 13.5% (year-end 2021: 15.8%) 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 increased year-on-year by 2 to 25. Counterparties in the public sector, savings banks and state-affiliated and supranational institutions accounted for 18.6% of the total volume of the cluster portfolio. A total of 10.8% of net loan volume related to counterparty clusters (year-end 2021: 14.4%).

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 2022 related to shadow banking entities under the principal approach (limit utilisation of total net risk position: 21%). For shadow banking entities under the fallback approach, there were only very small exposures as at year-end 2022, which were attributable to third-party investment funds. The levels of utilisation are considered acceptable. The shadow banking entities had an average rating of 5 on the DSGV master scale.

The average rating for the gross loan volume was unchanged at a score of 4 on the DSGV master scale. The average probability of default as at 31 December 2022 was 22 basis points (bps) (year-end 2021: 24 bps), which was partly attributable to improved ratings for various counterparties in the aviation segment and in the public sector. These were partly offset by rating downgrades in the course of the year for various counterparties in the renewable energies risk segment. The average rating for the net loan volume deteriorated by one notch to a score of 2 amid a slightly changed probability of default of 12 bps (year-end 2021: 10 bps). 89% of net loan volume remained in the same grouping (determined by rating class) as at the end of 2021. The target rating under the credit risk strategy was achieved without difficulty 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 2022	31 Dec 2022	Average PD in bps	Average rating 31 Dec 2021	31 Dec 2021
Commercial banks	6	A	10,311	6	A	6,373
Other financial institutions	8	A	5,438	7	A	4,144
Savings banks	1	AAA	12,624	1	AAA	5,772
Insurance companies	14	3	191	6	A+	208
Industrial sector	13	2	2,376	14	2	2,196
Service sector	13	2	1,389	16	3	1,401
Public sector	4	AA–	4,976	3	AA	7,986
State-affiliated and supranational institutions	1	AAA	17,153	1	AAA	18,450
Transport sector	172	9	536	220	9	791
Renewable energies	211	9	1,434	66	6	1,497
Conventional energies and infrastructure	26	4	3,420	14	2	3,472
Real estate sector (including real estate funds)	13	2	3,213	17	3	2,937
Retail sector	N/A	N/A	76	N/A	N/A	124
Funds (transactions and units)	13	2	9,064	12	2	8,603
Total	**12**	**2**	**72,199**	**10**	**A–**	**63,955**

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 the organisational structure. In addition to this, the Risk Talk sets sensitivity limits for the Capital Markets business division.

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, including the banking book. 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. Risk factors particularly include issuer-specific spread risk curves along with sector curves for various country/industry/rating combinations, spread curves for credit derivatives, reference curves for various fixed-rate periods (tenor-specific), individual stocks, exchange rates and implicit interest rate, equity and currency volatilities. Appropriate consideration is given to basis risk.

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. They can also be used to manage risk concentrations, for example where risk factors are highly correlated.

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 and the valuation result arising from changes in interest rates. In the earnings at risk (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 €576m. The increase versus the end of 2021 (€426m) was mainly attributable to significantly increased spread and general interest rate risks. The risk development was influenced chiefly by market developments involving increased interest rates, wider credit spreads, fluctuating share prices and high volatility, and less by changes in positions.

Utilisation of the allocated risk capital for market price risk stood at €1,800m (year-end 2021: €1,300m). This represented a very comfortable utilisation level of 32.0%. 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. At the end of 2022, market price risk from guarantee products totalled €88.8m (year-end 2021: €100.0m). The sharp rises in interest rates, particularly in the first half of the year, had a risk-reducing effect. The measures decided in the previous year (end to sales for the two Riester products) meant that no further exposures were built up.

With a confidence level of 99% and a holding period of ten days, market price risk (value-at-risk), excluding risks from guarantee products, stood at €73.3m as at the reporting date (year-end 2021: €49.2m). Utilisation of the operational management limit at Deka Group level (excluding guarantees) stood at €105.0m (year-end 2021: €88.0m). This represented a utilisation level of 70% and was therefore non-critical.

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

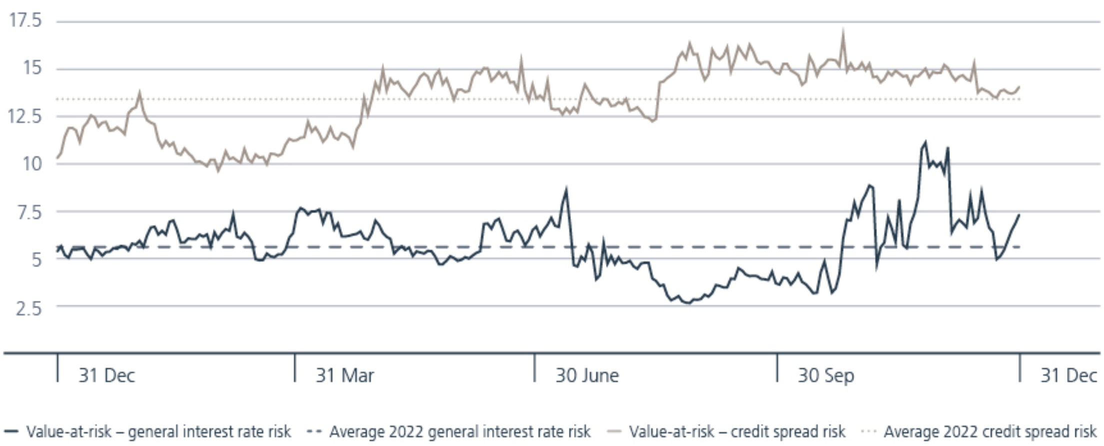
	31 Dec 2022						
Category	**Asset Management Securities business division**	**Asset Management Real Estate business division**	**Asset Management Services business division**	**Capital Markets business division**	**Treasury**	**Deka Group excluding guarantees**	Change in risk
Interest rate risk	2.2	0.0	9.6	14.5	65.8	75.4	53.9%
Interest rate – general	0.1	0.0	9.9	7.6	23.5	18.9	75.0%
Credit Spread	2.2	0.0	6.0	14.1	55.1	69.9	40.4%
Share price risk	0.4	0.5	0.8	12.7	14.2	10.5	–0.9%
Currency risk	0.3	0.0	0.0	0.7	2.2	2.6	–75.9%
Total risk	**2.2**	**0.5**	**9.8**	**19.9**	**64.3**	**73.3**	49.0%

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

At the end of 2022, the VaR for spread risk totalled €69.9m, which was higher than the level seen at year-end 2021 (€49.8m). Amid the crises affecting the economy, spread risk increased despite a reduction in bond positions. This was caused by widening spreads and increased volatility. 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 financial institutions, the public sector 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.

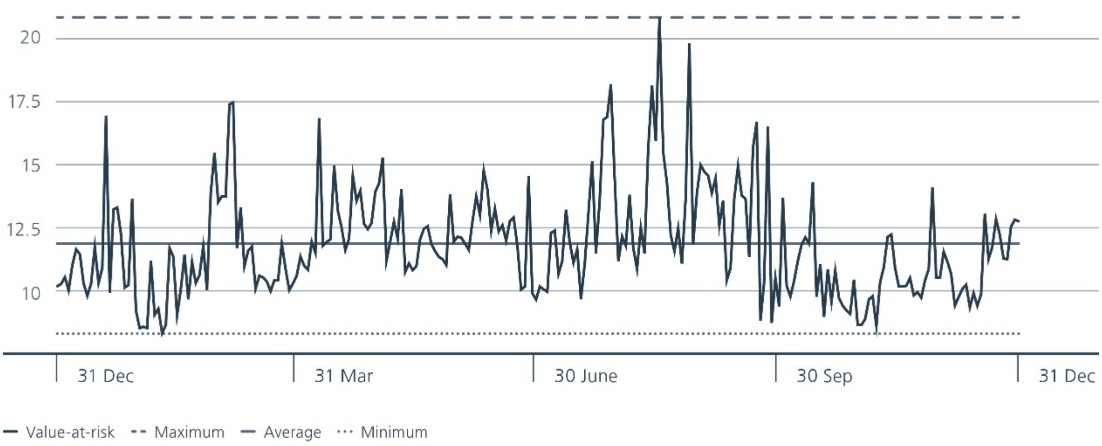
The VaR for general interest rate risk (excluding risks on guarantee products) rose from €10.8m at year-end 2021 to €18.9m. The increased risk was due to the sharp rise in interest rate volatility and to higher sales in the interest rate certificates business on the back of stronger demand.

Value-at-risk – General interest rate risk and credit spread risk in the Capital Markets trading book over the course of 2022 *€m (Fig. 33)*



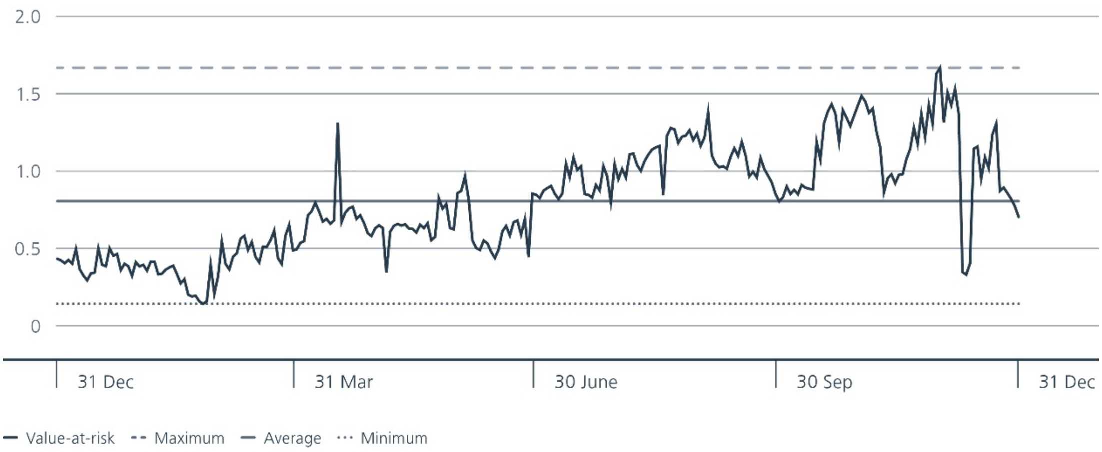
Share price risk was almost unchanged versus the end of 2021 (€10.6m) and stood at €10.5m at year-end 2022. It remains of low significance at Group level. Share price risk in the Capital Markets business division trading book amounted to €12.7m (year-end 2021: €10.2m). Macro hedges in the Treasury corporate centre had a risk-reducing effect at Group level.

Value-at-risk – Share price risk in the Capital Markets trading book over the course of 2022 *€m (Fig. 34)*



Currency risk, which mainly resulted from positions in US dollars, sterling and Canadian dollars, fell to €2.6m as a result of a reduction in these positions (year-end 2021: €10.8m) and so continued to be of minor significance. Currency risk in the Capital Markets business division trading book stood at €0.7m (year-end 2021: €0.4m).

Value-at-risk – Currency risk in the Capital Markets trading book over the course of 2022 *€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 (OR) 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 within the Deka Group.

OR management is based on the coordinated collaboration between different units as part of the Deka Group's established Three Lines of Defence model. The Board of Management has overall responsibility for appropriate and consistent handling of OR and is supported by recommendations from the Risk Management Committee (*Managementkomitee Risiko* – MKR).

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

A decentralised approach to risk management is pursued via the Three Lines of Defence model. This means that each unit is responsible in principle, as part of the first line of defence, for assessing and managing future risks and documenting loss events in its area of responsibility.

Units such as IT, whose role is to centrally provide infrastructure or processes, are a special case and are also responsible for assessing risks related to their services across the Group.

Centralised monitoring 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. 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), Strategy & HR (personnel risk) and Organisational Development (process and project risk) units.

The central functions specialising in risk sub-types set specific objectives and guidelines for the design of processes and controls for the relevant risk type and monitor adherence to these. They also support the units in the first line of defence with risk type-specific methods for identifying, assessing and managing the relevant risk type.

The Operational Risk unit defines and monitors the Group-wide methodological guidelines and common methods of OR management. In addition, it aggregates the information collected locally and reports this to the heads of department and the Board of Management.

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.

Objectives and guidelines
Maintaining a complete and up-to-date operational risk profile for the Deka Group is key to the handling of operational risks in order to ensure adequate capital and proper consideration of these risks in decision making. To minimise risks for the Deka Group and its stakeholders and make the best possible use of its resources, the Deka Group aims for appropriate management based on common principles. The common methods of OR management defined for this purpose and the minimum requirements for non-financial risks provide binding guidance and ensure the achievement of these objectives.

Integration into the concept of risk appetite
In the context of risk-bearing capacity, operational risks are limited by allocating risk capital (risk appetite) both overall and at business division level. The basis for this is a quantification model, which has been approved as an advanced measurement approach (AMA) and is used to calculate value-at-risk based on risk assessments and loss documentation. Value-at-risk is also incorporated into the regulatory capital requirement. The allocation of risk capital for OR to the business divisions (including Treasury) is primarily based on the number of employees and observed loss events in defined categories for the scale of losses.

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. These include methods with a forward-looking (ex-ante) perspective, such as self-assessment and scenario analysis, as well as a backward-looking (ex-post) perspective, such as 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 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 the Group 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 the common methods described and external loss data to supplement the internal loss database.

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 operational risk model is appropriate.

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. Sensitivities to isolated stress factors are 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 moderately from €280m at year-end 2021 to €331m. In the ex-post perspective, risk-increasing effects resulted from another large number of observed loss events and from multiple events with large loss amounts. There was also an increase in risk in the ex-ante perspective due to adjusted assessments in the reporting period. These related partly to the remodelling of loss scenarios, for example for the risk of legal changes, and partly to relevant business environment factors considered by the scenario analyses, such as the significantly higher transaction volumes in some cases and the increased market volatility in connection with the war in Ukraine. The breakdown of VaR by business division (including the Treasury corporate centre), which is used for internal management purposes, revealed a slight shift towards the Capital Markets business division. This was due to the development of loss events observed.

Risk capital allocated to operational risk stood at €385m (year-end 2021: €350m). Utilisation of this amount was 86.0%. Utilisation thus remains at a non-critical level.

Value-at-Risk *€m (Fig. 36)*

	2020	2021	2022
Asset Management Securities business division	102	104	119
Asset Management Real Estate business division	51	50	60
Asset Management Services business division	62	68	78
Capital Markets business division	42	38	52
Financing business division	15	13	14
Treasury Corporate Centre	7	8	9
Total	**279**	**280**	**331**

At €79m, the OR loss potential identified in the Group-wide risk inventory was also higher than the figure for year-end 2021 (€69m). One key driver was the revision of loss scenarios for changes in the tax environment, which now also include extremely unlikely or hypothetical scenarios concerning the impacts on DekaBank in connection with share trades transacted around the dividend record date. In addition, the assessments of the likelihood of occurrence and expected loss amounts were adjusted for various risk events, taking into account the loss history actually observed. In particular, these include potential additional payments for the use of incorrectly or incompletely licensed market data, general contractual risks from the outsourcing of IT-related processes and activities, or, for instance, cases of fraud in connection with the procurement and purchasing of external services. 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)*

	2020	2021	2022
Asset Management Securities business division	10	9	10
Asset Management Real Estate business division	9	9	9
Asset Management Services business division	5	5	6
Capital Markets business division	7	7	14
Financing business division	4	4	3
Treasury Corporate Centre	1	1	1
Savings Banks Sales & Marketing	2	3	3
Corporate Centres	28	30	33
Total	**66**	**69**	**79**

In the loss documentation, a total of 22 major loss events, each with a loss amount of at least €100 thousand, were newly recorded for the reporting period in 2022. None were recorded retrospectively for previous periods. Measured in terms of the amount of total losses, legal risks accounted for by far the largest share, for example in the form of agreements to end legal disputes with business partners in the Capital Markets business division or additional payments to service providers due to differing interpretations of legal provisions in the relevant contracts. In terms of the number of cases, loss events in connection with process risk dominated 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.

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 cum/cum transactions, 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 2022 in accordance with DekaBank’s interpretation of the relevant tax regulations and accounting standards.

In the past, transactions were concluded with business partners in connection with share trades transacted around the dividend record date, for which the tax office refused in full or in part to allow the relief from capital yields tax (*Kapitalertragsteuer*) claimed by these business partners. Corresponding agreements were reached with some of the business partners in 2022 to settle the matter. The resulting expenditure has been recognised in the amount of €42.2m in the annual financial statements as at 31 December 2022. There are plans to reach further such agreements with other affected business partners in 2023, which may result in further payments of approximately €30m. This amount could not be reported in the annual financial statements as at 31 December 2022, as the preconditions for recognition were not met.

In addition, DekaBank has begun 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. In light of ongoing investigations in relation to share trades transacted around the dividend record date, the Bank, in principle, faces the risk of a fine under section 30 of the Administrative Offences Act (*Ordnungswidrigkeitengesetz*) and confiscation of potential proceeds. Based on the findings of these investigations 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 2022 or that a fine or confiscation of proceeds will apply. The official search of DekaBank’s premises, the further information obtained as part of the search and the further voluntary investigations conducted on the basis thereof do not change the assessment at the present time. The situation is being constantly reviewed.

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.

Business risk is driven to a large extent by the fund business. In the Asset Management Securities, Asset Management Real Estate and Asset Management Services 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 net income contribution for the following year.

Commission directly depends on total customer assets (for the Asset Management Securities business division and Asset Management Real Estate business division) or assets under custody (for the depositary in the Asset Management 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.

Business risks are currently not material in the Capital Markets and Financing banking divisions or in the Treasury corporate centre and are therefore not included in the quantification of business risk.

Overall, the validation exercises carried out confirmed that the business risk model is appropriate.

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. The risk type-specific stress scenarios for business risk were fundamentally revised, taking account of regulatory requirements, on the basis of the completed go-live of the new business risk model for all business divisions in the first quarter of 2022. In addition to equity stress (exceeding that already observed during the crisis), introduced due to the coronavirus pandemic, the hypothetical scenarios now also include the effects of concentrations and adverse conditions on the real estate market. A combined scenario was also introduced covering both concentrations and stress affecting margins and expenses. Alongside the hypothetical scenarios, the stress tests also continue to involve historical scenarios including market crashes akin to those seen after the terrorist attacks in 2001 or during the financial crisis in 2008, and now also during the coronavirus pandemic. The results of the stress tests are determined quarterly and the impacts examined. They serve primarily to identify areas for action.

In the year under review, the VaR for business risk increased significantly to €388m (year-end 2021: €176m). The significant increase in risk was mainly due to sharply increased volatility and lower total customer assets in the Asset Management Securities business division in the context of the Ukraine-Russia war and the current energy crisis. Updated planning figures in the Asset Management Securities, Asset Management Services and Asset Management Real Estate business divisions also led to a significant rise in risk. Meanwhile, changes in modelling for the Capital Markets and Financing banking divisions had a slightly risk-reducing effect. The risks here are not currently regarded as material and are therefore not included in the quantification of business risk. Risk capital allocated to business risk was reduced from €710m at the end of 2021 to €460m. Utilisation was 84.5% and thus at a high but non-critical level. Should further geopolitical events increase market volatility or the turnaround in interest rates result in shifts to lower-margin products, a further increase in business risk would not be ruled out.

Expanding on reputational risk

In an appendix to the risk strategy entitled "Leitplanken zum Management von Reputationsrisiken" (guidelines on the management of reputational risk), the Deka Group Board of Management has defined specific measures and processes for the management of reputational risk. For example, as part of the holistic approach to reputational risks, proactive reputational risk management processes, which are designed to facilitate the handling of reputational risk for relevant business processes, are complemented by portfolio-oriented reputational risk management. The latter 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.

Reputational risks may arise directly from the business activity or as a result of events connected to other risk types and manifest themselves through their effect on business and liquidity risk.

Irrespective of its cause, reputational risk has an impact on the drivers of business risk and particularly on customer behaviour and sales performance.

A project has enhanced portfolio-oriented reputational risk management, which uses scenarios to identify potential reputational events and evaluates these qualitatively and quantitatively. As the basis for this work, the Risk Control corporate centre coordinates with the support of the Corporate Office & Communications corporate centre on an annual inventory and ad hoc updates for reputational risks in all units of the business divisions and corporate centres.

Appropriate scenarios are used to describe chains of reputational effects, which may affect the relevant risk drivers. To transparently illustrate reputational risks, which may arise from all business activities and have a potentially adverse impact on stakeholders, these risks will also be separately quantified in a scenario-based approach in future. First-time reporting on reputational risks quantified using this approach is planned in the course of 2023.

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.

Overall, the validation exercises carried out confirmed that the investment risk model is appropriate.

The VaR of investment risk was €23m at year-end 2022, down significantly on the level at the end of the previous year (year-end 2021: €30m). The primary reason for the noticeable decline in risk was the disposal of an equity investment. Risk capital allocated to investment risk remained unchanged at €45m (year-end 2021: €45m). Utilisation of this amount at year-end was 51.7%. Large-scale impacts of the Ukraine-Russia war 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

€m	Notes	2022	2021	Change
Interest income		1,011.3	821.8	23.1%
(thereof: calculated using the effective interest method)		700.5	339.5	106.3%
Interest expenses		795.3	649.6	22.4%
Net interest income	[31]	**216.0**	**172.2**	25.4%
Risk provisions in the lending and securities business	[17], [32]	**–41.0**	**0.6**	(< –300%)
Net interest income after provisions		**175.0**	**172.8**	1.3%
Commission income		3,179.7	3,322.9	–4.3%
Commission expenses		1,586.5	1,698.9	–6.6%
Net commission income	[33]	**1,593.2**	**1,624.0**	–1.9%
Net income from the derecognition of financial assets measured at amortised cost	[34]	**8.4**	**16.5**	–49.1%
Trading profit or loss	[35]	**354.5**	**159.4**	122.4%
Profit or loss on financial assets mandatorily measured at fair value	[36]	**–68.5**	**6.4**	(< –300%)
Profit or loss on financial instruments designated at fair value	[37]	**27.2**	**25.5**	6.7%
Profit or loss from fair value hedges	[38]	**11.3**	**12.3**	–8.1%
Profit or loss on financial investments	[39]	**–42.5**	**0.1**	(< –300%)
Administrative expenses	[40]	**1,251.5**	**1,183.3**	5.8%
(thereof: expenses for the bank levy and deposit guarantee scheme)		82.0	**79.5**	3.1%
Other operating profit	[41]	**–6.4**	**–42.3**	84.9%
Total of profit or loss before tax		**800.7**	**791.4**	1.2%
Income taxes	[42]	**267.4**	**254.9**	4.9%
Total of profit or loss		**533.3**	**536.5**	–0.6%
Thereof:				
Attributable to non-controlling interests		–	–	o.A.
Attributable to the shareholders of DekaBank		533.3	536.5	–0.6%
Changes not recognised in profit or loss	[30], [64]			
Items reclassified to profit or loss				
Change in reserve for financial assets measured at fair value through other comprehensive income		–30.4	–6.3	(< –300%)
Change of the foreign currency basis spread of hedging derivatives		19.2	–6.5	(> 300%)
Change in currency translation reserve		0.6	0.4	50.0%
Deferred taxes on items reclassified to profit or loss	[52], [61]	3.6	4.1	–12.2%
Items not reclassified to profit or loss				
Revaluation gains/losses on defined benefit pension obligations		167.1	141.4	18.2%
Change in valuation reserve for own credit risk of financial liabilities designated at fair value		0.5	0.4	25.0%
Deferred taxes on items not reclassified to profit or loss	[52], [61]	–72.6	–20.9	–247.4%
Other comprehensive income		**88.0**	**112.6**	–21.8%
Comprehensive income for the period under IFRS		**621.3**	**649.1**	–4.3%
Thereof:				
Attributable to non-controlling interests		–	–	o.A.
Attributable to the shareholders of DekaBank		621.3	649.1	–4.3%

Statement of financial position

€m	Notes	31 Dec 2022	31 Dec 2021	Change
Assets				
Cash reserves	[43]	**346.7**	**15,982.4**	–97.8%
Due from banks	[16], [44]	**38,849.8**	**13,817.8**	181.2%
Due from customers	[16], [45]	**28,778.9**	**30,560.6**	–5.8%
Financial assets at fair value	[18], [47]	**17,566.8**	**17,738.5**	–1.0%
(of which deposited as collateral)	[77]	2,621.1	3,476.4	24.6%
Trading portfolio		16,166.1	16,666.4	–3.0%
Financial assets mandatorily measured at fair value and shareholdings		1,400.6	1,072.1	30.6%
Financial assets designated at fair value		–	–	o.A.
Positive market values of derivative hedging instruments	[10], [19], [48]	**271.1**	**91.6**	195.9%
Financial investments	[20], [49]	**10,073.1**	**9,290.9**	8.4%
(of which deposited as collateral)	[77]	2,534.3	797.7	–217.7%
Financial assets measured at amortised cost		7,982.5	5,594.9	42.7%
Financial assets measured at fair value through other comprehensive income		2,074.2	3,679.6	–43.6%
Shares in at-equity accounted companies		16.5	16.4	0.0%
Intangible assets and purchased goodwill	[21], [50]	**194.6**	**199.6**	–2.5%
Property, plant and equipment and right-of-use assets for leases	[22], [51]	**335.8**	**290.9**	15.4%
Current income tax assets	[24], [52]	**201.4**	**197.9**	1.8%
Deferred income tax assets	[24], [52]	**372.7**	**265.8**	40.2%
Other assets	[23], [53]	**405.2**	**428.9**	–5.5%
Total assets		**97,395.9**	**88,864.9**	9.6%
Liabilities				
Due to banks	[25], [54]	**17,211.7**	**16,890.6**	1.9%
Due to customers	[25], [55]	**25,106.0**	**23,594.5**	6.4%
Securitised liabilities	[25], [56]	**11,169.4**	**9,543.3**	17.0%
Financial liabilities at fair value	[18], [57]	**34,353.0**	**29,194.4**	17.7%
Trading portfolio		34,135.9	28,724.7	18.8%
Financial liabilities designated at fair value		217.1	469.7	–53.8%
Negative market values of derivative hedging instruments	[10], [19], [58]	**555.1**	**383.9**	44.6%
Provisions	[26], [27], [59], [60]	**225.3**	**457.3**	–50.7%
Current income tax liabilities	[24], [61]	**136.9**	**161.3**	–15.1%
Deferred income tax liabilities	[24], [61]	**147.2**	**12.1**	(> 300%)
Other liabilities	[28], [62]	**847.1**	**1,316.9**	–35.7%
Subordinated capital	[29], [63]	**907.4**	**964.2**	–5.9%
Equity	[30], [64]	**6,736.8**	**6,346.4**	6.2%
Subscribed capital		191.7	191.7	0.0%
Additional capital components		598.6	598.6	0.0%
Capital reserve		239.5	239.5	0.0%
Retained earnings		5,489.4	5,187.0	5.8%
Revaluation reserve		17.4	–70.6	124.7%
Accumulated profit/loss (consolidated profit)		200.2	200.2	0.0%
Minority interest		–	–	o. A.
Total liabilities		**97,395.9**	**88,864.9**	9.6%

Statement of changes in equity

€m	Subscribed capital	Additional capital components	Capital reserve	Retained earnings	Consolidated profit/loss	Provisions for pensions[1]
Equity as at 1 January 2021	**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**
Total of profit or loss	–	–	–	–	533.3	–
Other comprehensive income	–	–	–	–	–	167.1
Comprehensive income for the period under IFRS	**–**	**–**	**–**	**–**	**533.3**	**167.1**
Changes in the scope of consolidation	–	–	–	–	–	–
Other changes[3]	–	–	–	–30.7	–	–
Allocation to reserves from retained earnings	–	–	–	333.1	–333.1	–
Distribution	–	–	–	–	–200.2	–
Equity as at 31 December 2022	**191.7**	**598.6**	**239.5**	**5,489.4**	**200.2**	**34.7**

[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.

[3] Comprises the payment of interest of the Additional Tier 1 bonds, which are classified as equity capital 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 comprehensive income	Own credit risk of financial liabilities designated at fair value	Currency translation reserve	Deferred taxes			
−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**
–	–	–	–	–	533.3	–	533.3
19.2	−30.4	0.5	0.6	−69.0	88.0	–	88.0
19.2	**−30.4**	**0.5**	**0.6**	**−69.0**	**621.3**	**–**	**621.3**
–	–	–	–	–	–	–	–
–	–	–	–	–	−30.7	–	−30.7
–	–	–	–	–	–	–	–
–	–	–	–	–	−200.2	–	−200.2
−0.9	**−27.8**	**−1.2**	**0.7**	**11.9**	**6,736.8**	**–**	**6,736.8**

Statement of cash flows

€m	2022	2021
Total of profit or loss	**533.3**	**536.5**
Non-cash items in net income and adjustments to reconcile net profit with cash flow from operating activities		
Depreciation, amortization, impairment losses and reversals of impairment losses on receivables, property, plant and equipment, equity investments and intangible assets	146.0	60.4
Changes in provisions	–24.8	59.4
Changes in other non-cash items	–588.4	29.0
Result on disposal of equity investments, property, plant and equipment and intangible assets	–2.8	0.1
Other adjustments	229.6	311.4
Sub-total	**292.9**	**996.8**
Change to assets and liabilities arising from operating activities and reconciliation to cash flow from operating activities		
Due from banks	–26,075.2	2,198.6
Due from customers	1,731.9	–5,978.5
Financial assets at fair value	27,937.0	3,568.1
Financial investments	–955.9	1,182.3
Other assets arising from operating activities	530.7	551.0
Due to banks	380.3	–224.6
Due to customers	1,637.7	1,968.2
Securitised liabilities	1,869.3	1,948.8
Financial liabilities at fair value	–22,062.8	503.8
Other liabilities arising from operating activities	–331.1	492.2
Interest received	1,266.3	785.3
Dividends received	8.2	8.7
Interest paid	–1,221.3	–920.4
Income tax payments or refunds	–336.2	–157.8
Cash flow from operating activities	**–15,328.2**	**6,922.5**
Proceeds from the disposal of equity investments	7.2	0.3
Disbursements for the purchase of equity investments	–	–8.6
Cash outflows for the acquisition of shares in companies accounted for using the at-equity method	–40.0	–
Disbursements for the purchase of property, plant and equipment	–11.7	–11.0
Disbursements for the purchase of intangible assets	–9.1	–34.2
Proceeds from sale of shares in subsidiaries, non-consolidated companies	0.0	–
Payments for the acquisition of shares in subsidiaries, non-consolidated companies	–	–0.0
Dividends received	1.6	1.0
Cash flow from investing activities	**–52.0**	**–52.5**
Proceeds from additions to equity	–	125.0
Payments to company owners and minority interests	–54.4	–140.8
Dividends paid	–200.2	–95.3
Proceeds from issues of subordinated capital	–	16.8
Payments from the repayment of subordinated capital	–1.1	–
Other changes	0.2	–
Cash flow from financing activities	**–255.5**	**–94.3**

€m	2022	2021
Cash and cash equivalents at the start of the period	**15,982.4**	**9,206.7**
Cash flow from operating activities	–15,328.2	6,922.5
Cash flow from investing activities	–52.0	–52.5
Cash flow from financing activities	–255.5	–94.3
Cash and cash equivalents at the end of the period	**346.7**	**15,982.4**

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, which comprises cash on hand and balances with central banks, corresponds to the balance sheet item cash reserves (see note [43] "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, €4.1m (previous year: €1.0m) was attributable to interest and €42.5m (previous year: €40.1m) 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.

Changes in equity and subordinated capital are shown in cash flow from financing activities. The table below provides an overview of movements in financing liabilities.

		Cash changes	Non-cash changes				
€m	2021		Acquisition	Re-scheduling	Exchange rate movements	Fair value changes	2022
Subordinated liabilities	964.2	–1.2	–	–	–	–55.6	907.4

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

Notes

Accounting standards

1 Accounting principles

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

The Deka Group is the securities service provider (the *Wertpapierhaus*) for the savings banks. DekaBank Deutsche Girozentrale (DekaBank) and its subsidiaries in Germany and other countries make up the Deka Group. Through its asset management and banking activities, it acts as a service provider for the investment, administration and management of assets, supporting its customers at every stage in the investment and advisory process within the securities business. It also offers comprehensive advice and solutions on investing, liquidity and risk management, and 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 management report was prepared in accordance with section 315 HGB.

These consolidated financial statements are reported in euros, the Bank's functional currency, and 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 are significant to the DekaBank consolidated financial statements were applied for the first time in the reporting year:

Amendments to IFRS 3

The IASB published amendments to IFRS 3 "Business Combinations" on 14 May 2020. The amendment updates a cross-reference in the IFRS to the revised Conceptual Framework (2018), in which, among other things, the definitions of assets and liabilities were also changed. Subject to certain conditions, an acquirer has to apply the provisions set out in IAS 37 or IFRIC 21, instead of the Conceptual Framework, to identify the liabilities it has assumed in a business combination. The amendment also includes an explicit statement added to IFRS 3 prohibiting the recognition of acquired contingent assets. The amendments had no effect on these consolidated financial statements.

Amendments to IAS 16

The IASB published amendments to IAS 16 "Property, Plant and Equipment" on 14 May 2020. The amendment clarifies that in future, it is prohibited to deduct from the cost of an item of property, plant and equipment any proceeds generated while bringing that asset to the location or condition necessary for it to be capable of operating. The amendments had no effect on these consolidated financial statements.

Amendments to IAS 37

The IASB published amendments to IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" on 14 May 2020. The amendments clarify what costs an entity considers in assessing whether a contract is onerous. The costs are to include both the incremental costs and other costs that relate directly to fulfilling contracts. The new provisions are to apply to contracts existing at the time of initial application for which the entity has not yet fulfilled all its obligations. The cumulative effect of initial application is recognised as an adjustment to the opening balance of retained earnings or other components of equity. Comparatives are not restated. The amendments had no effect on these consolidated financial statements.

Annual Improvements (2018 – 2020 cycle)

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. The amendments relevant to DekaBank had no effect on these consolidated financial statements.

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.

Standards and interpretations already adopted into European law

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 adoption is permitted. Implementation of the amendments is not likely to have any 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 adoption is permitted. 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 adoption of the amendments is permitted. The amendment will have no material 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.

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.

On 31 October 2022, the IASB published the final standard amendments to IAS 1 "Non-current Liabilities with Covenants", in which it clarifies that covenants with which an entity is required to comply on or shortly before the current reporting date are to be included when classifying a liability. By contrast, covenants that are only to be complied with after the reporting date do not have any impact on classification of a liability as current or non-current. If covenants are to be complied with within 12 months of the reporting date, additional information has to be provided in the notes. This includes information about the agreed covenants, any difficulties the entity may have complying with the covenants and information on the carrying amounts of related liabilities. By contrast, the requirement included in the proposed amendments for an entity to separately present non-current liabilities tied to fulfilment of conditions within 12 months of the reporting date is no longer included in the final amendments to the standard.

The January and July 2020 amendments, the November 2021 amendments and the October 2022 amendments are to become effective, based on the final amendment to the standards, for financial years beginning on or after 1 January 2024. Voluntary early application is possible subject to an endorsement of the amendments, which is still outstanding. Implementation of the amendments is not likely to have any material effect on the consolidated financial statements.

Amendments to IFRS 16

On 22 September 2022, the IASB published amendments to IFRS 16 "Lease Liability in a Sale and Leaseback". The amendments clarify how a seller-lessee subsequently measures lease liabilities. For the purposes of subsequent measurement, lease liabilities are to be measured in a way that does not recognise any amount of the gain or loss that relates to the right of use retained by the seller-lessee. The seller-lessee's choice of accounting policy must ensure compliance with the new requirement. While the IASB does not explicitly stipulate a specific method, IFRS 16 has been expanded to include an example of two possible methods in the Illustrative Examples. Application of the new rules is mandatory for financial years beginning on or after 1 January 2024. Voluntary early application is permitted subject to an endorsement of the amendments, which is still outstanding. Implementation of these amendments will have no effect on the consolidated financial statements.

Segment reporting

3 Segmentation by operating business divisions

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

As total 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 economic result, return on equity and the cost/income ratio are fixed components of internal management. At Group level, return on equity is defined as the ratio of the economic result to balance sheet equity and shows the return on the capital that has been invested in the Deka Group. For the purposes of operational management at business division level, the figure used for return on equity is the ratio of the economic result to regulatory capital employed. The cost/income ratio is an indicator of cost efficiency. The two management indicators – return on equity and the cost/income ratio – lead to a focus on profitability and efficiency, meaning that they directly support the strategic targets.

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 Deka 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 €0.3bn held as part of the proprietary portfolio (previous year: €0.5bn). 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 products and services, 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 various asset classes in master funds. 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 continuation of activities aimed at expanding sustainability in the range of products and services offered, as well as in the Deka Group's own 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, infrastructure 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 and infrastructure 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 offering 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 for structured issues (Deka certificates and cooperation certificates), as well as the debt capital markets business (third-party issues). 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 on 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	
	Economic result							
€m	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021
Net interest income	2.7	3.7	0.4	0.9	10.1	5.8	0.9	3.0
Risk provisions	–	–	–	–	–0.1	1.0	–	0.0
Net commission income	967.7	999.9	334.6	334.3	224.1	220.7	53.8	53.4
Net financial income[1]	–2.3	–2.7	–0.6	0.3	–5.5	0.3	337.8	267.8
Other operating profit[2]	–2.0	–11.1	–1.8	3.6	8.8	–11.1	–38.4	1.6
Total income without income distribution from Treasury function	**966.1**	**989.9**	**332.6**	**339.1**	**237.3**	**216.8**	**354.1**	**325.8**
Administrative expenses (including depreciation and amortisation)	411.3	370.9	166.7	149.7	238.7	194.5	193.2	204.2
Restructuring expense[2]	0.0	0.9	0.0	0.0	–	–	–	–
Total expenses	**411.3**	**371.7**	**166.7**	**149.7**	**238.7**	**194.5**	**193.2**	**204.2**
(Economic) result before tax excluding income distribution Treasury function	**554.8**	**618.2**	**165.9**	**189.4**	**–1.4**	**22.3**	**160.9**	**121.6**
Income distribution of Treasury function	–4.6	–11.9	0.1	–0.8	0.4	–0.9	15.5	1.2
(Economic) result before tax	**550.3**	**606.3**	**166.0**	**188.6**	**–1.0**	**21.4**	**176.4**	**122.8**
Cost/income ratio[3] %	42.6	37.5	50.1	44.1	100.5	90.1	54.6	62.7
Return on equity before tax (balance sheet)[4] %	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Return on equity before tax (regulatory)[5] %	101.6	125.9	99.9	125.1	–0.6	10.7	12.0	8.0
Risk-weighted assets	4,099	4,656	1,409	1,191	1,987	1,752	10,839	9,767
Total risk[6]	623	445	174	110	280	167	414	292
Gross loan volume	7,606	7,581	56	6	947	908	64,006	59,337
Total customer assets	293,533	320,419	53,714	50,231	–	–	24,506	24,498

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) The return on equity before tax (balance sheet) is calculated as the annualized economic result divided by the average adjusted equity (excluding additional Tier 1 capital (AT1) and adjusted for intangible assets). The average is calculated on the basis of the previous year's end-of-year financial statements and the most recent quarterly financial statements. From 2022 onwards, all quarters will be taken into account when calculating the average denominator. Until the end of 2021, only the annual ultimates were taken into account. The prior-year figure has been adjusted accordingly.
5) The return on equity before tax (regulatory) is calculated as the annualized economic result (before allocation of income to the treasury function) in relation to the average regulatory equity. The average is calculated using the monthly risk-weighted assets multiplied by 13 percent (as the strategic target level of regulatory capital) starting at the end of the previous year.
6) 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.
7) No cost/income ratio is presented for the segment Other because as this is deemed of limited economic informative value.

Financing		Other		Deka Group		Reconciliation		Deka Group	
Economic result								Total profit or loss before tax (IFRS)	
31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021
150.2	151.8	85.2	–3.4	249.4	161.8	–33.4	10.4	216.0	172.2
–35.0	–15.1	–5.8	14.7	–41.0	0.6	–	–	–41.0	0.6
15.6	18.1	–3.9	–3.4	1,591.8	1,623.0	1.4	1.0	1,593.2	1,624.0
–0.4	–1.0	–52.4	–124.9	276.5	139.9	13.9	80.3	290.4	220.2
0.9	0.7	191.9	110.5	159.5	94.2	–165.9	–148.0	–6.4	–53.8
131.3	**154.5**	**215.0**	**–6.5**	**2,236.3**	**2,019.5**	**–184.1**	**–56.4**	**2,052.2**	**1,963.2**
77.9	69.9	163.8	194.2	1,251.5	1,183.3	–	–	1,251.5	1,183.3
–	–	–0.0	–12.3	0.0	–11.5	–	–	–0.0	–11.5
77.9	**69.9**	**163.8**	**181.8**	**1,251.5**	**1,171.8**	**–**	**–**	**1,251.5**	**1,171.8**
53.4	**84.6**	**51.2**	**–188.3**	**984.8**	**847.8**	**–184.1**	**–56.4**	**800.7**	**791.4**
75.2	10.3	–86.7	2.1	–	–	–	–	–	–
128.6	**94.9**	**–35.5**	**–186.3**	**984.8**	**847.8**	**–184.1**	**–56.4**	**800.7**	**791.4**
46.8	41.2	– [7]	– [7]	55.0	58.6				
N/A	N/A	N/A	N/A	17.0	16.2				
4.1	6.9	–	–	–	–				
9,390	10,514	3,636	3,064	31,360	30,944				
496	393	656	413	2,488	1,731				
27,145	25,684	29,642	30,398	129,403	123,913				
–	–	–	–	371,753	395,148				

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 €184.1m (previous year: €56.4m) and mainly resulted from the circumstances referred to below.

The result not recognised in profit or loss amounted to €23.3m in the reporting period (previous year: €–74.5m). Of this total, €150.3m (previous year: €60.0m) 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 €–27.0m on the AT1 bonds (previous year: €–29.5m). 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 2022, the provision for these effects in the management accounts amounted to €–335.0m (previous year: €–235.0m). In the 2022 reporting year, there was an effect on the economic result of €–100.0m (previous year: €–105.0m; reported under Other).

The change of €157.0m in the revaluation reserve before tax (previous year: €129.5m) was also included in the economic result. Of this, €167.1m (previous year: €141.4m) 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, €–59.9m (previous year: €–17.1m) 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	2022	2021	2022	2021	2022	2021	2022	2021
Income	1,860.1	1,747.7	177.4	202.1	14.7	13.4	2,052.2	1,963.2
Total of profit or loss before tax	690.7	653.5	108.7	138.6	1.3	–0.7	800.7	791.4
Long-term segment assets[1]	482.0	436.9	24.7	27.9	23.7	25.6	530.4	490.4

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

Right-of-use assets for 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 2022 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. It is impossible to assess all of the implications related to the war between Russia and Ukraine. If the war in Ukraine worsens further or other geopolitical tensions escalate, this may hit economic growth and the capital markets. It also cannot yet be predicted how changes in supply chains and structural changes in energy prices will be reflected in corporate profitability. As a result, estimates of the development of growth and inflation are subject to change. Further explanatory information on the associated risks, exposures and effects, for example on the impairment of financial instruments and acquired goodwill, are set out in the Group management report, notes [32] and [46] "Risk provisions in the lending and securities business" and note [50] "Intangible assets and goodwill".

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], [32] and [46] "Risk provisions in the lending and securities business");
- fair value measurement of financial instruments (see note [66] "Fair value disclosures");
- recognition of pension obligations (see notes [26] and [59] "Provisions for pensions and similar commitments");
- impairment test for goodwill (see note [50] "Intangible assets and goodwill");
- recognition of other provisions and other liabilities (see notes [27] and [60] "Other provisions" and note [75] "Contingent liabilities and other obligations");
- lease accounting (see note [14] "Lease accounting"); and
- recognition of deferred taxes (see note [24] "Income taxes").

Changes in estimates that were made prospectively in the reporting year are set out in note [66] "Fair value disclosures".

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 [46] "Risk provisions in the lending and securities business", while information on the maturity analysis is provided in note [70] "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 IRFS 11, that exist at the Deka Group take the form of joint ventures. Joint ventures are defined as arrangements where the parties exercise joint control through voting rights held by each of them in equal proportion. Joint ventures and associates are included in the consolidated financial statements using the equity method, unless they are of minor significance for the presentation of the financial position and financial performance of the Group. Where a company valued under the equity method uses different accounting policies, appropriate adjustments are made in line with IFRS rules for consolidated financial statements by means of a separate calculation.

Subsidiaries are consolidated using the acquisition method, whereby all assets and liabilities of the subsidiary are recognised at fair value from the date of acquisition or the date the Group obtains a controlling interest. Any positive difference between the acquisition price and the fair value of the assets and liabilities acquired is reported under intangible assets as goodwill. Goodwill is tested for impairment at least once a year, or more frequently if there are indications of a possible decrease in value. If it is established that goodwill is impaired, the goodwill is written down to the lower value (see note [50] "Intangible assets and goodwill"). 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 [82] "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 12 (previous year: 11) domestic companies and 6 (previous year: 7) 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 2022 reporting year are due to the addition of SWIAT GmbH, Frankfurt am Main, as a wholly owned DekaBank subsidiary. This company commenced operations on 1 February 2022 Deka Immobilien Luxembourg S.A., Luxembourg, was liquidated on 25 March 2022.

A total of 9 (previous year: 11) affiliated companies controlled by the Deka Group were not consolidated, because they are of minor significance for the presentation of the financial position and financial performance of the Group. The interests held in these subsidiaries are reported under financial assets at fair value (see note [47] "Financial assets at fair value"). Where they are of minor significance to the consolidated financial statements, structured entities are also not consolidated (see note [82] "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 [47] "Financial assets at fair value").

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 the FVTPL 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 [66] "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 [38] “Profit or loss from fair value hedges”, note [48] “Positive market values of derivative hedging instruments”, note [58] “Negative market values of derivative hedging instruments”, note [65] “Result by measurement category” and note [71] “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 2022, 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 2022, 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 2022, 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 [33] "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, daily 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. The stage to which an asset is allocated affects the amount of the risk provisions to be formed for the respective 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 to cover a wide range of possible macroeconomic developments. The probabilities of occurrence for the scenarios used to calculate risk provisions as at 31 December 2022 were as follows: baseline scenario = 65% (previous year: 65%), negative scenario = 30% (previous year: 20%) and positive scenario = 5% (previous year: 15%). 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 (2022–2024) are shown in the table below:

Inputs	Baseline scenario	Negative scenario	Positive scenario
Unemployment rate (%)	5.2 to 5.6	5.2 to 7.2	4.1 to 5.2
Annual rate of change in GDP (%)	–0.5 to 1.5	–2.1 to 1.8	1.4 to 3.7
Annual rate of change Consumer Price Index (%)	2.3 to 8.1	1.8 to 8.1	2.3 to 8.1
Annual rate of change Leading Share Index (%)	4.1 to –13.8	–1.3 to –13.8	–13.8 to 16.5
Short-term interest rates (%)	0.4 to 2.7	0.4 to 2.2	0.4 to 3.6
Long-term interest rates (%)	1.2 to 2.5	0.5 to 1.4	1.2 to 4.2
Annual rate of change in the exchange rate EUR/USD (%)	–11.13 to 4.2	–11.13 to 2.21	–11.13 to 10.54
Brent oil price (USD per barrel)	85 to 100	100 to 124.9	51.4 to 100

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 generally continued to apply its established process for calculating risk provisions as of the reporting date, even against the backdrop of the coronavirus pandemic and the war in Ukraine. As the global economic environment remains uncertain in this context, the assumptions and parameters used to calculate risk provisions were once again reviewed and updated as part of the Bank’s risk management processes.

The multiple, mutually reinforcing risk drivers observed at the end of the year (e.g. energy prices and inflation) are hitting the real estate sector and corporates particularly hard. As a result, the decision was made to double the probability of default (PD) used to calculate expected credit losses for borrowers in the corporates rating module, and to quadruple it for borrowers in the commercial real estate 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, the gross effect came to €20.6m for corporates and €29.9m for real estate financing. A post-model adjustment set up in the previous year for aircraft and real estate financing had already been reversed in full at the end of the first half of 2022.

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 and goodwill

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 and right-of-use assets for leases

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 applicable combined tax rate (trade tax plus 15.0% corporation tax and 5.5% solidarity surcharge) is unchanged at 31.9%.

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 obligation (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 obligation (net asset) occurring during the year as a result of contribution and benefit payments are taken into account. Revaluations of the net obligation (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 in the balance sheet. They are measured at amortised cost or at their settlement amount.

Other liabilities also include liabilities from leasing transactions (see note [14] "Lease accounting").

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 Equity

Subscribed capital is the capital paid in by shareholders in accordance with the Bank's statutes. This item also includes the Bank's own shares, which reduce the subscribed capital. The amount of own shares held is reported separately in note [64] "Equity".

Capital reserves include premiums from the issue of shares in the company in accordance with the provisions of the Bank's statutes. This item also includes the atypical silent partnerships that were dissolved and contributed to DekaBank in 2021.

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 obligation (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 liabilities 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

31 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	2022	2021	Change
Interest income from			
Financial assets measured at amortised cost	**725.0**	**462.0**	263.0
thereof: lending and money market transactions	625.3	379.4	245.9
thereof: fixed-interest securities	99.7	82.6	17.1
Financial assets measured at fair value through other comprehensive income	**4.7**	**4.6**	0.1
thereof: fixed-interest securities	4.7	4.6	0.1
Financial assets measured at fair value through profit or loss	**154.7**	**152.8**	2.0
Trading portfolio			
thereof: lending and money market transactions	15.9	4.4	11.5
thereof: interest rate derivatives (economic hedges)	119.3	132.1	–12.8
Financial assets mandatorily measured at fair value through profit or loss			
thereof: lending and money market transactions	6.9	5.2	1.6
thereof: fixed-interest securities	2.9	1.4	1.5
thereof: current income from shares and other non-fixed-interest securities	8.2	8.7	–0.5
thereof: current income from equity investments	1.6	1.0	0.6
Hedge derivatives (hedge accounting)	**50.4**	**43.3**	7.0
Negative interest from liabilities	**76.5**	**159.1**	–82.6
Total interest income	**1,011.3**	**821.8**	189.4
Interest expenses for			
Financial liabilities measured at amortised cost	**284.9**	**142.7**	142.2
thereof: lending and money market transactions	187.3	77.5	109.8
thereof: securitised liabilities	64.5	32.0	32.4
thereof: subordinated liabilities	33.2	33.2	–0.0
Financial liabilities measured at fair value through profit or loss	**410.6**	**220.0**	190.7
Trading portfolio			
thereof: lending and money market transactions	43.5	16.4	27.0
thereof: interest rate derivatives (economic hedges)	356.0	181.7	174.3
Financial liabilities designated at fair value			
thereof: lending and money market transactions	11.2	21.8	–10.6
thereof: securitised liabilities	–	–	–
Hedge derivatives (hedge accounting)	**67.2**	**157.9**	–90.7
Negative interest on money-market transactions and fixed-interest securities	**32.5**	**129.0**	–96.5
Total interest expenses	**795.3**	**649.6**	145.6
Net interest income	**216.0**	**172.2**	43.8

The increase in interest income and interest expense is attributable primarily to the marked rise in market interest rates, with the liquidity position of own funds playing a decisive role in the positive year-on-year change in net interest income.

32 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	2022	2021	Change
Allocation to risk provisions/provisions for credit risks	–112.8	–113.2	0.4
Reversal of risk provisions/provisions for credit risks	72.4	94.2	–21.8
Direct write-downs on receivables	–0.1	–0.4	0.3
Income on written-down receivables	4.2	0.9	3.3
Net income from modifications in the lending business (stage 3 or POCI)	0.0	0.0	0.0
Risk provisions in the lending business	**–36.3**	**–18.5**	–17.8
Allocation to risk provisions	–8.0	–0.5	–7.5
Reversal of risk provisions	3.3	19.6	–16.3
Direct write-downs on securities	–	–	–
Net income from modifications in the securities business (stage 3 or POCI)	–	–	–
Risk provisions in the securities business	**–4.7**	**19.1**	–23.8
Risk provisions in the lending and securities business	**–41.0**	**0.6**	–41.6

In net terms, risk provisions in the lending and securities business were increased by €41.0m in the reporting year. The negative balance was due, in particular, to the application of post-model adjustments (due to energy prices and inflation) for the corporates and commercial real estate modules, as well as rating downgrades. The post-model adjustments set up in the previous year (due to the coronavirus pandemic) for aircraft and real estate financing had already been reversed in full in the first half of 2022.

33 Net commission income

Net commission income by type of service is as follows:

€m	2022	2021	Change
Commission income from			
Investment fund business	2,908.0	3,054.1	–146.1
Securities business	227.2	228.2	–1.0
Lending business	17.1	20.7	–3.6
Other	27.3	19.9	7.4
Total commission income	**3,179.7**	**3,322.9**	–143.3
Commission expenses for			
Investment fund business	1,448.9	1,573.0	–124.1
Securities business	131.7	118.5	13.2
Lending business	1.6	2.8	–1.2
Other	4.2	4.6	–0.4
Total commission expenses	**1,586.5**	**1,698.9**	–112.4
Net commission income	**1,593.2**	**1,624.0**	–30.8

As part of its activities as an asset manager, the Deka Group receives commission from contracts with customers which varies according to product category (e.g. mutual or special funds) and asset category (e.g. shares, bonds or real estate). The income is calculated and collected as described in the corresponding sales prospectuses and investment conditions of the investment funds concerned. The main types of income are explained in more detail below.

Commission income from investment fund business arises in the Asset Management Securities and Asset Management Real Estate 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.

Segment reporting in note [3] shows the net commission income for each business division pursuant to IFRS 8. Commission income and commission expenses are offset and reported in net terms, meaning that the figure shown includes revenue from contracts with customers pursuant to IFRS 15.

34 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	2022	2021	Change
Gains arising from the derecognition of financial assets measured at amortised costs	9.0	16.8	–7.7
Losses arising from the derecognition of financial assets measured at amortised costs	0.6	0.3	0.3
Net income from the derecognition of financial assets measured at amortised cost	**8.4**	**16.5**	–8.0

35 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	**2022**	**2021**	Change
Sale and valuation results	516.3	514.5	1.8
Net interest income and current income from trading transactions	–108.7	–326.8	218.1
Foreign exchange profit or loss	–2.7	–10.0	7.3
Commission	–50.4	–18.3	–32.1
Trading profit or loss	**354.5**	**159.4**	195.1

The increase in trading profit is largely due to valuation results from own trading issues due to increased spreads, from the certificates business, from the valuation of derivatives used to hedge fair value portfolios in the banking book, as well as from the adjustment of the derivative funding curve and the discount for the calculation of hedge costs.

36 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	**2022**	**2021**	Change
Sale and valuation results	–68.6	6.2	–74.9
Commission	0.1	0.1	–0.0
Profit or loss on financial assets mandatorily measured at fair value	**–68.5**	**6.4**	–74.9

The loss on financial assets mandatorily measured at fair value was primarily due to interest rate-induced valuation effects due to the marked increase in interest rates.

37 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	**2022**	**2021**	Change
Sale and valuation results	27.2	25.5	1.7
Commission	–	–	–
Profit or loss on financial instruments designated at fair value	**27.2**	**25.5**	1.7

38 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	2022	2021	Change
Interest rate fair value hedges			
Net valuation result from hedging financial assets	35.0	8.8	26.2
Net valuation result from hedging financial liabilities	–25.3	–5.6	–19.7
Currency fair value hedges			
Net valuation result from hedging financial assets	1.5	9.1	–7.6
Profit or loss from fair value hedges	**11.3**	**12.3**	–1.0

39 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	2022	2021	Change
Sale results	–2.5	0.0	–2.5
Commission	–	–	–
Net income from equity-accounted companies	–40.0	0.0	–40.0
Profit or loss on financial investments	**–42.5**	**0.1**	–42.6

The change in this item is due primarily to a capital-strengthening measure for a company in the equity investment portfolio and a write-down on this equity-accounted company in the amount of €40.0m (see note [41] "Other operating profit" and note [60] "Other provisions").

40 Administrative expenses

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

€m	2022	2021	Change
Personnel expenses			
Wages and salaries	516.4	479.8	36.5
Social security contributions	61.7	61.2	0.5
Allocation to/reversals of provisions for pensions and similar commitments	25.7	30.9	–5.2
Expenses for defined contribution plans	7.2	6.0	1.1
Other expenses for retirement pensions and benefits	1.3	–1.2	2.5
Total personnel expenses	**612.2**	**576.7**	35.5
Other administrative expenses			
Consultancy expenses	162.9	137.9	25.0
Computer equipment and machinery	102.3	96.2	6.2
Bank levy and deposit guarantee scheme	82.0	79.5	2.5
IT information services	37.4	65.5	–28.2
Marketing and sales expenses	41.5	37.5	4.0
Subscriptions and fees	38.2	37.8	0.4
Lump sum fees for fund administration services	18.2	16.4	1.8
Rentals and expenses for buildings	17.7	17.7	0.0
Postage/telephone/office supplies	15.9	18.2	–2.3
Other administrative expenses	52.0	38.4	13.6
Total other administrative expenses	**568.1**	**545.0**	23.1
Depreciation of property, plant and equipment	57.1	44.9	12.2
Depreciation and amortisation of intangible assets	14.1	16.6	–2.5
Total depreciation and amortisation	**71.2**	**61.5**	9.7
Administrative expenses	**1,251.5**	**1,183.3**	68.2

The increase in administrative expenses can be traced back to higher personnel expenses and is related to improved business development, wage and salary rises under collective agreements, the inflation compensation payment that was made, as well as a moderate increase in the Bank’s headcount, partly due to investments in the business model.

Other administrative expenses also increased, primarily due to higher consultancy expenses for strategic and regulatory projects, as well as increased expenses for computer equipment and machinery. By contrast, expenses for IT information services fell due to a one-off effect in the 2021 reporting year.

Other administrative expenses primarily include expenses for outsourced services, expenses for the annual accounts and auditing, and relocation expenses. The increase in other administrative expenses is related to costs for the move to the new office building in Frankfurt/Main, increased travel expenses and higher expenses for conferences and staff recruitment.

The increase in depreciation and amortisation is related to the gradual move into the new office building in Frankfurt/Main in December 2021 and August 2022. The new office building is reported in property, plant and equipment under leasing assets (see note [51] "Property, plant and equipment and right-of-use assets for leases").

Administrative expenses include expenses of €3.2m (previous year: €3.2m) 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 2022 reporting year.

41 Other operating profit

The breakdown of other operating profit is as follows:

€m	2022	2021	Change
Income from repurchased debt instruments	**2.2**	**–7.5**	9.7
Other operating income			
Reversal of provisions for restructuring	0.0	14.1	–14.0
Reversal of other provisions	66.7	0.8	65.9
Rental income	0.3	0.7	–0.4
Other income	18.6	15.6	2.9
Total other operating income	**85.6**	**31.2**	54.4
Other operating expenses			
VAT on provision of intra-Group services	14.9	13.2	1.6
Expenses for restructuring	0.0	2.6	–2.5
Other taxes	0.3	0.3	–0.0
Other expenses	78.9	49.8	29.1
Total other operating expenses	**94.1**	**65.9**	28.2
Other operating profit	**–6.4**	**–42.3**	35.9

Repurchases of the Bank's own registered and bearer bonds as well as promissory note loans raised led to a reduction in the liability (net disclosure). Repurchases of own issues result in the realisation of a gain or loss in the amount of the difference between the repurchase price and the book price.

Other operating income primarily includes income from the partial reversal of a provision set up in the 2019 financial year for capital-strengthening measures in relation to a company in the equity investment portfolio in the amount of €53.9m (see note [60] "Other provisions"). The increase in other operating expenses can be traced back mainly to settlement agreements with business partners in connection with past share trades around the dividend record date in the amount of €42.2m.

In the 2022 reporting year, other expenses included interest expenses from lease liabilities amounting to €4.1m (previous year: €1.0m).

42 Income taxes

This item includes all domestic and foreign taxes determined on the basis of the total profit for the year. Income tax expenses comprise the following:

€m	2022	2021	Change
Current tax expense in financial year	310.0	252.3	57.7
Current tax expense/income (–) in previous years	– 1.8	– 3.2	1.3
Current tax expense	**308.2**	**249.1**	59.0
Effect of origination and reversal of temporary differences	– 46.5	2.3	– 48.8
Effect of origination and reversal of permanet differences	1.0	2.0	– 1.0
Prior-year deferred tax income	4.7	1.5	3.2
Deferred tax expense	**– 40.8**	**5.8**	– 46.6
Total income tax expense	**267.4**	**254.9**	12.5

DekaBank is 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 income of €46.5m (previous year: tax expenses of €2.3m). The current tax income for previous years amounting to €1.8m is largely attributable to DekaBank (previous year: €3.2m to several Group companies). The following statement reconciles the result before tax with the tax expense:

€m	2022	2021	Change
Total of profit or loss before tax	800.7	791.4	9.3
x income tax rate	31.90%	31.90%	–
= Anticipated income tax expense in financial year	**255.4**	**252.5**	3.0
Increase from taxes due to non-deductible expenses	21.9	24.5	– 2.6
Decrease from taxes on tax-exempt income	2.5	4.5	– 2.0
Withholding tax	1.6	0.7	0.9
Tax effect of special funds	– 0.0	0.2	– 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	2.9	– 1.7	4.6
Effect of the distribution of the AT1 bond	– 8.9	– 9.4	0.5
Effects of differing effective tax rates	– 7.4	– 9.2	1.8
Other	4.5	1.8	2.7
Tax expenses according to IFRS	**267.4**	**254.9**	12.5

The increase in the taxes due to non-deductible expenses item is largely due to the bank levy.

The tax-free income relates mainly to the partial reversal of a provision for support measures at a joint venture, the recognition of which was not reflected in the tax base. On the other hand, there was no need to recognise a deferred tax asset, as utilisation of the provision would have led to non-tax-deductible costs on the equity investment in this joint venture. The prior-year effect was 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 “Other” item includes, in particular, local tax effects at a foreign permanent establishment of DekaBank which, due to special features of the foreign tax legislation, do not result in an even remotely similar exemption in accordance with the applicable double taxation agreement.

Notes to the statement of financial position

43 Cash reserves

The breakdown in cash reserves is as follows:

€m	31 Dec 2022	31 Dec 2021	Change
Cash on hand	0.0	3.5	–3.5
Balances with central banks	346.7	15,979.0	–15,632.3
Total	**346.7**	**15,982.4**	–15,635.8

The required minimum reserve was maintained at all times during the reporting year and amounted to €278.0m at the reporting date (previous year: €284.5m).

The drop in the cash reserves is due to the investment of credit balances (overnight deposits) with Deutsche Bundesbank in the form of a deposit facility, which are reported as amounts due from banks that are due on demand.

44 Due from banks

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

€m	31 Dec 2022	31 Dec 2021	Change
Deposit facility with Deutsche Bundesbank	15,361.7	–	15,361.7
Current accounts	308.6	360.7	–52.1
Daily and time deposits	9,687.6	5,322.1	4,365.5
Lending business	3,324.4	1,838.1	1,486.3
Genuine repurchase agreements and collateralised securities lending transactions	10,167.7	6,297.0	3,870.7
Due from banks before risk provisions	**38,850.1**	**13,817.9**	25,032.2
Risk provisions in the lending business	–0.3	–0.1	–0.2
Total	**38,849.8**	**13,817.8**	25,032.0

The increase in amounts due from banks is mainly due to the investment of credit balances (overnight deposits) with Deutsche Bundesbank in the form of a deposit facility (see note [43] "Cash reserves").

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

€m	31 Dec 2022	31 Dec 2021	Change
Domestic banks	32,097.4	8,050.6	24,046.8
Foreign banks	6,752.6	5,767.3	985.3
Due from banks before risk provisions	**38,850.1**	**13,817.9**	25,032.2
Risk provisions in the lending business	–0.3	–0.1	–0.2
Total	**38,849.8**	**13,817.8**	25,032.0

45 Due from customers

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

€m	31 Dec 2022	31 Dec 2021	Change
Current accounts	566.6	453.7	112.9
Daily and time deposits	1,081.4	1,329.5	–248.1
Lending business	21,537.9	22,394.0	–856.1
Genuine repurchase agreements and collateralised securities lending transactions	5,799.7	6,556.3	–756.6
Due from customers before risk provisions	**28,985.6**	**30,733.5**	–1,747.9
Risk provisions in the lending business	–206.7	–172.9	–33.8
Total	**28,778.9**	**30,560.6**	–1,781.7

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

€m	31 Dec 2022	31 Dec 2021	Change
Domestic borrowers	10,584.4	11,367.5	–783.1
Foreign borrowers	18,401.2	19,366.0	–964.8
Due from customers before risk provisions	**28,985.6**	**30,733.5**	–1,747.8
Risk provisions in the lending business	–206.7	–172.9	–33.8
Total	**28,778.9**	**30,560.6**	–1,781.7

46 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 2022 were as follows:

€m	31 Dec 2022	31 Dec 2021	Change
Risk provisions in the lending business	**219.7**	**179.1**	40.5
Risk provisions for loan losses – due from banks	0.3	0.1	0.2
Risk provisions for loan losses – due from customers	206.7	172.9	33.8
Provisions for off-balance sheet commitments	12.6	6.1	6.5
Risk provisions in the securities business	**10.2**	**5.5**	4.7
Risk provisions for securities[1)]	10.2	5.5	4.7
Total	**229.9**	**184.6**	45.2

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

Risk provisions of €0.3m were attributable to counterparties in Russia (previous year: €5 thousand). These exposures are secured through ECA guarantees.

Movements in risk provisions in 2022 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 2022	**0.1**	**–**	**–**	**0.1**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	0.1	–	–	0.1
Allocation	0.1	–	–	0.1
Reversal	−0.0	–	–	−0.0
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	−0.0	–	–	−0.0
Position as at 31 December 2022	**0.3**	**–**	**–**	**0.3**
Due from customers				
Position as at 1 January 2022	**10.9**	**75.6**	**86.4**	**172.9**
Transfer to other stages	−2.8	−0.4	–	−3.2
Transfer from other stages	0.3	2.8	0.1	3.2
Change in position including new business	−0.3	−11.1	−5.1	−16.5
Allocation	7.2	57.6	41.7	106.4
Reversal	−1.7	−42.1	−11.3	−55.1
Utilisation	–	–	−7.8	−7.8
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	0.0	−0.8	–	−0.8
Changes in the scope of consolidation	–	–	–	–
Exchange rate-related and other changes	0.1	3.1	4.3	7.5
Position as at 31 December 2022	**13.6**	**84.6**	**108.5**	**206.7**
Financial investments				
Position as at 1 January 2022	**2.4**	**2.8**	**–**	**5.2**
Transfer to other stages	−0.1	–	–	−0.1
Transfer from other stages	–	0.1	–	0.1
Change in position including new business	−0.2	−2.8	–	−3.0
Allocation	2.7	5.1	–	7.8
Reversal	−0.2	–	–	−0.2
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 2022	**4.7**	**5.1**	**–**	**9.9**

€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	0.1	–	0.1
Position as at 31 December 2021	**2.4**	**2.8**	**–**	**5.2**

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 2022	**0.3**	**–**	**–**	**0.3**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	–0.0	–	–	–0.0
Allocation	0.2	–	–	0.2
Reversal	–0.1	–	–	–0.1
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	–	–	–	–
Position as at 31 December 2022	**0.3**	**–**	**–**	**0.3**

€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**

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 2022	**0.9**	**5.2**	**0.0**	**6.1**
Transfer to other stages	–0.1	–	–	–0.1
Transfer from other stages	–	0.1	–	0.1
Change in position including new business	–0.5	–0.4	–0.0	–0.9
Allocation	0.5	7.0	0.0	7.5
Reversal	–0.1	–0.3	–	–0.4
Utilisation	–	–	–	–
Changes due to model changes	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Exchange rate-related and other changes	0.0	0.3	–	0.3
Position as at 31 December 2022	**0.7**	**11.8**	**0.0**	**12.6**

€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**

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. These simulations do not include the post-model adjustments. Instead, they apply the scenario-specific simulated probabilities of default. In the baseline scenario, risk provisions would be approximately 4% lower, while they would be approximately 1% lower in the negative scenario and around 5% lower in the positive scenario.

Movements in the gross carrying values relevant to risk provisions and committed/guaranteed amounts were as follows in 2022:

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 2022	**4,745.2**	**–**	**–**	**4,745.2**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	22,045.8	–	–	22,045.8
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	8.6	–	–	8.6
Position as at 31 December 2022	**26,799.6**	**–**	**–**	**26,799.6**
Due from customers				
Position as at 1 January 2022	**19,733.4**	**3,152.8**	**330.2**	**23,216.4**
Transfer to other stages	–1,943.3	–872.4	–	–2,815.7
Transfer from other stages	857.3	1,943.3	15.1	2,815.7
Change in position including new business	–545.1	415.1	–0.8	–130.8
Derecognition	–	–	–7.8	–7.8
Changes due to non-substantial modifications	–0.1	–1.2	–0.0	–1.3
Change in the scope of consolidation	–	–	–	–
Currency effects	70.3	109.4	7.2	186.9
Position as at 31 December 2022	**18,172.5**	**4,747.0**	**343.8**	**23,263.3**
Financial investments				
Position as at 1 January 2022	**5,545.8**	**17.8**	**–**	**5,563.6**
Transfer to other stages	–125.1	–	–	–125.1
Transfer from other stages	–	125.1	–	125.1
Change in position including new business	2,211.2	271.5	–	2,482.7
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	59.9	–	–	59.9
Position as at 31 December 2022	**7,691.7**	**414.5**	**–**	**8,106.2**

€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**

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 2022	**3,670.6**	**–**	**–**	**3,670.6**
Transfer to other stages	–	–	–	–
Transfer from other stages	–	–	–	–
Change in position including new business	–1,558.4	–	–	–1,558.4
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	–	–	–	–
Position as at 31 December 2022	**2,112.2**	**–**	**–**	**2,112.2**

€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**

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 2022	**1,374.4**	**176.8**	**0.0**	**1,551.2**
Transfer to other stages	– 135.6	–	–	– 135.6
Transfer from other stages	–	135.6	–	135.6
Change in position including new business	– 407.5	109.2	–	– 298.3
Derecognition	–	–	–	–
Changes due to non-substantial modifications	–	–	–	–
Currency effects	16.8	7.1	–	24.0
Position as at 31 December 2022	**848.2**	**428.7**	**0.0**	**1,276.9**

€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**

There was no gross loan volume and no country limit for counterparties in Ukraine and Belarus at the end of 2022. The gross loan volume for counterparties in Russia came to €43m (previous year: €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 €2m (previous year: around €4m).

In the 2022 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 2022	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	**26,747.5**	**50.9**	**0.2**	**1.0**	**–**	**–**	**–**
Stage 1	26,747.5	50.9	0.2	1.0	–	–	–
Stage 2	–	–	–	–	–	–	–
Stage 3	–	–	–	–	–	–	–
Due from customers	**8,682.6**	**8,939.3**	**2,948.3**	**1,344.9**	**993.4**	**343.9**	**10.9**
Stage 1	8,390.3	7,606.8	1,583.1	533.7	48.2	–	10.3
Stage 2	292.3	1,332.5	1,365.2	811.2	945.2	–	0.6
Stage 3	–	–	–	–	–	343.9	–
Financial investments	**6,344.9**	**3,857.7**	**1.9**	**–**	**13.9**	**–**	**–**
Stage 1	6,308.6	3,493.6	1.9	–	–	–	–
Stage 2	36.4	364.1	–	–	13.9	–	–
Stage 3	–	–	–	–	–	–	–
Off-balance sheet commitments	**317.1**	**650.4**	**49.1**	**76.1**	**175.7**	**–**	**8.5**
Stage 1	197.2	544.6	8.7	72.8	16.3	–	8.5
Stage 2	119.9	105.8	40.3	3.3	159.4	–	–
Stage 3	–	–	–	–	–	–	–

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

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.

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.

	2022		2021	
€m	**Stage 1**	**Stage 2/3**	**Stage 1**	**Stage 2/3**
Financial assets modified during the period				
Amortised cost before modification	343.0	336.3	189.9	728.4
Result from modifications	0.1	1.2	–	1.7
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 2022, the portfolio did not include any financial instruments (previous year: no financial instruments) for which no valuation allowance was recognised due to collateral.

Key ratios for risk provisions

%	**2022**	**2021**
Reversal/allocation ratio as at reporting date[1]		
(Ratio of net allocation/-reversal to gross carrying values relevant for risk provisions)	–0.07	0.00
Default rate as at reporting date		
(Ratio of defaults to gross carrying values relevant for risk provisions)	0.01	0.11
Average default rate		
(Ratio of defaults on a 5-year average to gross carrying values relevant for risk provisions)	0.08	0.23
Net provisioning ratio as at reporting date		
(Ratio of risk provisions to gross carrying values relevant for risk provisions)	0.37	0.48

[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 €61.6bn (previous year: €38.7bn).

Risk provisions by risk segment:

€m	Valuation allowances and provisions in the lending and securities business		Defaults[1]		Net allocations to[2]/reversals of valuation allowances and provisions for credit risk	
	31 Dec 2022	31 Dec 2021[3]	2022	2021	2022	2021
Customers						
Real estate sector (including real estate funds)	120.7	92.3	7.8	–0.3	–33.7	–26.2
Transport sector	55.5	80.3	–3.2	39.9	30.1	–3.1
Renewable energies	24.9	1.6	–1.0	–	–23.3	5.7
Conventional energies and infrastructure	13.1	1.3	–	4.0	–11.8	3.7
Public sector	1.9	2.1	–	–	0.2	–0.1
Industrial sector	1.7	0.6	–	–	–1.1	–0.1
Other financial institutions	0.7	0.5	–	–	–0.2	0.2
Service sector	0.2	0.1	–	–	–0.0	0.8
Other	0.5	0.2	0.0	0.1	–0.4	–0.2
Total customers	**219.4**	**179.0**	**3.6**	**43.7**	**–40.3**	**–19.3**
Banks						
Commercial banks	0.1	0.0	–	–	–0.1	0.2
Savings banks	0.2	0.1	–	–	–0.1	0.1
Other financial institutions	0.0	0.0	–	–	–0.0	0.0
Total banks	**0.3**	**0.1**	**–**	**–**	**–0.2**	**0.3**
Securities						
Renewable energies	1.9	2.8	–	–	0.8	4.1
Conventional energies and infrastructure	1.9	0.3	–	–	–1.6	0.6
Industrial sector	3.2	0.9	–	–	–2.2	3.6
Service sector	1.6	0.7	–	–	–0.9	0.6
Commercial banks	1.0	0.6	–	–	–0.4	8.4
Transport sector	0.0	0.0	–	–	–0.0	1.3
Other	0.5	0.2	–	–	–0.3	0.5
Total securities	**10.2**	**5.5**	**–**	**–**	**–4.7**	**19.1**
Total	**229.9**	**184.6**	**3.6**	**43.7**	**–45.2**	**0.1**

[1] Includes utilisation, direct write-downs and income on written-down receivables and securities
[2] Negative in the column
[3] In May 2022, the energy and infrastructure risk segment was split into the two risk segments renewable energies and conventional energies and infrastructure. Prior-year figures have been adjusted for better comparability.

47 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). In addition, this item includes holdings in unconsolidated subsidiaries, joint ventures and associated companies, as well as other equity investments.

€m	31 Dec 2022	31 Dec 2021	Change
Trading portfolio			
Debt securities and other fixed-interest securities	5,893.7	6,574.0	–680.3
Bonds and debt securities	5,870.8	6,574.0	–703.2
Money market securities	22.9	–	22.9
Shares and other non fixed-interest securities	1,211.1	3,422.4	–2,211.3
Shares	996.2	2,616.6	–1,620.4
Units in investment funds	214.9	805.8	–590.9
Positive market values of derivative financial instruments	8,565.4	6,263.9	2,301.6
Positive market values of derivative financial instruments (trading)	8,496.4	6,244.1	2,252.3
Positive market values of derivative financial instruments (economic hedging derivatives)	69.0	19.8	49.2
Loan receivables	495.9	406.1	89.8
Total – trading portfolio	**16,166.1**	**16,666.4**	–500.2
Financial assets mandatorily measured at fair value through profit or loss			
Debt securities and other fixed-interest securities	735.6	573.1	162.5
Bonds and debt securities	735.6	573.1	162.5
Money market securities	–	–	–
Shares and other non fixed-interest securities	252.9	253.5	–0.6
Shares	3.6	4.6	–1.0
Units in investment funds	249.2	248.9	0.3
Loan receivables	385.7	215.1	170.6
Shareholdings	26.4	30.4	–4.0
Equity investments	25.5	29.5	–4.0
Shares in affiliated companies	0.6	0.6	–0.0
Holdings in joint ventures	–	0.0	–0.0
Shares in associated companies	0.3	0.3	–0.0
Total – financial assets mandatorily measured at fair value through profit or loss	**1,400.6**	**1,072.1**	328.5
Total	**17,566.8**	**17,738.5**	–171.7

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 2022	31 Dec 2021	Change
Debt securities and other fixed-interest securities	5,316.2	6,256.9	–940.7
Shares and other non fixed-interest securities	1,066.0	2,940.0	–1,873.9

48 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 2022 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 2021 Nominal of the hedging instruments	Carrying amount of the hedging instruments[1]	Valuation result of the hedging instruments for the reporting period[2]
Interest rate fair value hedges						
Financial assets measured at amortised cost						
Due from banks	1,677.1	2.9	80.6	580.0	0.1	10.2
Due from customers	8,622.1	132.8	1,009.6	5,377.2	19.1	190.2
Financial investments	312.0	0.1	9.2	1,215.1	0.1	8.4
Financial assets measured at fair value through other comprehensive income						
Financial investments	2,255.2	3.4	151.3	986.0	0.5	41.5
Financial liabilities measured at amortised cost						
Due to banks	–	–	–	25.0	0.0	–0.9
Due to customers	–	–	–	125.0	0.0	–9.7
Securitised liabilities	92.0	0.3	16.4	250.0	0.0	–17.7
Subordinated capital	–	–	–	113.0	0.0	–4.7
Currency fair value hedges						
Bottom layer financial assets	3,238.4	131.6	146.9	2,430.1	71.9	–167.4
Total	**16,196.8**	**271.1**	**1,414.0**	**11,101.4**	**91.6**	**49.9**

[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.

49 Financial investments

€m	31 Dec 2022	31 Dec 2021	Change
Financial assets measured at amortised cost			
Debt securities and other fixed-interest securities	7,992.3	5,600.1	2,392.2
Financial assets measured at fair value through other comprehensive income			
Debt securities and other fixed-interest securities	2,074.2	3,679.6	–1,605.4
Shareholdings			
Shares in at-equity accounted companies	16.5	16.4	0.0
Financial investments before risk provisions	**10,083.0**	**9,296.1**	786.9
Risk provisions for securities (AC)	–9.9	–5.2	–4.6
Total	**10,073.1**	**9,290.9**	782.2

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 2022	31 Dec 2021	Change
Debt securities and other fixed-interest securities	8,629.6	7,921.7	707.9

50 Intangible assets and goodwill

€m	31 Dec 2022	31 Dec 2021	Change
Purchased goodwill	155.9	155.9	–
Software	19.2	21.6	– 2.4
Purchased	13.5	14.9	– 1.4
Developed in-house	5.7	6.7	– 1.0
Other intangible assets	19.5	22.1	– 2.6
Total	**194.6**	**199.6**	– 5.0

Purchased goodwill includes goodwill arising on the acquisition of Deka Vermögensmanagement GmbH in the amount of €95.0m. The item also includes goodwill from the acquisition of IQAM Invest GmbH and IQAM Partner GmbH totalling €7.8m. For the purposes of impairment testing as at 31 December 2022, 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 2022.

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. As the global economic environment remains uncertain due to the Ukraine war, coupled with the ongoing energy crisis, a further scenario was calculated as part of the valuation process.

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 2027. The long-term growth rate is 0.00% (previous year: 0.00%). The discount rate was 11.60% (previous year: 8.94%). 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 in the retail business over the next three years. Institutional business is expected to be subdued over the next two years, with a subsequent recovery in 2025 and a return to the ambition level. This is contingent on the successful completion of planned transactions in the challenging target segments. For the following years 2026 and 2027, results largely on a par with the 2025 level are expected due to the cyclical nature of sales as a result, among other things, of regulatory or political and economic uncertainties, such as the interest rate trend and price developments on the transaction markets. A perpetual return based on the forecast for 2027 was also taken into account and a long-term growth rate of 0.00% (previous year: 0.00%) was assumed. The discount rate was 10.64% (previous year: 7.31%). 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 and goodwill:

€m	Purchased goodwill	Software purchased	Software developed in-house	Other intangible assets	Total
Historical cost					
As at 1 January 2021	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**
Additions	–	7.1	2.1	–	9.2
Disposals	–	0.0	–	0.0	0.0
Change in scope of consolidation	–	–	–	–	–
As at 31 December 2022	**246.5**	**108.5**	**96.1**	**45.5**	**496.6**
Cumulative amortisation/impairment					
As at 1 January 2021	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**
Amortisation/impairment	–	8.5	3.1	2.6	14.2
Disposals	–	0.0	–	–	0.0
Change in scope of consolidation	–	–	–	–	–
As at 31 December 2022	**90.6**	**95.0**	**90.4**	**26.0**	**302.0**
Carrying value as at 31 December 2021	**155.9**	**14.9**	**6.7**	**22.1**	**199.6**
Carrying value as at 31 December 2022	**155.9**	**13.5**	**5.7**	**19.5**	**194.6**

51 Property, plant and equipment and right-of-use assets for leases

€m	31 Dec 2022	31 Dec 2021	Change
Plant and equipment	20.9	19.1	1.8
Technical equipment and machines	8.8	7.4	1.5
Right-of-use assets for leases (leasing assets)	306.1	264.4	41.7
Total	**335.8**	**290.9**	45.0

Property, plant and equipment and right-of-use assets for leases developed as follows within the Deka Group:

€m	Property, plant and equipment: Plant and equipment	Property, plant and equipment: Technical equipment and machines	Property, plant and equipment (leasing assets): Office properties	Property, plant and equipment (leasing assets): Motor vehicles	Property, plant and equipment (leasing assets): Plant and equipment	Total
Historical cost						
As at 1 January 2021	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**
Additions	6.9	5.5	88.3	2.0	0.0	102.7
Disposals	0.0	1.7	–	0.0	–	1.7
Change in currency translation	0.0	0.0	–	–	–	0.0
As at 31 December 2022	**49.5**	**27.1**	**456.4**	**14.4**	**1.6**	**549.0**
Cumulative depreciation/impairment						
As at 1 January 2021	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	–	–	–	1.1
As at 31 December 2021	**23.5**	**15.9**	**108.7**	**7.6**	**1.4**	**157.1**
Amortisation/impairment	5.1	3.4	45.9	2.5	0.2	57.1
Write-backs	–	–	–	–	–	–
Disposals	–	1.0	–	–	–	1.0
Change in currency translation	−0.0	−0.0	–	–	–	−0.0
Change in scope of consolidation	–	–	–	–	–	–
As at 31 December 2022	**28.6**	**18.3**	**154.6**	**10.1**	**1.6**	**213.2**
Carrying value as at 31 December 2021	**19.1**	**7.4**	**259.4**	**4.8**	**0.2**	**290.9**
Carrying value as at 31 December 2022	**20.9**	**8.8**	**301.8**	**4.3**	**0.0**	**335.8**

52 Income tax assets

€m	31 Dec 2022	31 Dec 2021	Change
Current income tax assets	201.4	197.9	3.5
Deferred income tax assets	372.7	265.8	106.9
Total	**574.1**	**463.7**	110.4

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 €1.4m in relation to tax loss carry-forwards at one Group company (previous year: €2.4m at one company).

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

€m	31 Dec 2022	31 Dec 2021	Change
Asset items			
Due from customers	371.9	10.4	361.5
Financial assets at fair value	0.8	0.4	0.4
Financial investments	35.8	–	35.8
Intangible assets	45.1	52.2	–7.1
Other assets	1.3	0.1	1.2
Liability items			
Due to banks	–	0.3	–0.3
Due to customers	–	26.4	–26.4
Securitised liabilities	–	–	–
Financial liabilities at fair value	321.6	169.3	152.3
Negative market values of derivative hedging instruments	167.3	105.0	62.3
Provisions	87.6	168.1	–80.5
Other liabilities	98.3	89.7	8.6
Subordinated capital	–	0.3	–0.3
Loss carryforwards	**1.4**	**2.4**	**–1.0**
Sub-total	**1,131.1**	**624.6**	**506.5**
Netting	–758.4	–358.8	–399.6
Total	**372.7**	**265.8**	**106.9**

Reported deferred tax assets include €372.6m (previous year: €235.5m) that are medium- or long-term in nature.

As at the balance sheet date, three Group companies had unrecognised loss carryforwards of €4.1m (previous year: four companies with unrecognised losses of €2.2m). 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 €2.3m in connection with provisions for pensions (previous year: €74.7m) were offset against equity. In addition, deferred tax assets of €0.4m for creditworthiness-related fair value changes to financial liabilities designated at fair value were offset against equity (previous year: €0.6m). In the year under review, deferred income tax assets of €9.0m had to be recognised in connection with the fair value measurement of financial assets in other comprehensive income (previous year: deferred income tax liabilities of €0.8m). Finally, deferred tax assets of €0.3m were recognised for currency fair value hedges (previous year: €6.4m).

53 Other assets

€m	31 Dec 2022	31 Dec 2021	Change
Amounts due from investment funds	180.6	234.9	– 54.4
Amounts due from non-banking business	16.7	3.6	13.1
Amounts due or refunds from other taxes	1.1	0.7	0.4
Other assets	159.5	155.0	4.6
Prepaid expenses	47.3	34.8	12.5
Total	**405.2**	**428.9**	– 23.8

Other assets include €0.1m (previous year: €0.1m) of a medium or long-term nature.

54 Due to banks

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

€m	31 Dec 2022	31 Dec 2021	Change
Overdrafts	802.6	307.0	495.6
Daily and time deposits	10,866.5	9,358.4	1,508.1
Promissory note loans and registered bonds	1,779.8	2,226.6	– 446.8
Collateralised registered bonds and promissory note loans	144.7	142.9	1.8
Unsecured registered bonds and promissory note loans	1,635.1	2,083.7	– 448.6
Genuine repurchase agreements and collateralised securities lending transactions	3,567.6	4,812.5	– 1,244.9
Borrowings	195.2	186.1	9.1
Total	**17,211.7**	**16,890.6**	321.1

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

€m	31 Dec 2022	31 Dec 2021	Change
Domestic banks	14,735.0	13,265.7	1,469.3
Foreign banks	2,476.7	3,624.9	– 1,148.2
Total	**17,211.7**	**16,890.6**	321.1

55 Due to customers

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

€m	31 Dec 2022	31 Dec 2021	Change
Overdrafts	18,281.5	18,820.9	–539.4
Daily and time deposits	4,880.5	2,262.7	2,617.8
Promissory note loans and registered bonds	1,573.7	1,734.7	–161.0
Collateralised registered bonds and promissory note loans	375.8	551.8	–176.0
Unsecured registered bonds and promissory note loans	1,197.9	1,182.9	15.0
Genuine repurchase agreements and collateralised securities lending transactions	249.8	603.4	–353.6
Borrowings	120.5	172.8	–52.3
Total	**25,106.0**	**23,594.5**	1,511.5

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

€m	31 Dec 2022	31 Dec 2021	Change
Domestic customers	19,993.7	18,001.6	1,992.1
Foreign customers	5,112.3	5,592.9	–480.6
Total	**25,106.0**	**23,594.5**	1,511.5

56 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 €265.8m (previous year: €189,9m) were deducted from the issued bonds.

€m	31 Dec 2022	31 Dec 2021	Change
Uncovered debt securities issued	7,095.9	4,964.2	2,131.7
Covered debt securities issued	2,968.6	2,118.7	849.9
Money market securities issued	1,104.9	2,460.4	–1,355.4
Total	**11,169.4**	**9,543.3**	1,626.2

57 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 2022	31 Dec 2021	Change
Trading portfolio			
Trading issues	19,988.5	22,160.3	–2,171.8
Securities short portfolios	1,008.5	619.3	389.1
Negative market values of derivative financial instruments (trading)	13,085.4	5,907.3	7,178.1
Negative market values of derivative financial instruments (economic hedging derivatives)	53.5	37.8	15.7
Total trading portfolio	**34,135.9**	**28,724.7**	5,411.1
Financial liabilities designated at fair value			
Issues	217.1	469.7	–252.5
Financial liabilities designated at fair value - total	**217.1**	**469.7**	–252.5
Total	**34,353.0**	**29,194.4**	5,158.6

Issues are broken down by product type as follows:

€m	31 Dec 2022	31 Dec 2021	Change
Trading portfolio			
Uncovered trading issues			
Bearer bonds issued	17,551.5	18,513.0	–961.5
Registered bonds issued	776.4	1,350.5	–574.1
Promissory notes raised	1,660.6	2,296.8	–636.2
Total	**19,988.5**	**22,160.3**	–2,171.8
Financial liabilities designated at fair value			
Uncovered issues			
Registered bonds issued	110.6	141.9	–31.3
Promissory notes raised	20.3	20.7	–0.4
Covered issues	86.2	307.1	–220.9
Total	**217.1**	**469.7**	–252.5

The fair value of issues in the designated at fair value category (fair value option) includes cumulative creditworthiness-related changes in value amounting to €1.2m (previous year: €1.7m) 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 €3.4m (previous year: €31.6m) higher than the repayment amount.

58 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 2022 Nominal of the hedging instruments	31 Dec 2022 Carrying amount of the hedging instruments[1]	31 Dec 2022 Valuation result of the hedging instruments for the reporting period[2]	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]
Interest rate fair value hedges						
Financial assets measured at amortised cost						
Due from banks	30.0	0.0	1.0	235.0	0.0	4.3
Due from customers	910.5	6.3	24.2	4,261.1	35.2	116.9
Financial investments	185.4	0.1	–4.4	228.8	0.0	–1.1
Financial assets measured at fair value through other comprehensive income						
Financial investments	77.0	0.0	0.9	216.5	0.0	3.1
Financial liabilities measured at amortised cost						
Due to banks	619.0	1.6	–107.4	574.0	0.1	–23.7
Due to customers	550.0	2.1	–117.2	458.3	0.1	–18.9
Securitised liabilities	1,670.9	5.0	–223.8	815.0	0.1	–32.8
Subordinated capital	292.4	1.1	–61.2	160.5	0.1	–7.8
Currency fair value hedges						
Bottom layer financial assets	8,892.9	538.9	–281.6	8,724.0	348.2	–459.7
Total	**13,228.1**	**555.1**	**–769.5**	**15,673.2**	**383.9**	**–419.7**

[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.

59 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 2021	**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**
Allocation	25.7	3.1	28.8
Utilisation	17.1	4.4	21.5
Reversals	–	3.1	3.1
Reclassifications	1.8	0.5	2.3
Change in plan assets	–8.5	–1.9	–10.4
Revaluations recognised in other comprehensive income	–167.2	–	–167.2
Reclassification due to net asset	26.0	–	26.0
As at 31 December 2022	**1.6**	**12.9**	**14.5**

[1] Including provision for working hours accounts

The pension provisions of €1.6m 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 €12.9m 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.

The present value of the defined benefit obligations can be reconciled to the provisions for pensions as follows:

€m	31 Dec 2022	31 Dec 2021	Change
Present value of fully or partially funded defined benefit obligations	693.5	964.5	–271.0
Fair value of plan assets at reporting date	734.0	826.7	–92.7
Funding status	**–40.5**	**137.8**	–178.3
Present value of unfunded defined benefit obligations	1.6	2.3	–0.7
Cap due to limitation of net assets	13.7	–	13.7
Reclassification due to net asset	26.8	0.8	26.0
Provisions for pensions	**1.6**	**140.9**	–139.3

The movement in the net liability was as follows:

	Defined benefit obligations		Fair value of plan assets		Net obligation/(net asset)	
€m	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
As at 1 January	**966.8**	**996.0**	**826.7**	**694.2**	**140.9**	**302.1**
Current service cost	24.1	27.8	–	–	24.1	27.8
Interest expense or income	11.2	7.1	9.6	5.0	1.7	2.1
Pension expenses (recognised in profit or loss)	**35.3**	**34.9**	**9.6**	**5.0**	**25.7**	**29.9**
Actuarial gains/losses from:						
Financial assumptions	–261.0	–76.4	–	–	–261.0	–76.4
Demographic assumptions	–	–	–	–	–	–
Experience adjustment	–30.5	27.9	–	–	–30.5	27.9
Income from plan assets excluding interest income	–	–	–110.7	92.9	110.7	–92.9
Cap due to net asset ceiling	–	–	–	–	13.7	–
Revaluation gains/losses (recognised in other comprehensive income)	**–291.6**	**–48.5**	**–110.7**	**92.9**	**–167.2**	**–141.4**
Transfers	1.8	2.9	–	–	1.8	2.9
Employer contributions	–	–	5.4	33.3	–5.4	–33.3
Employee contributions	–	–	6.1	5.8	–6.1	–5.8
Benefits paid	–17.1	–18.5	–3.0	–4.5	–14.0	–14.0
Other changes	–	–	–	–	26.0	0.5
As at 31 December	**695.2**	**966.8**	**734.0**	**826.7**	**1.6**	**140.9**
Comprising:						
Final salary plans and general contribution schemes	371.3	552.3	397.1	438.2	1.6	114.1
Unit-linked defined contribution plans	323.8	414.5	336.9	388.5	–	26.8

The present value of the defined benefit obligation was calculated using the Heubeck 2018 G mortality tables based on the following actuarial parameters:

%	31 Dec 2022	31 Dec 2021	Change
Actuarial interest rate	3.95	1.15	2.80
Pension trend for adjustments according to Section 16(2) Company Pension Funds Act (BetrAVG)[1)]	2.20	1.75	0.45
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

The pension trend was increased due to higher inflation. 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 2.92% (previous year: –0.42%). 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.

€m	Change in actuarial assumptions	Effect on defined benefit obligations 31 Dec 2022	Effect on defined benefit obligations 31 Dec 2021
Actuarial interest rate	Increase of 1.0 percentage points	–50.4	–115.0
	Reduction of 1.0 percentage points	75.7	153.7
Salary trend	Increase of 0.25 percentage points	2.0	4.3
	Reduction of 0.25 percentage points	–2.0	–4.2
Pension trend	Increase of 0.25 percentage points	10.4	18.5
	Reduction of 0.25 percentage points	–10.0	–17.6
Life expectancy	Extended by 1 year	15.1	29.4

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

€m	31 Dec 2022	31 Dec 2021	Change
Mutual funds	338.1	388.2	–50.1
Equity funds	323.6	373.8	–50.2
Bond funds	3.7	3.0	0.7
Mixed funds	10.8	11.4	–0.6
Special funds	395.7	438.2	–42.5
Insurance contracts	0.3	0.3	–
Total	**734.0**	**826.7**	–92.7

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 2022, the plan assets included €733.7m of the Deka Group's own investment funds (previous year: €826.4m). 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 high level of interest rates leads to a relatively lower net obligation.

The weighted average maturity of the defined benefit pension obligations was 9.3 years as at the reporting date (previous year: 13.9 years).

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

€m	31 Dec 2022	31 Dec 2021	Change
Current scheme members	366.7	522.6	– 155.9
Former scheme members	151.7	221.2	– 69.5
Pensioners and surviving dependents	176.7	223.0	– 46.3
Present value of defined benefit obligation	**695.2**	**966.8**	– 271.6

For the 2023 financial year it is expected that contributions amounting to €11.8m (previous year: €13.4m) will have to be allocated to the defined benefit schemes.

60 Other provisions

€m	31 Dec 2022	31 Dec 2021	Change
Provisions in investment funds business	83.8	92.7	– 8.9
Provisions for legal risks	12.8	22.3	– 9.5
Provisions for credit risks	12.6	6.1	6.5
Provisions for operational risks	8.6	5.7	2.9
Provisions in human resources	0.7	0.2	0.5
Provisions for restructuring measures	0.0	1.5	– 1.5
Sundry other provisions	92.2	169.2	– 77.0
Total	**210.8**	**297.7**	– 86.9

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. It also includes a guarantee fund whose minimum return is forecast and published on the basis of current interest rates set by the Group. The amount of the provision is calculated applying various loss scenarios.

As at the balance sheet date, provisions of €17.5m (previous year: €30.6m) had been made based on the performance of the relevant funds. As of the reporting date, the guarantees covered a maximum total volume of €1.9bn (previous year: €2.3bn) at the respective guarantee dates. The market value of the relevant funds totalled €2.1bn (previous year: €2.7bn). This includes funds with a forecast return performance, which had a volume of €0.4bn (previous year: €0.4bn).

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 €51.9m (previous year: €47.7m) was recognised. Potential obligations from fund-based pension products totalled €5.7bn at the reporting date (previous year: €5.3bn). The market value of the fund-based pension products totalled €7.0bn (previous year: €7.7bn).

The Bank refined its procedure for calculating provisions for a Riester product in the 2022 financial year. The estimate is based on a Monte Carlo simulation and calculates the expected value of a potential shortfall at the guarantee date at individual contract level. As at the reporting date, a distinction was made for the first time, for the purposes of the calculation, between contracts with a remaining life of up to 5 years and contracts with a remaining life of more than 5 years. Forecasts for deviating economic returns based on the maturity were taken into account for the maturity ranges that were created. Applying the previous estimate would have resulted in a €16.7m lower provision of €31.0m for fund-based Riester products as at 31 December 2022.

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 recognised a provision for legal risks in the amount of €6.2m for potential claims for the repayment of fees (previous year €13.2m).

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 €6.7m 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 amount of €3.8m as at 31 December 2020. As at 31 December 2022, the amount of the provision was increased by €2.9m to €6.7m based on further analyses. No further risks in this regard were evident as at 31 December 2022. The official search of DekaBank's premises, the additional information obtained as part of the search and further voluntary investigations carried out on this basis do not change the assessment at the present time. The situation is being constantly reviewed.

Provisions for credit risks are provisions set up for expected losses from loan commitments, guarantees and sureties (see note [46] "Risk provisions in the lending and securities business").

The sundry other provisions were established in respect of liabilities arising from a range of issues. Sundry other provisions chiefly comprise a provision created in the 2019 financial year for a capital-strengthening measure in relation to a company in the equity investment portfolio. In the 2022 financial year, the measure was specified further, with DekaBank entering into a commitment to provide potential support (up to a maximum amount of €100.0m). This commitment is valued using a Monte Carlo simulation to forecast a possible capital shortfall at the level of the affiliated company depending on capital market developments. As at the reporting date, the average net present value of the payments amounts to €–86.1m (previous year €–100.0m). A provision of €40.0m that was also set up within this context in the 2019 financial year was reversed in full.

The drop in sundry other provisions is also due to utilisation and to the reversal of provisions for IT information services set up in the previous year which are no longer required.

The movement in other provisions is as follows:

€m	Opening balance 1 Jan 2022	Allocation	Utilisations	Reversal	Reclassi-fications	Accrued interest	Currency effects	Closing balance 31 Dec 2022
Provisions in investment funds business	92.7	27.2	23.7	12.4	–	–	–	83.8
Provisions for legal risks	22.3	1.4	1.6	8.2	–1.1	–	–	12.8
Provisions for credit risks	6.1	8.1	–	1.9	–	–	0.3	12.6
Provisions for operational risks	5.7	4.2	0.4	0.9	–	–	–	8.6
Provisions in human resources	0.2	0.7	0.1	0.1	–	–	–	0.7
Provisions for restructuring measures	1.5	–	1.0	0.0	–0.5	–	–	0.0
Sundry other provisions	169.2	0.8	8.4	69.4	–	–	–	92.2
Other provisions	**297.7**	**42.5**	**35.1**	**92.9**	**–1.6**	**–**	**0.3**	**210.8**

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 €64.5m (previous year: €168.4m) that are of a medium or long-term nature.

61 Income tax liabilities

€m	31 Dec 2022	31 Dec 2021	Change
Provisions for income taxes	6.5	6.5	–
Current income tax liabilities	130.4	154.8	–24.4
Deferred income tax liabilities	147.2	12.1	135.1
Total	**284.1**	**173.4**	110.7

The provisions for income taxes relate to corporation tax, the solidarity surcharge and trade tax in a total amount of €4.4m (previous year: €4.4m), as well as to a foreign tax liability in the amount of €2.1m (previous year: €2.1m).

The provisions for income taxes reported are of a short-term nature (previous year: €6.5m 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 2022	31 Dec 2021	Change
Asset items			
Due from banks	–	8.1	– 8.1
Due from customers	–	–	–
Financial assets at fair value	264.5	172.4	92.1
Positive market values of derivative hedging instruments	365.3	72.1	293.2
Financial investments	–	15.5	– 15.5
Shares in at-equity accounted companies	0.1	0.1	–
Intangible assets	7.3	8.9	– 1.6
Property, plant and equipment	94.0	80.1	13.9
Other assets	–	1.5	– 1.5
Liability items			
Due to banks	35.5	2.7	32.8
Due to customers	19.2	–	19.2
Securitised liabilities	97.8	7.8	90.0
Provisions	2.2	0.1	2.1
Subordinated capital	19.7	1.6	18.1
Sub-total	**905.6**	**370.9**	534.7
Netting	– 758.4	– 358.8	– 399.6
Total	**147.2**	**12.1**	135.1

Reported deferred tax liabilities include €138.8m (previous year: €4.5m) 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 €125.8m (previous year: €506.3m), resulting in imputed deferred tax liabilities of €2.0m (previous year: €8.1m). €2.0m (previous year: €8.0m) of this amount was recognised as a liability due to the return of the banking licence by Deka Verwaltungsgesellschaft Luxembourg S.A. in the previous year. The remainder (< €0.1m) is attributable to two other companies and was not recognised as a liability in accordance with IAS 12.39.

In the year under review, no deferred income tax liabilities had to be recognised in connection with the fair value measurement of financial assets in other comprehensive income (previous year: €0.8m). 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: €0.1m).

62 Other liabilities

The breakdown of other liabilities is as follows:

€m	31 Dec 2022	31 Dec 2021	Change
Liabilities			
Liabilities from leasing transactions	315.7	272.7	43.1
Commissions not yet paid to sales offices	114.4	184.6	–70.2
Liabilities from current other taxes	38.6	45.4	–6.8
Shares of profit attributable to atypical silent partners	5.9	4.5	1.4
Debt capital from minority interests	0.7	0.7	0.0
Other	118.6	110.3	8.3
Accruals			
Sales performance compensation	–	446.1	–446.1
Personnel costs	189.1	173.1	16.0
Other accruals	54.6	70.9	–16.3
Year-end audit and other audit costs	9.2	8.4	0.8
Prepaid expenses	0.3	0.2	0.1
Total	**847.1**	**1,316.9**	–469.9

The amount reported under "Shares of profit attributable to atypical silent partners" relates to outstanding amounts in connection with company tax audits for 2013–2020. The atypical silent partnerships were dissolved with effect from 31 December 2020/1 January 2021.

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.

Since the 2022 reporting year, obligations from sales performance compensation have been reported in amounts due to banks.

Other liabilities (excluding leases) include €0.7m (previous year: €3.2m) of a medium or long-term nature.

Leases are broken down by residual term as follows:

€m	31 Dec 2022	31 Dec 2021
Up to 1 year	48.8	40.4
Between 1 and 5 years	94.4	96.9
More than 5 years	219.4	158.6
Total	**362.6**	**295.9**

63 Subordinated capital

€m	31 Dec 2022	31 Dec 2021	Change
Subordinated bearer bonds	277.7	285.3	–7.6
Subordinated promissory note loans	94.7	94.7	–
Other subordinated liabilities	516.4	565.5	–49.1
Prorated interest on subordinated liabilities	18.6	18.6	–0.0
Total	**907.4**	**964.2**	–56.8

There are no agreements or plans to convert these funds into capital or another form of debt. There is no early repayment obligation.

64 Equity

€m	31 Dec 2022	31 Dec 2021	Change
Subscribed capital	**286.3**	**286.3**	–
Own shares (deduction)	**94.6**	**94.6**	–
Additional capital components (AT1 bonds)	**598.6**	**598.6**	–
Capital reserve	**239.5**	**239.5**	–
Retained earnings	**5,489.4**	**5,187.0**	302.4
Statutory reserve	6.1	6.1	–0.0
Other retained earnings	5,483.3	5,180.9	302.3
Revaluation reserve	**17.4**	**–70.6**	88.0
For provisions for pensions	34.7	–132.4	167.1
For foreign currency basis spreads of hedging derivatives	–0.9	–20.1	19.2
For financial assets measured at fair value through other comprehensive income	–27.8	2.6	–30.4
For own credit risk of financial liabilities designated at fair value	–1.2	–1.7	0.5
Currency translation reserve	0.7	0.1	0.6
Deferred taxes	11.9	80.9	–69.0
Accumulated profit/loss (consolidated profit)	**200.2**	**200.2**	–
Total	**6,736.8**	**6,346.3**	390.5

Actuarial gains on pension obligations came to €167.1m due to market-related factors (previous year: €141.4m). These mainly arose due to the increase in the actuarial interest rate to 3.95% (previous year: 1.15%), which was partly offset by the drop in plan assets.

Notes on financial instruments

65 Result by measurement category

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

€m	2022	2021	Change
Financial assets and liabilities measured at fair value through profit or loss	**56.5**	**122.4**	–65.9
Trading portfolio	90.2	97.7	–7.5
Financial assets mandatorily measured at fair value through profit or loss	–50.2	20.6	–70.8
Financial assets designated at fair value	–	–	–
Financial liabilities designated at fair value	16.5	4.1	12.4
thereof: amounts recognised in profit or loss	16.0	3.7	12.3
thereof: amounts recognised in other comprehensive income (OCI)	0.5	0.4	0.1
Financial assets measured at fair value through other comprehensive income	**–32.7**	**–14.5**	–18.2
thereof: amounts transferred to profit or loss due to	–2.5	0.0	–2.5
thereof: amounts recognised in other comprehensive income (OCI)	–30.4	–6.3	–24.1
Financial assets measured at amortised cost	**671.8**	**365.4**	306.4
Financial liabilities measured at amortised cost	**–206.3**	**8.9**	–215.2
Profit or loss from fair value hedges	**30.6**	**5.8**	24.8
thereof: amounts recognised in profit or loss	11.3	12.3	–1.0
thereof: amounts recognised in other comprehensive income (OCI)	19.2	–6.5	25.7
thereof: amounts transferred to profit or loss due to	–	–	–

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.

66 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 2022		31 Dec 2021	
€m	**Fair value**	**Carrying value**	**Fair value**	**Carrying value**
Assets				
Financial assets measured at amortised cost				
Cash reserves	346.7	346.7	15,982.4	15,982.4
Due from banks	38,736.3	38,849.8	13,822.9	13,817.8
Due from customers	28,324.3	28,778.9	30,901.5	30,560.6
Financial investments	7,539.8	7,982.5	5,707.1	5,594.9
Other assets	199.3	199.3	239.8	239.8
Financial assets measured at fair value through other comprehensive income				
Financial investments	2,074.2	2,074.2	3,679.6	3,679.6
Financial assets measured at fair value through profit or loss				
Trading portfolio				
Financial assets at fair value	16,166.1	16,166.1	16,666.4	16,666.4
Financial assets mandatorily measured at fair value through profit or loss				
Financial assets at fair value	1,400.6	1,400.6	1,072.1	1,072.1
Other assets	1.7	1.7	0.8	0.8
Positive market values of derivative hedging instruments	**271.1**	**271.1**	**91.6**	**91.6**
Total asset items	**95,060.1**	**96,070.9**	**88,164.2**	**87,706.0**
Liabilities				
Financial liabilities measured at amortised cost				
Due to banks	17,044.8	17,211.7	16,946.1	16,890.6
Due to customers	25,021.9	25,106.0	23,698.6	23,594.5
Securitised liabilities	10,413.5	11,169.4	9,541.1	9,543.3
Subordinated capital	888.9	907.4	1,032.6	964.2
Other liabilities	520.7	520.7	539.5	539.5
Financial liabilities measured at fair value through profit or loss				
Trading portfolio				
Financial liabilities at fair value	34,135.9	34,135.9	28,724.7	28,724.7
Other liabilities	1.4	1.4	0.7	0.7
Financial liabilities designated at fair value				
Financial liabilities at fair value	217.1	217.1	469.7	469.7
Negative market values of derivative hedging instruments	**555.1**	**555.1**	**383.9**	**383.9**
Total liability items	**88,799.3**	**89,824.8**	**81,337.0**	**81,111.2**

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 €315.7m (previous year: €272.7m).

In the following description of the fair value hierarchy, financial assets amounting to €16,768.9m (previous year: €17,072.3m) and financial liabilities amounting to €19,606.8m (previous year: €19,668.3m) 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 on 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 based on observable market data (level 3)	
€m	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Financial assets measured at fair value through profit or loss						
Debt securities, other fixed-interest securities and loan receivables	2,282.9	3,543.8	4,299.1	3,619.2	929.0	605.2
Shares and other non fixed-interest securities	1,316.6	3,562.1	95.2	96.4	52.1	17.5
Derivative financial instruments	125.2	113.7	8,303.3	6,125.4	137.0	24.9
Interest-rate-related derivatives	–	–	5,997.4	4,659.8	104.2	20.4
Currency-related derivatives	–	–	156.5	56.3	–	–
Share and other price-related derivatives	125.2	113.7	2,149.3	1,409.3	32.8	4.5
Shareholdings	–	–	–	–	26.4	30.4
Positive market values of derivative hedging instruments	–	–	271.1	91.6	–	0.0
Financial assets measured at fair value through other comprehensive income						
Debt securities and other fixed-interest securities	528.7	1,630.3	1,545.5	2,049.2	–	–
Shares and other non fixed-interest securities	–	–	–	–	–	–
Financial assets measured at amortised cost						
Due from banks	–	–	20,741.4	10,627.5	2,339.7	2,799.5
thereof: assets from genuine repurchase agreements and collateralised securities lending transactions	–	–	8,435.1	3,797.1	1,730.8	2,498.0
Due from customers	–	–	5,984.9	6,724.5	21,773.2	23,723.6
thereof: assets from genuine repurchase agreements and collateralised securities lending transactions	–	–	4,903.9	5,395.3	896.2	1,161.2
Debt securities and other fixed-interest securities	4,323.9	3,894.9	2,964.0	1,645.6	251.9	166.6
Total	**8,577.3**	**12,744.8**	**44,204.5**	**30,979.4**	**25,509.3**	**27,367.7**

€m	Prices listed on active markets (level 1) 31 Dec 2022	31 Dec 2021	Valuation method based on observable market data (level 2) 31 Dec 2022	31 Dec 2021	Valuation method based on observable market data (level 3) 31 Dec 2022	31 Dec 2021
Financial liabilities measured at fair value through profit or loss						
Securities short portfolios	609.0	513.4	399.5	105.9	–	–
Derivative financial instruments	160.5	107.5	12,504.9	5,764.6	473.5	73.0
Interest-rate-related derivatives	–	–	9,955.5	3,907.0	447.1	54.9
Currency-related derivatives	–	–	146.0	74.3	–	–
Share and other price-related derivatives	160.5	107.5	2,403.3	1,783.3	26.4	18.1
Issues	–	–	17,848.0	20,733.1	2,357.6	1,896.9
Negative market values of derivative hedging instruments	–	–	555.1	383.9	–	–
Financial liabilities measured at amortised cost						
Due to banks	–	–	16,069.8	16,453.0	171.8	186.1
thereof: liabilities from genuine repurchase agreements and collateralised securities lending transactions	–	–	3,562.6	4,809.0		–
Due to customers	–	–	6,621.5	4,632.9	119.0	244.7
thereof: liabilities from genuine repurchase agreements and collateralised securities lending transactions	–	–	250.0	531.7	–	71.5
Securitised liabilities	–	–	10,413.5	9,541.1	–	–
Subordinated capital	–	–	–	–	888.9	1,032.6
Total	**769.5**	**620.9**	**64,412.3**	**57,614.5**	**4,010.8**	**3,433.3**

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 2022	2021	Reclassifications from level 2 to level 1 2022	2021
Financial assets measured at fair value through profit or loss				
Debt securities, other fixed-interest securities and loan receivables	919.9	398.8	217.9	490.9
Derivative financial instruments	17.2	63.5	73.8	45.8
Share and other price-related derivatives	17.2	63.5	73.8	45.8
Financial liabilities measured at fair value through profit or loss				
Securities short portfolios	16.3	14.1	8.6	10.3
Derivative financial instruments	0.8	62.8	110.9	30.0
Interest-rate-related derivatives	–	–	–	–
Share and other price-related derivatives	0.8	62.8	110.9	30.0

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 forward 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.

DekaBank has changed its procedure for determining the DekaBank credit spread valuation curves for own issues recognised at fair value. In times of volatile markets, like the trend witnessed on the interest rate market since mid-February 2022 in particular, the illiquidity spreads used for pricing purposes to date have not led to the sort of clarity and transparency expected. As a result, the decision was made no longer to apply a valuation-related input parameter from 31 May 2022 onwards. The adjustment to the valuation curves resulted in a one-off effect in the income statement of €–231.1m in the 2022 financial year.

In the second half of the year, DekaBank introduced its own derivatives funding curve to calculate the funding valuation adjustment (FVA). This move was prompted by the change in the FVA, in net terms, from a funding cost adjustment (FCA) to a funding benefit adjustment (FBA) due to the sharp rise in interest rates. This means that DekaBank benefits from a funding advantage from unsecured derivative transactions (relates in particular to transactions with savings banks and German federal states). However, this advantage can only be realised to a limited extent given the overall regulatory conditions (funding from derivatives cannot count towards the net stable funding ratio), meaning that different treatment of funding from derivatives and other sources of funding was necessary. The introduction of the new derivative funding curve resulted in a one-off effect in the income statement of €–56.3m in the second half of 2022.

DekaBank has revised the procedure for calculating the discount from the uncertainty associated with accrued hedge costs for certificates. Market development due to ongoing crises is translating into higher hedge costs for the certificates. The methodology was refined to adequately quantify the discount. This adjustment resulted in a one-off effect in the income statement of €–47.5m.

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, risk weight, 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 €0.2m 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 measured at fair value could have been €6.5m 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 share option positions concerned was around €–1.6m as at 31 December 2022. 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 +2.4%, giving rise to a measurement difference of €+0.2m. There are also equity derivatives with a maturity that is longer than the equivalent (based on the underlying) exchange-traded equity (index) options. The temporal extrapolation uncertainty as at 31 December 2022 is approximately €–43.2m. 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 2022, this results in a value of €0.1m.

There are no publicly quoted market prices for the company shares listed as shareholdings. The fair value of company shares is determined using the dividend discount model, provided that the company pays dividends on a sustained basis. Other company shares are measured on the basis of the net asset value approach.

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 2022, 100% of bonds and other fixed-income 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	2022	2021	Change
Balance at 1 January (unrecognised gains)	**1.1**	**0.8**	0.3
Increase due to new trades	2.3	1.8	0.6
Reduction due to passage of time	0.7	1.4	–0.7
Balance at 31 December (unrecognised gains)	**2.7**	**1.1**	1.6

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	Share-holdings	Positive market values of derivative hedging instruments	Total
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**
As at 1 January 2022	**605.2**	**17.5**	**19.4**	**5.5**	**30.4**	**0.0**	**678.0**
Additions through purchase	2,328.6	57.0	–	11.0	–	–	2,396.6
Disposals through sale	1,803.1	22.3	–	5.4	7.3	–	1,838.1
Maturity/repayments	74.6	–	–	–	–	–	74.6
Transfers							
To Level 3	100.8	–	–	–	–	–	100.8
From Level 3	122.4	–	–	0.2	–	–	122.6
Changes arising from measurement/disposal							
Recognised in profit or loss[1]	–105.5	–0.1	84.8	21.9	3.3	–	4.4
Recognised in other comprehensive income[2]	–	–	–	–	–	–	–
As at 31 December 2022	**929.0**	**52.1**	**104.2**	**32.8**	**26.4**	**0.0**	**1,144.5**
Movement in unrealised gains or losses in respect of assets in the portfolio at the balance sheet date[3]	**–77.0**	**–**	**84.8**	**21.8**	**0.5**	**–**	**30.1**

[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 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**
As at 1 January 2022	**53.8**	**19.2**	**1,896.9**	**1,969.9**
Additions through purchase	–	1.0	–	1.0
Disposals through sale	0.2	–2.5	–	–2.3
Additions through issues	–	–	481.6	481.6
Maturity/repayments	–	0.2	98.0	98.2
Transfers				
To Level 3	–	6.4	578.0	584.4
From Level 3	–	5.9	30.7	36.6
Changes arising from measurement/disposal				
Recognised in profit or loss[1]	–393.5	–3.4	470.2	73.3
Recognised in other comprehensive income[2]	–	–	–	–
As at 31 December 2022	**447.1**	**26.4**	**2,357.6**	**2,831.1**
Movement in unrealised gains or losses in respect of liabilities in the portfolio at the balance sheet date[3]	**–394.2**	**–8.7**	**445.3**	**42.4**

[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 gains and losses on 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, profit or loss on financial instruments designated at fair value and the revaluation reserve. In the reporting period, the overview of "Performance of financial instruments in fair value hierarchy level 3" was standardised to improve legibility regarding the presentation of the different financial instruments. In cases involving disposals of derivative financial instruments, for example, the value in the opening balance is now broken down into the disposal value and realised profit and loss for the period.

Positive market values of debt securities, other fixed-interest securities and loan receivables amounting to €122.4m were transferred from level 3 in the reporting period. Negative market values of share and other price-related derivatives amounting to €5.9m and of issues amounting to €30.7m were also transferred from level 3. Positive market values of debt securities, other fixed-interest securities and loan receivables amounting to €100.8m were migrated to level 3. Negative market values of share and other price-related derivatives amounting to €6.4m and of issues amounting to €578.0m were also migrated to level 3. This was due to a more detailed analysis of the market data used for valuation.

Level 3 financial instruments are analysed with regard to the materiality of spread curves and correlation matrices as at the reporting date. 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, 124 positions with a market value of €170.1m 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.

67 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 [69] "Derivative transactions").

31 Dec 2022				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)	3,115.5	2,385.7	729.8	729.8	–	–
Receivables arising from securities repurchase agreements (not eligible for offsetting)	15,126.8	–	15,126.8	15,126.8	–	–
Derivatives (eligible for offsetting)	26,600.2	25,940.7	659.5	–	659.5	–
Derivatives (not eligible for offsetting)	8,177.0	–	8,177.0	331.6	6,706.0	1,139.4
Total	**53,019.5**	**28,326.4**	**24,693.1**	**16,188.2**	**7,365.5**	**1,139.4**
Liabilities						
Liabilities arising from securities repurchase agreements (eligible for offsetting)	3,148.3	2,385.7	762.6	762.6	–	–
Liabilities arising from securities repurchase agreements (not eligible for offsetting)	2,345.4	–	2,345.4	2,345.4	–	–
Derivatives (eligible for offsetting)	22,736.7	22,228.7	508.0	508.0	–	–
Derivatives (not eligible for offsetting)	13,186.0	–	13,186.0	470.1	5,666.3	7,049.6
Total	**41,416.4**	**24,614.4**	**16,802.0**	**4,086.1**	**5,666.3**	**7,049.6**

31 Dec 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**

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).

68 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	Renewable energies	Real estate sector	Total 31 Dec 2022	Total 31 Dec 2021
Non-performing exposures[1]	108.6	–	235.3	343.9	333.3
Collateral[2]	84.0	–	151.3	235.3	242.0
Provisions for loan losses/credit rating-related changes in fair value	24.5	–	84.0	108.5	86.4

[1] The figures shown represent the gross carrying value of the credit risk-bearing financial assets classified as non-performing.
[2] Recognition of measurable collateral. Indication of market/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	Renewable energies	Real estate sector	Total 31 Dec 2022	Total 31 Dec 2021
Forborne exposures[1]	250.6	20.9	588.5	860.0	1,268.3
thereof: Performing	189.4	20.9	478.3	688.6	1,020.0
thereof: Non-Performing	61.2	–	110.2	171.4	248.3
Collateral[2]	218.1	–	497.6	715.7	1,144.1
Provisions for loan losses/credit rating-related changes in fair value	32.5	0.0	72.6	105.1	98.7

[1] The figures shown represent the gross carrying value of the credit risk-bearing financial assets classified as forborne.
[2] Recognition of measurable collateral. Indication of market/fair value not exceeding the underlying exposure.

Key ratios for non-performing and forborne exposures

%	31 Dec 2022	31 Dec 2021
NPE ratio at the reporting date		
(Ratio of non-performing exposures to maximum credit risk)	0.36	0.39
NPE coverage ratio, including collateral, at the reporting date		
(Ratio of risk provisions, including collateral, to non-performing exposures)	99.99	98.53
NPE coverage ratio, excluding collateral, at the reporting date		
(Ratio of risk provisions, excluding collateral, to non-performing exposures)	31.55	25.94
Forborne exposure ratio, at the reporting date		
(Ratio of forborne exposures to maximum credit risk)	0.90	1.48

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 commitments. 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 €95.9bn (previous year: €85.5bn).

69 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 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Interest rate risks						
OTC products						
Interest rate swaps	551,197.3	539,175.0	30,724.4	10,846.8	30,882.2	10,448.8
Forward rate agreements	80,186.0	138,163.0	81.9	7.3	75.5	7.9
Interest rate options						
Purchases	26,344.9	20,673.4	595.8	400.4	191.8	176.9
Sales	30,332.8	25,677.0	320.5	335.4	937.1	681.5
Caps, floors	25,763.6	23,608.2	226.0	66.0	470.1	64.1
Other interest rate contracts	3,376.4	4,944.9	247.1	34.4	8.8	37.0
Exchange traded products						
Interest rate futures/options	45,635.6	14,425.0	22.5	5.3	53.8	5.6
Total interest rate risks	**762,836.6**	**766,666.5**	**32,218.2**	**11,695.6**	**32,619.3**	**11,421.8**
Currency risks						
OTC products						
Foreign exchange future contracts	17,639.6	13,606.0	156.5	56.4	146.0	74.3
(Interest rate) currency swaps	13,505.3	13,640.0	154.2	107.4	584.5	400.1
Total currency risks	**31,144.9**	**27,246.0**	**310.7**	**163.8**	**730.5**	**474.4**
Share and other price risks						
OTC products						
Share options						
Purchases	2,714.0	1,013.7	468.2	84.2	–	–
Sales	2,538.7	435.0	–	–	466.0	45.7
Credit derivatives	12,337.3	8,885.9	261.3	120.0	66.0	133.7
Other forward contracts	5,717.0	5,793.2	46.8	50.4	363.3	78.9
Exchange traded products						
Share options	35,771.6	34,099.6	1,493.2	1,349.5	1,731.4	1,735.4
Share futures	287.0	536.1	10.2	13.8	7.0	6.5
Total share and other price risks	**59,365.6**	**50,763.5**	**2,279.7**	**1,617.9**	**2,633.7**	**2,000.2**
Total	**853,347.1**	**844,676.0**	**34,808.6**	**13,477.3**	**35,983.5**	**13,896.4**
Net amount disclosed in the statement of financial position			**8,836.5**	**6,355.5**	**13,694.0**	**6,329.1**

[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 €26.0bn (previous year: €7.1bn). Conversely, the variation margin paid reduced fair values within liabilities by a total of €22.3bn (previous year: €7.6bn).

The following table shows nominal values and positive and negative fair values for derivative transactions by counterparty:

	Nominal value		Positive fair values[1]		Negative fair values[1]	
€m	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Banks in the OECD	673,119.9	637,523.2	22,862.6	9,041.9	28,337.4	9,550.2
Public sector entities in the OECD	17,484.1	14,019.0	1,599.7	1,512.3	260.3	184.4
Other counterparties	162,743.1	193,133.8	10,346.3	2,923.1	7,385.8	4,161.8
Total	**853,347.1**	**844,676.0**	**34,808.6**	**13,477.3**	**35,983.5**	**13,896.4**

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

70 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. Shareholdings that serve business operations on an ongoing basis as part of ordinary business activity but do not have a contractually agreed maturity are included in the "due on demand and indefinite term" maturity range.

€m	31 Dec 2022	31 Dec 2021	Change
Asset items			
Due from banks			
Due on demand and indefinite term	22,546.4	4,067.2	18,479.2
Up to 3 months	5,028.9	3,963.2	1,065.7
Between 3 months and 1 year	4,065.4	1,919.3	2,146.1
Between 1 year and 5 years	6,815.1	3,557.0	3,258.1
More than 5 years	393.9	311.2	82.7
Due from customers			
Due on demand and indefinite term	1,688.4	1,811.4	–123.0
Up to 3 months	1,416.7	1,557.1	–140.4
Between 3 months and 1 year	4,777.8	5,130.0	–352.2
Between 1 year and 5 years	13,800.6	14,233.7	–433.1
More than 5 years	7,095.3	7,828.4	–733.1
Financial assets at fair value			
Thereof: non-derivative assets			
Due on demand and indefinite term	1,327.2	3,587.5	–2,260.3
Up to 3 months	484.5	389.4	95.1
Between 3 months and 1 year	6,292.4	6,795.3	–502.9
Between 1 year and 5 years	711.1	498.5	212.6
More than 5 years	186.2	203.9	–17.7
Thereof: Derivative assets			
Due on demand and indefinite term	1.0	0.0	1.0
Up to 3 months	293.5	313.6	–20.1
Between 3 months and 1 year	8,226.3	5,943.7	2,282.7
Between 1 year and 5 years	32.7	4.6	28.1
More than 5 years	11.8	2.0	9.8
Positive market values of derivative hedging instruments			
Due on demand and indefinite term	–	–	–
Up to 3 months	12.9	0.1	12.8
Between 3 months and 1 year	8.1	17.8	–9.6
Between 1 year and 5 years	155.6	57.6	98.0
More than 5 years	94.4	16.1	78.3
Financial investments			
Due on demand and indefinite term	16.5	16.4	0.1
Up to 3 months	670.9	969.1	–298.3
Between 3 months and 1 year	1,640.6	839.7	800.9
Between 1 year and 5 years	6,384.7	6,554.2	–169.5
More than 5 years	1,360.5	911.5	449.0

€m	31 Dec 2022	31 Dec 2021	Change
Liability items			
Due to banks			
Due on demand and indefinite term	5,275.9	2,535.5	2,740.4
Up to 3 months	3,229.1	5,818.5	–2,589.4
Between 3 months and 1 year	2,993.2	1,203.8	1,789.4
Between 1 year and 5 years	4,985.8	6,411.0	–1,425.2
More than 5 years	727.8	921.8	–194.0
Due to customers			
Due on demand and indefinite term	20,371.9	20,136.7	235.2
Up to 3 months	1,883.5	1,392.6	490.9
Between 3 months and 1 year	1,382.2	353.9	1,028.3
Between 1 year and 5 years	743.7	781.3	–37.6
More than 5 years	724.7	930.0	–205.3
Securitised liabilities			
Due on demand and indefinite term	–	–	–
Up to 3 months	1,424.6	2,702.8	–1,278.2
Between 3 months and 1 year	1,270.9	366.8	904.1
Between 1 year and 5 years	5,699.2	3,426.1	2,273.1
More than 5 years	2,774.7	3,047.6	–273.0
Financial liabilities at fair value			
Thereof: non-derivative financial liabilities			
Due on demand and indefinite term	74.2	195.2	–121.0
Up to 3 months	217.7	1,036.9	–819.2
Between 3 months and 1 year	20,782.4	21,776.4	–994.0
Between 1 year and 5 years	106.8	200.2	–93.4
More than 5 years	33.0	40.5	–7.5
Thereof: Derivative financial liabilities			
Due on demand and indefinite term	2.4	0.0	2.4
Up to 3 months	273.1	343.7	–70.6
Between 3 months and 1 year	12,827.1	5,585.9	7,241.2
Between 1 year and 5 years	23.4	9.0	14.4
More than 5 years	13.0	6.6	6.4
Negative market values of derivative hedging instruments			
Due on demand and indefinite term	–	–	–
Up to 3 months	69.8	22.1	47.8
Between 3 months and 1 year	37.7	30.2	7.5
Between 1 year and 5 years	307.1	206.8	100.3
More than 5 years	140.5	125.0	15.5
Subordinated capital			
Due on demand and indefinite term	–	–	–
Up to 3 months	18.6	18.6	–0.0
Between 3 months and 1 year	25.0	–	25.0
Between 1 year and 5 years	507.4	519.0	–11.7
More than 5 years	356.4	426.5	–70.1

71 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 2022			31 Dec 2021		
	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$m)	129.2	956.3	706.8	265.8	575.2	1,080.4
Nominal (€m)[1]	89.4	661.3	488.8	184.6	399.4	750.2
Average fixed rate (%)	1.5	1.7	1.9	1.2	1.8	1.8
Interest rate swaps EURIBOR (EUR)						
Nominal (€m)	625.8	3,774.7	3,257.3	1,001.7	2,453.4	3,269.3
Average fixed rate (%)	0.4	1.1	1.0	0.4	0.3	0.7
Interest rate swaps SONIA (GBP)						
Nominal (£m)	637.7	602.4	473.0	287.3	1,013.3	587.0
Nominal (€m)[1]	718.7	678.9	533.1	342.2	1,207.2	699.3
Average fixed rate (%)	1.3	2.0	1.1	0.7	1.3	0.9
Interest rate swaps TONAR (JPY)						
Nominal (¥m)	–	23,400.0	–	–	9,000.0	–
Nominal (€m)[1]	–	166.2	–	–	68.9	–
Average fixed rate (%)	–	–0.1	–	–	–0.2	–
Interest rate swaps LIBOR/SOFR (USD)						
Nominal ($m)	230.3	2,287.2	638.8	20.4	2,325.1	553.1
Nominal (€m)[1]	215.8	2,143.2	598.6	18.0	2,049.6	487.5
Average fixed rate (%)	1.5	2.4	1.7	1.5	2.4	1.9
Interest rate swaps other benchmark interest rates (Other currencies)						
Nominal (€m)[1]	–	46.4	71.1	48.2	47.9	72.2
Interest rate fair value hedges of financial liabilities						
Interest rate swaps EURIBOR (EUR)						
Nominal (€m)	–	295.0	2,929.2	–	150.0	2,370.8
Average fixed rate (%)	–	0.9	1.0	–	0.5	1.0

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

DekaBank is still making use of the relief for Phase 1 of the IASB's IBOR project in connection with transactions that have not yet been switched over to the new interest rate benchmarks (see note [72] "Interest rate benchmark reform"). 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.

	31 Dec 2022			31 Dec 2021		
	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$m)	129.2	908.8	906.5	291.2	600.1	990.5
Nominal (€m)[1]	89.4	628.5	626.9	202.3	416.7	687.8
Average contract rate (EUR/CAD)[2]	1.45	1.46	1.49	1.52	1.48	1.50
Cross-currency base swaps (CHF/EUR)						
Nominal (CHFm)	–	–	70.0	50.0	–	74.6
Nominal (€m)[1]	–	–	70.8	48.2	–	72.0
Average contract rate (EUR/CHF)[2]	–	–	1.15	1.09	–	1.15
Cross-currency base swaps (GBP/EUR)						
Nominal (£m)	626.8	1,432.7	602.6	330.2	1,417.8	594.0
Nominal (€m)[1]	706.5	1,614.6	679.1	393.4	1,689.1	707.6
Average contract rate (EUR/GBP)[2]	0.87	0.87	0.86	0.83	0.87	0.87
Cross-currency base swaps (JPY/EUR)						
Nominal (¥m)	–	23,400.0	–	–	13,337.0	–
Nominal (€m)[1]	–	166.2	–	–	102.2	–
Average contract rate (EUR/JPY)[2]	–	124.79	–	–	118.51	–
Cross-currency base swaps (USD/EUR)						
Nominal ($m)	1,122.0	4,945.9	1,911.8	828.4	5,372.0	1,436.4
Nominal (€m)[1]	1,051.3	4,634.5	1,791.5	730.3	4,735.5	1,266.2
Average contract rate (EUR/USD)[2]	1.14	1.13	1.13	1.15	1.15	1.15
Cross-currency base swaps (other currencies)						
Nominal (€m)[1]	25.6	46.4	–	–	90.0	12.8

[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 2022			31 Dec 2021		
	Carrying amount of the hedged items	Accumulated valuation result of the hedged items[1)2)]	Valuation result of the hedged items for the reporting period[3)]	Carrying amount of the hedged items	Accumulated valuation result of the hedged items[1)2)]	Valuation result of the hedged items for the reporting period[3)]
Interest rate fair value hedges						
Financial assets measured at amortised cost						
Due from banks	1,650.5	–67.4	–7.7	831.0	12.8	–1.3
Due from customers	8,583.0	–1,004.9	–968.1	9,733.3	3.2	–302.0
Financial investments	2,130.6	–113.9	–147.9	1,066.0	36.4	–48.6
Financial assets measured at fair value through other comprehensive income						
Financial investments	361.6	–9.9	–10.0	1,425.6	6.6	–11.5
Financial liabilities measured at amortised cost						
Due to banks	502.8	–118.9	101.2	584.0	–17.6	22.7
Due to customers	475.6	–127.7	112.1	643.5	–17.0	28.2
Securitised liabilities	1,323.8	–215.9	258.1	1,044.7	–26.0	48.8
Subordinated capital	234.2	–64.2	55.6	271.1	–8.6	11.0
Currency fair value hedges						
Bottom layer financial assets	11,961.3	–	136.5	10,994.1	–	632.8
Total	**27,223.4**	**–1,722.6**	**–470.1**	**26,593.3**	**–10.1**	**380.1**

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	2022	2021	Change
Financial assets measured at amortised cost			
Due from banks	32.4	48.2	–15.8
Due from customers	10,912.3	9,848.1	1,064.2
Financial investments	1,016.6	1,097.8	–81.2
Financial assets measured at fair value through other comprehensive income			
Financial investments	–	–	–

72 Interest rate benchmark reform

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.

After the first few interest rate benchmarks were switched over successfully at the end of 2021, further implementation work will focus first on USD LIBOR, which will be transitioned in the period leading up to mid-2023, and second on adjusting the product range to reflect the new reference rates.

The USD is the most important foreign currency for DekaBank. As a result, the focus in 2022 is on preparing to transition the USD LIBOR-based positions. The Term SOFR reference rate has become established on the market as a genuine alternative to the compounded SOFR, with strong demand among customers. DekaBank is one of the first European banks to have granted Term SOFR-based loans. However, the extreme movement on the interest rate markets, particularly in USD, and the resulting fluctuations in the tenor basis spreads are making pricing during the transition phase more difficult.

In addition to the USD transition, the second focal point is on expanding the range of products to reflect the new RFRs. The corresponding options markets in the various currency areas are developing in parallel with linear products like swaps. DekaBank is keeping an eye on these developments and will adjust its product range accordingly whenever the necessary market data is available.

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 2022. 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	
	Total amount of contracts not yet converted		Total amount of contracts not yet converted	
€m	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Non-derivative financial assets	–	861.8	4,008.8	4,688.8
Non-derivative financial liabilities	–	–	38.7	85.8
Derivatives	–	853.3	22,257.7	21,096.1
Total	**–**	**1,715.1**	**26,305.2**	**25,870.7**

Other disclosures

73 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 [74] "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 profit or loss 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 quarterly 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.

74 Regulatory capital (own funds)

Regulatory capital and the capital ratios were calculated as at 31 December 2022 on the basis of the capital requirements currently applicable under the Capital Requirements Regulation (CRR), which is subject to certain transitional provisions. Since the end of 2021, the transitional provisions in the CRR have no longer been relevant for DekaBank. Own funds are calculated based on the figures from the IFRS consolidated financial statements. Pursuant to Article 26 (2) CRR, the year-end profit less foreseeable charges and dividends was recognised in Common Equity Tier 1 capital within the same period as at 31 December 2022 (dynamic approach). 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 composition of own funds is shown in the following table:

€m	31 Dec 2022	31 Dec 2021	Change
Subscribed capital	286	286	–
Less repurchased Common Equity Tier 1 items	95	95	–
Open reserves	5,743	5,113	631
Other comprehensive income	– 16	183	– 199
Prudential filters	277	145	132
Deductions from Common Equity Tier 1 items	212	260	– 48
Common Equity Tier 1 (CET 1) capital	**5,462**	**4,716**	**746**
Additional Tier 1 capital instruments	599	599	–
Silent capital contributions	–	–	–
Deductions from Additional Tier 1 items	–	–	–
Additional Tier 1 (AT 1) capital	**599**	**599**	**–**
Tier 1 capital	**6,061**	**5,314**	**746**
Subordinated liabilities	657	761	– 104
Other items	33	–	33
Deductions from Tier 2 items	–	–	–
Tier 2 (T2) capital	**690**	**761**	**– 71**
Own funds	**6,751**	**6,075**	**675**

Compared with the previous year, Common Equity Tier 1 capital increased by €746m to €5,462m. The increase is due to the inclusion of year-end effects from 2021 and 2022 (mainly profit retention). Additional Tier 1 (AT 1) capital was constant as against the previous year. Compared with the previous year, Tier 2 capital was down by €71m to €690m. This was primarily due to the reduced eligibility of Tier 2 capital instruments under the CRR in the last five years before maturity. Effects from the comparison of provisions had the opposite effect.

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:

€m	31 Dec 2022	31 Dec 2021	Change
Credit risk	20,993	21,499	– 506
Market risk	5,645	5,588	57
Operational risk	4,139	3,500	639
CVA risk	583	358	225
Risk-weighted assets	**31,360**	**30,944**	**416**

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 Dec 2022	31 Dec 2021
Common Equity Tier 1 capital ratio	17.4	15.2
Tier 1 capital ratio	19.3	17.2
Total capital ratio	21.5	19.6

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 ratios.

75 Contingent liabilities and other obligations

The off-balance sheet commitments of the Deka Group essentially consist of potential future liabilities.

€m	31 Dec 2022	31 Dec 2021	Change
Irrevocable lending commitments	1,149.9	1,412.0	– 262.1
Other liabilities	70.3	108.8	– 38.5
Total	**1,220.2**	**1,520.8**	– 300.6

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.

Other financial liabilities include payment obligations of €0.1m to unconsolidated companies or companies outside the Group. There are no additional funding obligations in other financial liabilities (previous year: €5.1m). There is an additional funding obligation for the deposit guarantee scheme of the *Landesbanken* and *Girozentralen* of €41.2m (previous year: €53.1m). 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 €119.8m (previous year: €138.4m).

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 €28.0m may arise in this regard. The reduction in contingent liabilities by around €22m as against 31 December 2021 is related to voluntary advance payments to interrupt the running of interest for potential interest on back payments. As DekaBank continues to assume that its legal view will be confirmed in the final instance of fiscal court proceedings, tax refund claims of €149.5m are recognised in this context.

76 Assets transferred as collateral

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

€m	31 Dec 2022	31 Dec 2021	Change
Carrying value of transferred collateral			
Under Pfandbrief Act	5,336.2	5,498.3	–162.1
For refinancing purposes with Deutsche Bundesbank	962.9	929.4	33.5
From transactions on German and foreign futures exchanges	828.8	770.6	58.2
From repurchase agreements	306.7	241.1	65.6
From securities lending agreements	4,993.0	2,428.8	2,564.2
From tri-party transactions	1,320.9	4,259.4	–2,938.5
From other transactions	482.6	204.9	277.7
Loan and securities collateral	**14,231.1**	**14,332.5**	–101.4
Cash collateral relating to securities lending and repurchase agreements	114.8	136.4	–21.6
Cash collateral relating to derivative transactions	5,733.3	3,653.9	2,079.4
Cash collateral	**5,848.1**	**3,790.3**	2,057.8
Total	**20,079.2**	**18,122.8**	1,956.4

77 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 derivatives and 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 €45.8bn (previous year: €48.7bn). Of this total, €31.8bn (previous year: €34.7bn) was resold or re-pledged.

78 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 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021
Genuine repurchase agreements						
thereof: financial assets measured at amortised cost	182.5	63.1	180.8	62.5	1.7	0.6
thereof: financial assets measured at fair value through other comprehensive income	1.3	–	1.3	–	–	–
thereof: financial assets measured at fair value through profit or loss	89.9	107.7	89.1	107.4	0.8	0.3
Securities lending transactions						
thereof: financial assets measured at amortised cost	118.0	154.6	–	–	118.0	154.6
thereof: financial assets measured at fair value through other comprehensive income	19.1	16.2	–	–	19.1	16.2
thereof: financial assets measured at fair value through profit or loss	865.8	530.5	34.1	9.8	831.7	520.7
Other transfers not constituting economical disposal						
thereof: financial assets measured at amortised cost	95.4	175.0	94.9	175.0	0.5	–
thereof: financial assets measured at fair value through other comprehensive income	0.1	0.2	0.1	0.2	–	–
thereof: financial assets measured at fair value through profit or loss	42.4	26.8	42.4	26.8	–	–
Total	**1,414.5**	**1,074.1**	**442.7**	**381.7**	**971.8**	**692.4**

79 Letter of comfort

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

80 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 [74] "Regulatory capital (own funds)" and note [76] "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 [43] "Cash reserves").

Interests in joint arrangements and associates

DekaBank still has interests in two jointly controlled entities and two associated companies. 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 [82]).

81 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 €370.3bn (previous year: €406.8bn). 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 sector (aviation and shipping), real estate sector (including real estate funds) and retail risk segments. The financing concerned is generally collateralised by charges on property, aircraft mortgages, ship mortgages, and sureties and guarantees. In addition, and as in the previous year, there was an unsecured financing arrangement in the form of a promissory note loan in the reporting year, some of which was also assigned to third parties. To secure the claims, the financed asset (consumer loan portfolio) was transferred by a structured entity to a security trustee.

When determining the size of the financing classified as structured, the total assets shown in the current available financial statements or the market value of the financed asset were used. This figure amounts to €2.5bn (previous year: €2.4bn). Amounts in foreign currencies were translated at the mean spot rate as at the reporting date.

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 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Asset items				
Due from customers	1,969.2	1,680.8	755.8	469.6
Financial assets at fair value	782.2	998.0	60.3	111.9
Other assets	0.0	–	–	–
Total asset items	**2,751.4**	**2,678.8**	**816.1**	**581.5**
Liability items				
Due to customers	16,466.9	16,017.0	4.4	4.4
Financial liabilities at fair value	398.9	119.3	–	–
Other liabilities	2.8	5.5	–	–
Total liability items	**16,868.6**	**16,141.8**	**4.4**	**4.4**
Contingent liabilities and other obligations				
Irrevocable lending commitments	–	–	–	144.5
Other liabilities	–	–	–	5.1
Total contingent liabilities and other obligations	**–**	**–**	**–**	**149.6**
Maximum exposure to loss	**2,751.4**	**2,678.8**	**816.1**	**731.1**

[1] Including risk provisions

The maximum exposure to loss sets out the highest possible loss that the Bank could sustain in connection with its interests in unconsolidated structured entities. The figure presented does not take into account the probability of such a loss being incurred.

- The maximum possible exposure to loss from interests in unconsolidated structured entities that arise as a result of on-balance-sheet transactions corresponds to the carrying value or fair value of the respective balance sheet item.
- According to the definition, the maximum possible exposure to loss from interests in unconsolidated structured entities that arise from off-balance-sheet transactions, for example from guarantees or lending commitments, corresponds to the maximum guaranteed amount, or the amount of the potential liability that would arise if the credit line that is extended were to be fully utilised.

In addition, provisions are established for investment funds with formal guarantees and targeted returns (see note [60] "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, and as in the previous year, 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 €23.8m (previous year: €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 2022, there were no sponsored unconsolidated structured entities.

82 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 2022
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 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
SWIAT GmbH, Frankfurt/Main	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 2022
A-DGZ 2-FONDS, Frankfurt/Main	100.00
DDDD-FONDS, Frankfurt/Main	100.00
S Broker 1 Fonds, Frankfurt/Main	100.00

Joint ventures accounted for under the equity method:

Name, registered office	Share of equity % 31 Dec 2022	Equity €'000 31 Dec 2022	Total of profit or loss €'000 31 Dec 2022
S-PensionsManagement GmbH, Cologne[1)]	50.00	28,164.8	857.5
Dealis Fund Operations GmbH i.L., Frankfurt/Main[1)]	50.00	32,865.4	47.0

[1)] Amounts reported in financial statements for the year ended 31 December 2021

Associated companies not accounted for under the equity method:

Name, registered office	Share of equity % 31 Dec 2022
DPG Deutsche Performancemessungs-Gesellschaft für Wertpapierportfolios mbH, Frankfurt/Main	22.20
Merry Hill NewCo Limited, Jersey	21.37

Unconsolidated subsidiaries (affiliated companies):

Name, registered office	Share of equity % 31 Dec 2022
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 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
IQAM Research der DekaBank GmbH(former: Privates Institut für quantitative Kapitalmarktforschung der DekaBank GmbH), Frankfurt/Main	100.00
WIV Verwaltungs GmbH, Frankfurt/Main	94.90

Unconsolidated structured entities:

Name, registered office	Fund assets €m 31 Dec 2022	Share of equity/ fund assets % 31 Dec 2022
Deka-Globale Aktien Value, Luxembourg	10.47	99.79
Deka-Immobilien PremiumPlus-Private Banking CF (T), Luxembourg	0.34	96.85
Deka-MultiFactor Global Corporates, Luxembourg	30.02	93.08
Deka-BoutiqueSelect, Frankfurt/Main	2.01	83.46
Private Banking Premium Chance Nachhaltigkeit, Frankfurt/Main	7.24	67.42
S-Multi Asset ESG Ausgewogen, Frankfurt/Main	14.82	64.61
Deka-MultiFactor Emerging Markets Corporates, Luxembourg	26.50	58.14
Deka-MultiFactor Global Corporates HY, Luxembourg	36.51	54.28
Private Banking Premium Ertrag Nachhaltigkeit, Frankfurt/Main	8.82	49.98
Deka Investors Spezial InvAG m.v.K. und TGV, Frankfurt/Main		
Teilgesellschaftsvermögen Mittelstandskreditfonds I, Frankfurt/Main	11.14	23.00

83 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 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021
Short-term benefits	4.1	4.1	1.0	1.0
Post-employment benefits	0.9	1.6	–	–
Other long-term benefits	3.1	2.9	–	–
Total	**8.2**	**8.6**	**1.0**	**1.0**

Units in investment funds amounting to €7.4m are held by related parties in connection with the management of mutual funds in the DekaBank custody account (previous year: €6.6m).

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 on arm's length terms as part of the ordinary business activities of the Deka Group. These relate, *inter alia*, to loans, daily and 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 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Asset items				
Due from customers	–	–	–	0.0
Financial assets at fair value	–	–	0.3	0.5
Other assets	–	–	0.1	0.1
Total asset items	**–**	**–**	**0.4**	**0.6**
Liability items				
Due to customers	48.5	49.0	3.4	2.9
Financial liabilities at fair value	–	–	–	–
Other liabilities	–	–	0.0	0.0
Total liability items	**48.5**	**49.0**	**3.4**	**2.9**

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

	Joint ventures/ associated companies		Other related parties	
€m	**31 Dec 2022**	**31 Dec 2021**	**31 Dec 2022**	**31 Dec 2021**
Asset items				
Due from customers	110.2	115.8	–	0.1
Financial assets at fair value	1.9	4.4	–	–
Other assets	0.0	0.1	–	0.1
Total asset items	**112.1**	**120.3**	**–**	**0.2**
Liability items				
Due to customers	9.3	16.0	–	8.6
Financial liabilities at fair value	13.9	58.8	–	–
Other liabilities	0.5	–	–	–
Total liability items	**23.7**	**74.8**	**–**	**8.6**

There are risk provisions of €65.3m for amounts due from customers (previous year: €46.4m).

84 Average number of staff

	2022			2021		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
Full-time employees	2,606	1,039	3,645	2,567	1,026	3,593
Part-time and temporary employees	338	842	1,180	278	811	1,089
Total	**2,944**	**1,881**	**4,825**	**2,845**	**1,837**	**4,682**

85 Remuneration of Board members

€	31 Dec 2022	31 Dec 2021
Total remuneration of active Board members		
Board of Management	6,128,559	5,737,186
Administrative Board	1,046,186	992,500
Total remuneration of former Board members and their surviving dependents		
Board of Management	3,963,624	4,343,518
Provisions for pensions for former Board members and their dependents	45,690,596	62,677,804

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 2022 financial year, variable remuneration components amounting to €3.5m (previous year: €2.1m) were committed to current members of the Board of Management, which are dependent on future performance. 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 €1.9m and to former members of the Board of Management amounting to €0.5m. The entitlement of active board members comprises €0.7m for the 2021 financial year, €0.5m for the 2020 financial year, €0.2m for the 2019 financial year, €0.2m for the 2018 financial year, €0.2m for the 2017 financial year and €0.1m for the 2016 financial year.

86 Fees for auditors

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

€m	2022	2021	Change
Fees for			
Year-end audit services	4.5	4.0	0.5
Non-audit services			
Other assurance services	0.8	0.9	–0.1
Tax advisory services	0.0	0.6	–0.6
Other services	–	–	–
Total	**5.3**	**5.5**	–0.2

87 Additional miscellaneous information

Events after the reporting period
No major developments of particular significance occurred after the 2022 reporting date.

Recommendation regarding appropriation of net profit
The proposed appropriation of the net profit for the 2022 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 2022.

The consolidated financial statements were approved for publication on 6 March 2023 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, 6 March 2023

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 2022, the statement of changes in equity and the statement of cash flows for the financial year from 1 January to 31 December 2022, and notes to the consolidated financial statements for 2022, 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 2022.

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 2022, and of its financial performance for the financial year from 1 January to 31 December 2022, 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.

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 2022 to 31 December 2022. 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 2022, the Deka Group recognised "financial assets valued at fair value" totalling EUR 17.6 billion. At 18.0% 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
- 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 2022:

- 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 35.3% (EUR 34.4 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 riskoriented approach as at 31 December 2022:

- 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 33 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 2022 financial year, the Deka Group recognised commission income from the fund business of EUR 2.9 billion and commission expenses from the fund business of EUR 1.4 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 remaining parts of the annual report, which are expected to be made available to us after the date of the auditor’s 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 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, 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 and related disclosures made by management.
- 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 actions taken or safeguards implemented to mitigate threats to the independence.

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 "dekabankdeutschegirozentrale-2022-12-31-de.zip" (SHA256 hash value 19ff40dbf7f1eaa945ca15311bf3db0b412016e42958960b54ff6b4e75292ed0) 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 2022, 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 (10.2022)). 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 31 March 2022. We were engaged by the Administrative Board on 24 May 2022. 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], assurance engagements pursuant to ISAE 3402, issuing of a letter of comfort and other assurance services required by supervisory law, 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 Franz Haider.

Frankfurt am Main, 9 March 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft

(signature) Haider	(signature) Immesberger
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

OTHER INFORMATION

Shareholders, subsidiaries and associated companies

Shareholders of DekaBank *(as of 1 March 2023)*

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 2023)*

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, Frankfurt/Main	100.0%
S-PensionsManagement GmbH, Cologne	50.0%
Sparkassen Pensionsfonds AG, Cologne	50.0%
Sparkassen Pensionskasse AG, Cologne	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/Main	2.5%
Asset Management Real Estate business division	
Deka Immobilien Investment GmbH, Frankfurt/Main	100.0%
Deka Vermögensverwaltungs 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	11.7%
Deka-S-PropertyFund No. 1 Beteiligungs GmbH & Co. KG, Frankfurt/Main	11.6%
Financing business division	
Global Format GmbH & Co. KG, Munich	18.8%
RSU 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 2023)

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

Ralf Fleischer
Chairman of the Management Board of Stadtsparkasse München, Munich

Michael Fröhlich
Chairman of the Management Board of Sparkasse Bielefeld, Bielefeld
Member of the Risk and Credit Committee

Thomas Hirsch
(since 1 January 2023)
President of the Savings Banks Association Rhineland-Palatinate, Mainz

Melanie Kehr
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, Mölln

Beate Läsch-Weber
(until 31 December 2022)
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
(until 31 December 2022)
Member of the Board of Management of Berliner Sparkasse, Berlin
Member of the Risk and Credit Committee

Stefan G. Reuß
(since 1 January 2022)
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

Prof. Dr. Ulrich Reuter
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
Freelance 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, Berlin

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:

Edwin Quast
(until 28 February 2023)
Chairman of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

(since 1 March 2023)
Member of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

Barbara Wörfel
(until 28 February 2023)
Second Deputy Chairwoman of the Staff Committee, DekaBank Deutsche Girozentrale, Frankfurt/Main

(since 1 March 2023)
First 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 President 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

Martin K. Müller
Member of the Board of Management

Executive Manager

Manfred Karg

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
(until 30 September 2022)

Sparkassen Pensionskasse AG, Cologne:
Deputy Chairman of the Supervisory Board
(until 30 September 2022)

Sparkassen Pensionsfonds AG, Cologne:
Chairman of the Supervisory Board
(until 30 September 2022)

Deka Treuhand Erwerbsgesellschaft mbH, Frankfurt/Main:
Managing Director

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 Administrative Board

Daniel Kapffer
S Broker AG & Co. KG, Wiesbaden:
Chairman of the Supervisory Board
(until 30 April 2022)
Deputy Chairman of the Supervisory Board
(since 1 May 2022)

S Broker Management AG, Wiesbaden:
Chairman of the Supervisory Board
(until 30 April 2022)
Member of the Supervisory Board
(since 1 May 2022 until 9 May 2022)
Deputy Chairman of the Supervisory Board
(since 10 May 2022)

bevestor GmbH, Frankfurt/Main:
Deputy Chairman of the Supervisory Board

S-PensionsManagement GmbH, Cologne:
Member of the Supervisory Board
(from 27 June 2022 until 8 November 2022)
Deputy Chairman of the Supervisory Board
(since 9 November 2022)

Sparkassen Pensionskasse AG, Cologne:
Member of the Supervisory Board
(from 27 June 2022 until 8 November 2022)
Deputy Chairman of the Supervisory Board
(since 9 November 2022)

Sparkassen Pensionsfonds AG, Cologne:
Member of the Supervisory Board
(from 27 June 2022 until 8 November 2022)
Chairman of the Supervisory Board
(since 9 November 2022)

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
(until 30 April 2022)
Chairman of the Supervisory Board
(since 1 May 2022)

S Broker Management AG, Wiesbaden:
Member of the Supervisory Board
(from 1 May 2022 until 9 May 2022)
Chairman of the Supervisory Board
(since 10 May 2022)

Martin K. Müller
Deka Verwaltungsgesellschaft Luxembourg S.A., Luxembourg:
Chairman of the Administrative Board

Deka Treuhand Erwerbsgesellschaft mbH, Frankfurt/Main:
Managing Director

Fund-related committees

Asset Management Securities business division

Advisory Board Retail
(as of 1 March 2023)

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
Deputy Spokesman of the Management Board of Hamburger Sparkasse AG, Hamburg

Martin Bücher
Chairman of the Management Board of Kreissparkasse Biberach, Biberach

Martin Deertz
Deputy Chairman of the Management Board of Sparkasse Südholstein, Neumünster

Andreas Frühschütz
Chairman of the Management Board of Kreissparkasse München Starnberg Ebersberg, Munich

Andreas Götz
Member of the Management Board of Landesbank Baden-Württemberg, Stuttgart

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

Oliver Klink
Chairman of the Management Board of Taunus-Sparkasse, Bad Homburg v. d. H.

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 2023)

Chairman

Peter Orth
Member of the Management Board of Sparkasse Dortmund, Dortmund

Deputy Chairman

Michael Bott
Chairman of the Management Board of Sparkasse Waldeck-Frankenberg, Korbach

Members

Peter Becker
Chairman of the Management Board of Sparkasse Herford, Herford

Christian Bonnen
Member of the Management Board of Kreissparkasse Köln, Cologne

Markus Frei
Chairman of the Management Board of Kreissparkasse Ostalb, Aalen

Steffen-Peter Horn
Chairman of the Management Board of Kreissparkasse Eichsfeld, Leinefelde-Worbis

Timo Kluge
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

Hans Neuweiler
Chairman of the Management Board of Sparkasse Pforzheim Calw, Pforzheim

Dr. Olaf Oesterhelweg
Member of the Management Board of Hamburger Sparkasse AG, Hamburg

Frank Opitz
Chairman of the Management Board of Sparkasse Fürstenfeldbruck, Fürstenfeldbruck

Christoph Schulz
Chairman of the Management Board of Braunschweigische Landessparkasse, Braunschweig

Rolf Settelmeier
Chairman of the Management Board of Stadtsparkasse Augsburg, Augsburg

Petra von Crailsheim
Deputy Chairwoman of the Management Board of Ostsächsische Sparkasse, Dresden

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 2023)

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 2023)

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

Carmen Lehr
Heilenbach

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 2023)

Chairman

Torsten Knapmeyer
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

Daniel Kapffer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Members

Dr. Olaf Heinrich
Head of Digital Multichannel Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Dr. Hans-Jürgen Plewan
Head of IT, DekaBank Deutsche Girozentrale, Frankfurt/Main

Board of Management

S Broker Management AG

S Broker Management AG

Members of the Supervisory Board
(as of 1 March 2023)

Chairman

Torsten Knapmeyer
Member of the Board of Management of DekaBank Deutsche Girozentrale, Frankfurt/Main

Deputy Chairman

Daniel Kapffer
Member of the Board of 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 2023)

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 Vermögensmanagement 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 2023)

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
Chairman of the Management Board of Sparkasse Regen-Viechtach, Regen

Dr. Alexander Endlich
Chairman of the Management Board of Sparkasse Hegau-Bodensee, Singen

Dr. Jürgen Fox
Chairman of the Management Board of Saalesparkasse, Halle (Saale)

Stefan Gratzfeld
Chairman of the Management Board of Sparkasse Celle-Gifhorn-Wolfsburg, Gifhorn

Markus Hacke
Deputy Chairman of the Management Board of Sparkasse an Volme und Ruhr, 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 2023)

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 2023)

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.

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.

Fund assets (according to BVI)
Fund assets according to BVI comprise the fund assets of the mutual and special funds, funds of funds, and 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) of the German Banking Act (Kreditwesengesetz), 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.

Return on equity (RoE)
Return on equity before tax at the Deka Group is calculated as the return on balance sheet equity. The annualised economic result is expressed relative to the average balance sheet equity excluding Additional Tier 1 (AT1) capital and adjusted for intangible assets. Average balance sheet equity is calculated based on the capital at the previous year-end and the last quarterly financial statements.
At business division level, return on equity before tax is calculated as regulatory return on equity. This involves expressing the annualised economic result (before income distribution of the Treasury function) relative to the average regulatory capital employed. The average is calculated using monthly risk-weighted assets multiplied by 13% (the strategic target for regulatory capital employed), starting with the figure at the previous year-end.

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 relevant maturity bands for periods of up to 20 years.

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 partners, third-party funds and liquidity, master funds and advisory/management mandates and Deka certificates.

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
Lyoner Straße 13
60528 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
Lyoner Straße 13
60528 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
Lyoner Straße 13
60528 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
Lyoner Straße 13
60528 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 2022 Annual Report can be found at www.deka.de/deka-gruppe under the heading "Investor Relations/ Reports 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