UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 18-K

For Foreign Governments and Political Subdivisions Thereof

ANNUAL REPORT

of

KfW

(Name of Registrant)

Date of end of last fiscal year: December 31, 2023

SECURITIES REGISTERED
(As of the close of the fiscal year)*

TITLE OF ISSUE	AMOUNT AS TO WHICH REGISTRATION IS EFFECTIVE	NAMES OF EXCHANGES ON WHICH REGISTERED
N/A	N/A	N/A

* The registrant files annual reports on Form 18-K on a voluntary basis.

Name and address of person authorized to receive notices and communications from the Securities and Exchange Commission:

KRYSTIAN CZERNIECKI
Sullivan & Cromwell LLP
Neue Mainzer Strasse 52
60311 Frankfurt am Main, Germany

TABLE OF CONTENTS

EXPLANATORY NOTE	2
FORM 18-K	2
EXHIBIT INDEX	8
SIGNATURES	9

Union participating in the euro, including the Federal Republic. References to "U.S. dollars," "$" or "USD" are to United States dollars.

FORM 18-K

1. In respect of each issue of securities of KfW registered, a brief statement as to:

   (a) The general effect of any material modifications, not previously reported, of the rights of the holders of such securities.

   Not applicable.

   (b) The title and the material provisions of any law, decree or administrative action, not previously reported, by reason of which the security is not being serviced in accordance with the terms thereof.

   Not applicable.

   (c) The circumstances of any other failure, not previously reported, to pay principal, interest or any sinking fund or amortization installment.

   Not applicable.

KfW

2. A statement as of the close of the last fiscal year of KfW giving the total outstanding of:

   (a) Internal funded debt of KfW. (Total to be stated in the currency of the registrant. If any internal funded debt is payable in foreign currency, it should not be included under this paragraph (a), but under paragraph (b) of this item.)

   The total principal amount of internal funded debt of KfW, which is defined as euro denominated debt with an initial maturity of more than one year (bonds and other fixed-income securities, other borrowings, and subordinated liabilities), outstanding as of December 31, 2023, was EUR 320.27 billion.

   (b) External funded debt of KfW. (Totals to be stated in the respective currencies in which payable. No statement need be furnished as to intergovernmental debt.)

   For the principal amount of external funded debt of KfW, which is defined as non-euro denominated debt with an initial maturity of more than one year (bonds and other fixed-income securities, other borrowings, and subordinated liabilities), see "KfW—Business—Financial Markets—Funding—Financial-Market Funds—Capital-Market Funding—Information on Issuances of Funded Debt of KfW Group (as of December 31, 2023)," p. 37 of Exhibit (d), which is hereby incorporated by reference herein.

3. A statement giving the title, date of issue, date of maturity, interest rate and amount outstanding, together with the currency or currencies in which payable, of each issue of funded debt of KfW outstanding as of the close of the last fiscal year of KfW.

   See "KfW—Business—Financial Markets—Funding—Financial-Market Funds—Capital-Market Funding—Information on Issuances of Funded Debt of KfW Group (as of December 31, 2023)," p. 37 of Exhibit (d), which is hereby incorporated by reference herein.

4. (a) As to each issue of securities of KfW which is registered, there should be furnished a breakdown of the total amount outstanding, as shown in Item 3, into the following:

   (1) Total amount held by or for the account of KfW.

Not applicable.

(b) If a substantial amount is set forth in answer to paragraph (a) (1) above, describe briefly the method employed by KfW to reacquire such securities.

Not applicable.

5. A statement as of the close of the last fiscal year of KfW giving the estimated total of:

(a) Internal floating indebtedness of KfW. (Total to be stated in the currency of the registrant.) The total principal amount of internal floating indebtedness of KfW, which is defined as euro denominated debt with an initial maturity of one year or less (short-term funds), outstanding as of December 31, 2023, was EUR 13.3 billion.

(b) External floating indebtedness of KfW. (Total to be stated in the respective currencies in which payable.) The principal amount of external floating indebtedness of KfW, which is defined as non-euro denominated debt with an initial maturity of one year or less (short-term funds), outstanding as of December 31, 2023, was:

Currency	Principal amount outstanding in currency	Equivalent in euro with conversion rate as of December 31, 2023
CHF	143,000,000.00	154,427,645.79
AUD	96,500,000.00	59,337,145.67
USD	27,391,700,000.00	24,788,868,778.27
GBP	2,754,800,000.00	3,169,898,164.66
CNY	3,555,000,000.00	452,814,327.02
HKD	4,290,000,000.00	497,022,499.25
PLN	150,000,000.00	34,566,194.26
Total		**29,156,934,754.92**

6. Statements of the receipts, classified by source, and of the expenditures, classified by purpose, of KfW for each fiscal year of KfW ended since the close of the latest fiscal year for which such information was previously reported. These statements should be so itemized as to be reasonably informative and should cover both ordinary and extraordinary receipts and expenditures; there should be indicated separately, if practicable, the amount of receipts pledged or otherwise specifically allocated to any issue registered, indicating the issue.

See “Combined management report—Economic report—Development of the KfW Group earnings position,” “Consolidated financial statements—Consolidated statement of comprehensive income,” “Consolidated financial statements—Notes—Accounting Policies,” and “Consolidated financial statements—Notes—Notes to the statement of comprehensive income,” pp. 17 to 21, 62, 68 to 91 and 92 to 103 of Exhibit (e), which are hereby incorporated by reference herein.

7. (a) If any foreign exchange control, not previously reported, has been established by the Federal Republic, briefly describe the effect of any such action, not previously reported.

No foreign exchange control not previously reported was established by the government of the Federal Republic during 2023.

(b) If any foreign exchange control previously reported has been discontinued or materially modified, briefly describe the effect of any such action, not previously reported.

No foreign exchange control previously reported was discontinued or materially modified by the government of the Federal Republic during 2023.

10. The balances of international payments of KfW for each year ended since the close of the latest year for which such information was previously reported. The statements of such balances should conform, if possible, to the nomenclature and form used in the “Statistical Handbook of the League of Nations.” (These statements need to be furnished only if KfW has published balances of international payments.)

Not applicable.

Federal Republic of Germany

2. A statement as of December 31, 2023 giving the total outstanding of:

(a) Internal funded debt of the Federal Republic. (Total to be stated in the currency of the Federal Republic. If any internal funded debt is payable in foreign currency, it should not be included under this paragraph (a), but under paragraph (b) of this item.)

The total amount of internal funded indebtedness of the Federal Republic, which is defined as euro denominated debt with an initial maturity of one year or more, outstanding as of December 31, 2023 was EUR 1,504.27 billion *(Source: Open-Data-Portal of the Federal Ministry of Finance https://www.bundesfinanzministerium.de/Datenportal/Daten/offene-daten/haushalt-oeffentliche-finanzen/Zeitreihe-Schuldenstand-Bruttokreditbedarf-Zinsen-Tilgung-ab1996/Zeitreihe-Schuldenstand-Tilgung-ab1996.html).*

For further information on the principal amount of the outstanding direct debt of the Federal Republic, see “The Federal Republic of Germany—Tables and Supplementary Information—I. Direct Debt of the Federal Government—Summary of the Principal Amount of the Outstanding Direct Debt of the Federal Government”, p. G-47 of Exhibit (d), which is hereby incorporated by reference herein.

(b) External funded debt of the Federal Republic. (Totals to be stated in the respective currencies in which payable. No statement need be furnished as to intergovernmental debt.)

None.

3. A statement giving the title, date of issue, date of maturity, interest rate and amount outstanding, together with the currency or currencies in which payable, of each issue of funded debt of the Federal Republic outstanding as of the close of the last fiscal year of the Federal Republic.

See “The Federal Republic of Germany—Tables and Supplementary Information—I. Direct Debt of the Federal Government”, pp. G-47 to G-50 of Exhibit (d), which are hereby incorporated by reference herein.

4. (a) As to each issue of securities of the Federal Republic which is registered, there should be furnished a breakdown of the total amount outstanding, as shown in Item 3, into the following:

(1) Total amount held by or for the account of the Federal Republic.

Not applicable.

(2) Total estimated amount held by nationals of the Federal Republic; this estimate need be furnished only if it is practicable to do so.

5. A statement as of the close of the last fiscal year of the Federal Republic giving the estimated total of:

(a) Internal floating indebtedness of the Federal Republic. (Total to be stated in the currency of the Federal Republic.)

The total amount of internal floating indebtedness of the Federal Republic, which is defined as euro denominated debt with an initial maturity of less than one year, outstanding as of December 31, 2023 was EUR 135.5 billion *(Source: Open-Data-Portal of the Federal Ministry of Finance https://www.bundesfinanzministerium.de/Datenportal/Daten/offene-daten/haushalt-oeffentliche-finanzen/Zeitreihe-Schuldenstand-Bruttokreditbedarf-Zinsen-Tilgung-ab1996/Zeitreihe-Schuldenstand-Tilgung-ab1996.html).*

(b) External floating indebtedness of the Federal Republic. (Total to be stated in the respective currencies in which payable.)

None.

6. Statements of the receipts, classified by source, and of the expenditures, classified by purpose, of the Federal Republic for each fiscal year of the Federal Republic ended since the close of the latest fiscal year for which such information was previously reported. These statements should be so itemized as to be reasonably informative and should cover both ordinary and extraordinary receipts and expenditures; there should be indicated separately, if practicable, the amount of receipts pledged or otherwise specifically allocated to any issue registered, indicating the issue.

See “The Federal Republic of Germany—Public Finance”, pp. G-39 et seq. of Exhibit (d), which are hereby incorporated by reference herein.

7. (a) If any foreign exchange control, not previously reported, has been established by the Federal Republic, briefly describe the effect of any such action, not previously reported.

No foreign exchange control not previously reported was established by the Federal Republic during 2023.

(b) If any foreign exchange control previously reported has been discontinued or materially modified, briefly describe the effect of any such action, not previously reported.

No foreign exchange control previously reported was discontinued or materially modified during 2023.

8. Brief statements as of a date reasonably close to the date of the filing of this report (indicating such date), in respect of the note issue and gold reserves of the central bank of issue of the Federal Republic, and of any further gold stocks held by the Federal Republic.

See “The Federal Republic of Germany—Monetary and Financial System—Official Foreign Exchange Reserves,” p. G-31 of Exhibit (d), which is hereby incorporated by reference herein.

9. Statements of imports and exports of merchandise for each year ended since the close of the latest year for which such information was previously reported. The statements should be reasonably itemized so far as practicable as to commodities and as to countries. They should be set forth in terms of value and of weight or quantity; if statistics have been established in terms of value, such will suffice.

Exhibit (e)	-	KfW Financial Information 2023.
Exhibit (f)	-	Consent of Deloitte GmbH Wirtschaftsprüfungsgesellschaft.
Exhibit (g)	-	Consent of the Federal Republic of Germany.

This annual report is filed subject to the Instructions for Form 18-K for Foreign Governments and Political Subdivisions thereof.

(g) Consent of the Federal Republic of Germany.

Title: Chief Executive Officer

By: /s/ BERND LOEWEN

Name: Bernd Loewen

Title: Member of the Executive Board

PRESENTATION OF FINANCIAL AND OTHER INFORMATION **3**
RECENT DEVELOPMENTS **4**
- KFW 4
  - KfW's Results for the Three Months Ended March 31, 2024 4
- THE FEDERAL REPUBLIC OF GERMANY 7
  - Overview of Key Economic Figures 7

KFW **11**
- GENERAL 11
  - Overview 11
  - Ownership 11
  - Legal Status 12
  - Relationship with the Federal Republic 12
  - Supervision and Regulation 13
  - Corporate Background 16
  - Sustainable Promotion 16
  - Financial Statements and Auditors 19
- BUSINESS 20
  - Introduction 20
  - Domestic Promotional Business 21
  - SME Bank & Private Clients 24
  - Customized Finance & Public Clients 26
  - KfW Capital 28
  - Export and Project Finance (KfW IPEX-Bank) 29
  - KfW Entwicklungsbank (KfW Development Bank) 33
  - DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH 35
  - Financial Markets 36
  - Strategic Shareholdings 42
- CAPITALIZATION 45
- MANAGEMENT AND EMPLOYEES 46
  - Executive Board 46
  - Board of Supervisory Directors 48
  - Employees 51

THE FEDERAL REPUBLIC OF GERMANY **G-1**
- GENERAL G-1
  - Area, Location and Population G-1
  - Government G-2
  - Political Parties G-3
  - International Organizations G-4
  - The European Union and European Integration G-4
  - Statistical Standards G-13
- THE ECONOMY G-15
  - Overview G-15
  - Key Economic Figures G-15
  - Economic Outlook G-16
  - General Economic Policy G-17
  - Gross Domestic Product G-19
  - Sectors of the Economy G-20
  - Employment and Labor G-21
  - Social Security, Social Protection, and Social Policy G-23
  - International Economic Relations G-24

Receipts and Expenditures G-39
Germany's General Government Deficit/Surplus and General Government Gross Debt G-40
Fiscal Outlook G-42
Tax Structure G-43
Government Participations G-45
Direct Debt of the Federal Government G-45
TABLES AND SUPPLEMENTARY INFORMATION G-47

Germany—General—The European Union and European Integration" for a discussion of the introduction of the euro.

Unless explicitly stated otherwise, financial information relating to KfW Group presented herein has been prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("IFRS").

Amounts in tables may not add up due to rounding differences.

On May 10, 2024, the euro foreign exchange reference rate as published by the European Central Bank was EUR 1.00 = U.S. dollar 1.0779 (EUR 0.9277 per U.S. dollar).

In this document, references to the "Federal Republic" and "Germany" are to the Federal Republic of Germany and references to the "Federal Government" are to the government of the Federal Republic of Germany. The terms "KfW Group" and "group" refer to KfW and its consolidated subsidiaries.

interim financial reporting. This information is not necessarily indicative of the figures of KfW Group for the full year ending December 31, 2024.

KfW Group's total assets decreased by 1.5%, or EUR 8.1 billion, from EUR 560.7 billion as of December 31, 2023 to EUR 552.6 billion as of March 31, 2024. KfW Group's operating result before valuation and promotional activities amounted to EUR 454 million for the three months ended March 31, 2024, compared to EUR 385 million for the corresponding period in 2023. The main driver for KfW Group's operating result before valuation and promotional activities during the three months ended March 31, 2024, was net interest income. KfW Group's operating result before valuation and promotional activities is before (i) risk provisions for lending business, (ii) net gains/losses from securities and investments, (iii) net gains/losses from hedge accounting and other financial instruments at fair value through profit or loss, and (iv) expenses relating to promotional activities. These valuation effects consisted mainly of the following:

- Income from risk provisions in an amount of EUR 108 million for the three months ended March 31, 2024, compared to income in an amount of EUR 5 million for the corresponding period in 2023;
- Positive effects in an amount of EUR 48 million as market values of securities and equity investments increased in the three months ended March 31, 2024, compared to positive effects of EUR 22 million for the corresponding period in 2023;
- Net gains in an amount of EUR 19 million for the three months ended March 31, 2024 due to fair value changes of derivatives used exclusively for hedging purposes in closed risk positions, compared to net gains in an amount of EUR 87 million for the corresponding period in 2023[1]; and
- Expenses relating to promotional activities in an amount of EUR 77 million for the three months ended March 31, 2024, compared to expenses in an amount of EUR 82 million for the corresponding period in 2023.

KfW Group's consolidated result for the three months ended March 31, 2024 amounted to a profit of EUR 461 million, compared to a profit of EUR 394 million for the corresponding period in 2023.

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1 KfW generally enters into derivative transactions to economically hedge interest and currency risks in connection with its financing and funding activities. Some economic hedging relationships entered into do not qualify for hedge accounting or the fair value option under IFRS. In these cases, only the fair value changes in the hedging instrument are recognized in the consolidated income statement as net gains/losses from other financial instruments at fair value through profit or loss, whereas fair value changes in the hedged instrument are not. As a result, the economic risk-mitigating effect of such hedging relationships is not reflected in the consolidated income statement.

SME Bank & Private Clients (*Mittelstandsbank & Private Kunden*)	9,028	10,316	-12
Customized Finance & Public Clients (*Individualfinanzierung & Öffentliche Kunden*)	1,615	21,566	-93
KfW Capital	43	878	-95
Export and Project Finance (KfW IPEX-Bank)	6,135	6,663	-8
KfW Entwicklungsbank	508	506	<1
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	228	110	107
Financial Markets	0	188	-100
Total Promotional Business Volume (1) (2)	**17,450**	**40,004**	**-56**

* Amounts in the table may not add up due to rounding differences.

(1) Total promotional business for the three months ended March 31, 2024, has been adjusted for commitments of EUR 107 million, compared to EUR 223 million for the corresponding period in 2023, made by KfW IPEX-Bank relating to export and project finance and refinanced under certain programs of SME Bank.

(2) Commitments represent the volume of funds committed for loans and other business transactions (with the exception of program-based global loans, RegioInnoGrowth loans and global funding facilities to *Landesförderinstitute*) in the relevant period, including amounts to be disbursed in future periods, and do not include amounts disbursed in the relevant period pursuant to commitments made in prior periods. In the case of program-based global loans, RegioInnoGrowth loans and global funding facilities to *Landesförderinstitute*, commitments represent the actual volume of funds disbursed in the relevant period.

KfW's total promotional business volume decreased to EUR 17.5 billion for the three months ended March 31, 2024, compared to EUR 40.0 billion for the corresponding period in 2023. Commitments in KfW's business sectors Customized Finance & Public Clients and KfW Capital GmbH & Co. KG ("KfW Capital") decreased significantly. Commitments in the business sectors SME Bank & Private Clients, Export and Project Finance and KfW Entwicklungsbank decreased as well, while commitments in the business sector DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH ("DEG") increased substantially. There were no commitments in Financial Markets.

Commitments in the SME Bank & Private Clients business sector amounted to EUR 9.0 billion for the three months ended March 31, 2024, compared to EUR 10.3 billion for the corresponding period in 2023. This slight decrease was attributable to lower commitments in SME Bank (EUR 3.0 billion compared to EUR 6.0 billion for the corresponding period in 2023) which were partially offset by higher commitments in the Private Clients segment. The decline in the volume of new commitments in SME Bank was primarily due to lower commitment volumes under renewable energy programs and the SME Climate Protection Facility.

Commitments in the business sector Customized Finance & Public Clients amounted to EUR 1.6 billion for the three months ended March 31, 2024, compared to EUR 21.6 billion for the corresponding period in 2023. This significant decrease was primarily driven by the decrease in loan commitments to companies in the energy sector compared to the corresponding period in 2023. In 2023, there was a particularly high volume of loan commitments to companies in the energy sector, which were made under special mandates by the Federal Government ("Federal Government") of the Federal Republic of Germany ("Federal Republic") against the background of rising energy prices and in consideration of their impact on the stability of relevant infrastructure in Germany, following Russia's invasion of Ukraine.

Commitments related to KfW Capital decreased to EUR 43 million for the three months ended March 31, 2024, compared to EUR 878 million for the corresponding period in 2023. This substantial decrease was mainly attributable to a one-off investment made by KfW in the first quarter of 2023 on a fiduciary basis for the Federal Government with governmental funds into the European Tech Champions Initiative through the "Future Fund" (*Zukunftsfonds*).

Commitments in KfW's Export and Project Finance business sector for the three months ended March 31, 2024 amounted to EUR 6.1 billion, compared to commitments of EUR 6.7 billion for the corresponding period in 2023. This decrease was primarily due to certain extraordinary, non-recurring transactions executed in the Industries and Commerce sector in 2023.

bond portfolio were reached, the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection and KfW agreed to terminate the mandate, which launched the green bond portfolio. The mandate expired at the end of December 2023. Existing green bonds will be held to maturity.

Sources of Funds

The volume of funding raised in the capital markets for the three months ended March 31, 2024 totaled EUR 35.6 billion, of which 53.9% was raised in euro, 33.5% in U.S. dollar and the remainder in four other currencies.

Capitalization and Indebtedness of KfW Group as of March 31, 2024*

	(EUR in millions)
Borrowings	
Short-term funds	21,556
Bonds and other fixed-income securities	429,413
Other borrowings	48,411
Total borrowings	499,379
Equity	
Paid-in subscribed capital (1)	3,300
Capital reserve	8,447
Reserve from the ERP Special Fund	1,191
Retained earnings	25,611
Revaluation reserve	-13
Total equity	38,536
Total capitalization	**537,915**

* Amounts in the table may not add up due to rounding differences.

(1) KfW's equity capital, 80% of which is held by the Federal Government and the remaining 20% by the Länder, amounted to EUR 3,750 million as of March 31, 2024, of which EUR 3,300 million has been paid in pro rata by the Federal Government and the Länder.

The capitalization of KfW Group as of March 31, 2024 is not necessarily indicative of its capitalization to be recorded as of December 31, 2024.

KfW Group's total equity as of March 31, 2024 was EUR 38,536 million, compared to EUR 38,073 million as of December 31, 2023. The increase, of EUR 463 million in total equity reflected:

(i) KfW Group's consolidated profit of EUR 461 million for the three months ended March 31, 2024; and

(ii) an increase of EUR 1 million of revaluation reserves due to valuation results recognized directly in equity relating to pensions and own credit risk.

In connection with the phase-in of the analogous application of banking supervisory law to KfW, the provisions of the EU Capital Requirements Regulation (Regulation EU No 575/2013, "CRR"), the German Banking Act (*Kreditwesengesetz*) and the German Solvency Regulation (*Solvabilitätsverordnung*), which require banks to have adequate own funds (*Eigenmittel*) for the conduct of their business, have become applicable to KfW by analogy with effect from January 1, 2016. In June 2017, KfW received the approval from the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) to calculate its regulatory capital requirements following the advanced internal ratings-based approach ("IRBA") for a large part of its portfolio as of June 30, 2017.

Based on the results for the three months ended March 31, 2024, KfW's total capital ratio amounted to 28.6% and its Tier 1 capital ratio according to Article 92 of the CRR amounted to 28.5%, in each case as of March 31, 2024 (not taking into account the interim profit of the year to date)[2]. The increase of the total capital ratio and the Tier 1 capital ratio compared to December 31, 2023, when the total capital ratio as well as the Tier 1 capital ratio amounted to 27.9%, was mainly due to the recognition of the profit of the second half of 2023.

2 According to Article 26(2) CRR.

(adjusted for price, seasonal and calendar effects) (1)

Reference period	Percentage change on the previous quarter	Percentage change on the same quarter in previous year
1st quarter 2023	0.3	0.1
2nd quarter 2023	-0.1	0.1
3rd quarter 2023	0.1	0.0
4th quarter 2023	-0.5	-0.2
1st quarter 2024	0.2	-0.2

(1) Adjustment for seasonal and calendar effects according to the Census X13 method.

Germany's gross domestic product ("GDP") increased by 0.2% in the first quarter of 2024 compared to the fourth quarter of 2023 after adjustment for price, seasonal and calendar effects, following a decrease at the end of 2023. This was mainly due to an increase in gross fixed capital formation in construction and in exports. By contrast, there was a decline in household final consumption expenditure.

Compared to the first quarter of 2023, price-adjusted GDP in the first quarter of 2024 decreased by 0.9%. The price and calendar adjusted GDP was 0.2% lower because there were 1.6 fewer working days than in the same period a year earlier.

In addition to calculating data for the first quarter of 2024, as usual the Federal Statistical Office also reviewed the results published earlier for 2023 and included new statistical information in the calculation of the results. This resulted in changes of up to 0.2 percentage points for the quarterly price adjusted GDP data published so far. The latest calculations show that economic performance in 2023 as a whole declined by a price adjusted 0.2% (previously: -0.3%), and economic growth stagnated after adjustment for price and calendar effects (revised: 0.0%, previously: -0.1%).

Source: Federal Statistical Office, Gross domestic product in the 1st quarter of 2024 up 0.2% on the previous quarter, press release of April 30, 2024 (https://www.destatis.de/EN/Press/2024/04/PE24_173_811.html).

May 2023	-0.1	6.1
June 2023	0.3	6.4
July 2023	0.3	6.2
August 2023	0.3	6.1
September 2023	0.3	4.5
October 2023	0.0	3.8
November 2023	-0.4	3.2
December 2023	0.1	3.7
January 2024	0.2	2.9
February 2024	0.4	2.5
March 2024	0.4	2.2

The inflation rate in Germany, measured as the year-on-year change in the consumer price index, amounted to 2.2% in March 2024, after 2.5% in February 2024 and 2.9% in January 2024. The inflation rate in March 2024 represented the lowest inflation rate since May 2021, when it also stood at 2.2%. Before May 2021, an even lower value was observed in April 2021 (+2.0%). According to the Federal Statistical Office, in March 2024, for the first time since February 2015, consumers paid less for food than a year earlier. The inflation rate excluding food and energy, often referred to as core inflation, was 3.3% in March 2024 compared to March 2023.

Energy prices in March 2024 decreased by 2.7% compared to March 2023 despite the discontinuation of the energy price brake and the introduction of a higher carbon price, both as of January 2024, which affected the price of fossil fuels such as motor fuels, heating oil and natural gas. Since the beginning of 2024, a year-on-year decrease in energy prices has therefore been consistently recorded (January 2024: -2.8%; February 2024: -2.4%), which had a downward effect on the rate of inflation.

Food prices decreased by 0.7% in March 2024 compared to March 2023, the first decrease since February 2015 (-0.2%). The increase in food prices has slowed since April 2023 and was already below the overall rate of inflation in February 2024. In particular, the prices of fresh vegetables (-20.1%) declined in the period from March 2023 to March 2024. Consumers also had to pay markedly less for dairy products compared to March 2023 (-5.5%), while fish, fish products and seafood were more expensive (+0.9%). In contrast, price increases of a variety of foodstuffs in March 2024 exceeded the overall rate of inflation, including the price of sugar, jam, honey and other confectionery (+8.4%), the price of fruit (+4.2%) and the price of bread and cereals (+3.0%). Year on year, a marked decline was recorded in the price of sunflower oil, rapeseed oil and the like (-21.7%), while olive oil prices saw a steep increase (+54.1%).

The prices of goods (total) increased by 1.0% in the period from March 2023 to March 2024, representing a lesser increase than overall inflation. In March 2024, the prices of non-durable consumer goods and durable consumer goods rose by 0.5% and 1.8%, respectively. Some goods registered above-average price increases, however, for example non-alcoholic beverages (+6.5%), alcoholic beverages and tobacco products (+5.2%) and passenger cars (+4.1%). In contrast, lower prices were observed, for example, for mobile phones (-5.3%) and information processing equipment (-5.5%).

The prices of services (total) increased by 3.7% in March 2024 compared to March 2023. A major factor contributing to the development of service prices was the 2.1% increase in net rents exclusive of heating expenses. The prices of a number of other services increased above average, among them, insurance services (+11.0%), services of social facilities (+7.8%) and catering services in restaurants, cafés and the like (+6.9%). In contrast, the Germany ticket for public transport, which has been available since May 2023, continued to have a dampening effect on the increase in service prices in March 2024. Consumers had to pay less for the combined tickets for rail, bus and the like (-23.3%) compared to March 2023.

(https://www.destatis.de/EN/Press/2024/04/PE24_169_611.html).

Unemployment Rate

UNEMPLOYMENT RATE

(percent of unemployed persons in the total labor force according to the International Labour Organization (ILO) definition) (1)

Reference period	Original percentages	Adjusted percentages (2)
March 2023	2.9	2.9
April 2023	3.1	2.9
May 2023	2.8	2.9
June 2023	3.0	3.0
July 2023	3.0	3.0
August 2023	3.2	3.0
September 2023	3.0	3.1
October 2023	3.2	3.1
November 2023	3.1	3.1
December 2023	2.9	3.1
January 2024	3.1	3.2
February 2024	3.5	3.2
March 2024	3.4	3.2

(1) The time series on unemployment are based on the German Labour Force Survey.

(2) Trend cycle component (X-13-ARIMA method using JDemetra+; calculation by Eurostat).

Compared to March 2023, the number of employed persons in March 2024 increased by approximately 100,000 or 0.2%. Compared to February 2024, the number of employed persons in March 2024 increased by approximately 8,000 or 0.0%, after adjustment for seasonal fluctuations.

In March 2024, the number of unemployed persons increased by approximately 233,000 or 18.1%, compared to March 2023. Adjusted for seasonal and irregular effects, the number of unemployed persons in March 2024 stood at 1.42 million, reflecting an increase of 7,000 or 0.5% compared to February 2024.

Sources: Federal Statistical Office, Rate of increase in employment continued to slow in March 2024, press release of April 30, 2024 (https://www.destatis.de/EN/Press/2024/04/PE24_171_132.html);
Federal Statistical Office, Genesis-Online Datenbank, Result 13231-0001, Unemployed persons, persons in employment, economically active population, unemployment rate: Germany, months, original and adjusted data (https://www-genesis.destatis.de/genesis/online?sequenz=tabelleErgebnis&selectionname=13231-0001&zeitscheiben=2&leerzeilen=false&language=en#abreadcrumb).

Current account	**57.7**	**37.9**

(1) Figures may not add up due to rounding.

Source: Deutsche Bundesbank, Balance of payments statistics, 11-04-2024, I. Major items of the balance of payments (https://www.bundesbank.de/resource/blob/914116/bab6740d6f03a824b27eba8a33c7b401/mL/2024-04-11-zahlungsbilanz-anlage-data.pdf).

Monetary Policy

On April 11, 2024, the Governing Council of the European Central Bank ("ECB") reaffirmed its decisions of January 25, 2024 and March 7, 2024, by deciding to keep the three key ECB interest rates unchanged at 4.50% (main refinancing operations), 4.75% (marginal lending facility) and 4.00% (deposit facility). Based on its assessment as of April 11, 2024, the Governing Council considers that the key ECB interest rates are at levels that are making a substantial contribution to the timely return of inflation to the medium-term target level of 2%.

On April 11, 2024, the Governing Council of the ECB also reiterated that the Asset Purchase Programme (APP) portfolio is declining at a measured and predictable pace, as the Eurosystem no longer reinvests the principal payments from maturing securities. The Governing Council stated that it intends to continue to reinvest, in full, the principal payments from maturing securities purchased under the Pandemic Emergency Purchase Programme (PEPP) during the first half of 2024. Over the second half of the year, it intends to reduce the PEPP portfolio by EUR 7.5 billion per month on average. The Governing Council intends to discontinue reinvestments under the PEPP at the end of 2024. It stated it will continue applying flexibility in reinvesting redemptions coming due in the PEPP portfolio, with a view to countering risks to the monetary policy transmission mechanism related to the COVID-19 pandemic.

Source: European Central Bank, Monetary policy decisions, press release of April 11, 2024 (https://www.ecb.europa.eu/press/pr/date/2024/html/ecb.mp240411~1345644915.en.html).

With total assets of EUR 560.7 billion as of December 31, 2023, including loans and advances of EUR 450.0 billion, KfW is Germany's flagship promotional bank and ranks among Germany's largest financial institutions. KfW's promotional business volume amounted to EUR 111.3 billion in 2023. For more information on KfW's promotional business volume, see the table "Promotional Business Volume by Business Sector" in "Business—Introduction."

KfW conducts its business in the following business sectors:

- SME Bank & Private Clients (*Mittelstandsbank & Private Kunden*): offers highly standardized products primarily for small and medium-sized enterprises ("SMEs"), business founders, start-ups, self-employed professionals and private individuals;
- Customized Finance & Public Clients (*Individualfinanzierung & Öffentliche Kunden*): provides individual financing solutions for municipal and social infrastructure, and offers corporate loans and project financing as well as customized financing for financial institutions and *Landesförderinstitute*;
- KfW Capital: KfW Capital invests in German and European venture capital and venture debt funds with the aim of improving access to capital for innovative, technology-oriented growth companies in Germany through professionally managed funds. KfW Capital is a legally independent entity wholly owned by KfW;
- Export and Project Finance: KfW IPEX-Bank GmbH ("KfW IPEX-Bank") offers customized financing for exports and project and corporate financing worldwide. KfW IPEX-Bank is a legally independent entity wholly owned by KfW;
- KfW Entwicklungsbank (KfW Development Bank) is responsible for KfW's public sector development cooperation activities;
- DEG – DEG finances private-sector investments in developing countries. DEG is a legally independent entity wholly owned by KfW; and
- Financial Markets: comprises KfW's treasury, funding, asset management and other capital markets-related activities.

In addition, KfW manages its direct and indirect strategic shareholdings, which include a number of investments made in companies pursuant to special mandates (*Zuweisungsgeschäfte*) by the Federal Government in accordance with article 2 paragraph 4 of the Law Concerning KfW (*Gesetz über die Kreditanstalt für Wiederaufbau*, or the "KfW Law"). For more information on KfW's business sectors and its strategic shareholdings, see "Business."

KfW's offices are located at Palmengartenstraße 5-9, 60325 Frankfurt am Main, Germany. KfW's telephone number is 011-49-69-74310. KfW also maintains branch offices in Berlin and Bonn, Germany, as well as a liaison office to the EU in Brussels, Belgium.

Ownership

The Federal Republic holds 80% of KfW's subscribed capital, and the German federal states (each, a "Land" and together, the "Länder") hold the remaining 20%. The KfW Law does not provide for shareholders' meetings; instead, the Board of Supervisory Directors assumes the responsibilities of a shareholders' meeting. For more information on the Board of Supervisory Directors, see "Management and Employees—Board of Supervisory Directors."

allows it to strengthen its equity base in order to support its promotional activities. KfW is prohibited under the KfW Law from distributing profits, which are instead allocated to statutory reserves and to separately reportable reserves. KfW is generally also prohibited under the KfW Law from taking deposits or engaging in the financial commission business.

Relationship with the Federal Republic

Guarantee of the Federal Republic

The KfW Law expressly provides that the Federal Republic guarantees all existing and future obligations of KfW in respect of money borrowed, bonds and notes issued and derivative transactions entered into by KfW, as well as obligations of third parties that are expressly guaranteed by KfW (KfW Law, article 1a). Under this statutory guarantee (the "Guarantee of the Federal Republic"), if KfW fails to make any payment of principal or interest or any other amount required to be paid with respect to securities issued by KfW, or if KfW fails to make any payment required to be made under KfW's guarantee when that payment is due and payable, the Federal Republic will be liable at all times for that payment as and when it becomes due and payable. The Federal Republic's obligation under the Guarantee of the Federal Republic ranks equally, without any preference, with all of its other present and future unsecured and unsubordinated indebtedness. Holders of securities issued by KfW or issued under KfW's guarantee may enforce this obligation directly against the Federal Republic without first having to take legal action against KfW. The Guarantee of the Federal Republic is strictly a matter of statutory law and is not evidenced by any contract or instrument. It may be subject to defenses available to KfW with respect to the obligations covered.

Institutional Liability (Anstaltslast)

KfW is a public law institution (*Anstalt des öffentlichen Rechts*). Accordingly, under the German administrative law principle of *Anstaltslast*, the Federal Republic, as the constituting body of KfW, has an obligation to safeguard KfW's economic basis. Under *Anstaltslast*, the Federal Republic must keep KfW in a position to pursue its operations and enable it, in the event of financial difficulties, through the allocation of funds or in some other appropriate manner, to meet its obligations when due. *Anstaltslast* is not a formal guarantee of KfW's obligations by the Federal Republic, and creditors of KfW do not have a direct claim against the Federal Republic. Nevertheless, the effect of this legal principle is that KfW's obligations, including the obligations to the holders of securities issued by it or issued under KfW's guarantee, are fully backed by the credit of the Federal Republic. The obligation of the Federal Republic under *Anstaltslast* would constitute a charge on public funds that, as a legally established obligation, would be payable without the need for any appropriation or any other action by the German Parliament.

Understanding with the European Commission

In order to clarify that the Federal Republic's responsibility for KfW's obligations was and is compatible with EU law prohibitions against state aid, the German Federal Ministry of Finance and the European Commissioner for Competition held discussions which were formalized in an understanding reached on March 1, 2002. In the understanding with the European Commission, it was agreed that, in respect of the promotional activities for which KfW is responsible, KfW will continue to benefit from *Anstaltslast* and the Guarantee of the Federal Republic. The understanding acknowledged that KfW's role in providing financing for, in particular, SMEs, risk capital, environmental protection, technology/innovation, infrastructure and housing, as well as its cooperation with developing countries, is of a promotional nature and thus compatible with EU rules.

Organization for Economic Cooperation and Development ("OECD") consensus;

- participation in syndicated financing activities outside the EU, the European Economic Area and countries holding the status of official candidate for EU membership, subject to certain conditions, and sole financing activities in countries in which sufficient sources of financing do not exist; and
- participation in projects in the interest of the EU that are co-financed by the European Investment Bank or similar European financing institutions.

The European Commission transformed the understanding into a decision, which the Federal Republic formally accepted. In August 2003, a part of the Promotional Bank Restructuring Act (*Förderbankenneustrukturierungsgesetz*) implemented the understanding with the European Commission and amended the KfW Law accordingly.

On January 1, 2008, KfW IPEX-Bank, a limited liability company (*Gesellschaft mit beschränkter Haftung*) formed as a wholly owned subsidiary of KfW, commenced operations as a legally independent entity, thus satisfying the requirements set forth in the understanding with the European Commission. KfW IPEX-Bank conducts those export and project finance activities which the European Commission deemed to fall outside the scope of KfW's promotional activities directly and on its own behalf. For more information on KfW IPEX-Bank, see "Business—Export and Project Finance (KfW IPEX-Bank)."

Supervision and Regulation

Supervision

The Federal Ministry of Finance, acting in consultation with the Federal Ministry for Economic Affairs and Climate Action, exercises legal supervision (*Rechtsaufsicht*) over KfW, i.e., it supervises KfW's compliance with applicable laws and may adopt all necessary measures to ensure such compliance. Legal supervision primarily comprises supervision of compliance with the KfW Law and KfW's Bylaws, but also with all other applicable laws and regulations, except for certain provisions of bank regulatory law referenced in the following paragraph and described in "Regulation." The relevant Federal Ministers are represented on KfW's Board of Supervisory Directors, which supervises KfW's overall activities. See below "Management and Employees—Board of Supervisory Directors."

In addition to being subject to legal supervision by the Federal Ministries, in October 2013, KfW became subject to banking-specific supervision exercised by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, or "BaFin"). This supervision was established by a ministerial regulation (*KfW–Verordnung*, or "KfW Regulation"), which implements an amendment to the KfW Law that became effective in July 2013. The KfW Regulation, while maintaining KfW's general exemption from bank regulatory law, specifies those provisions of bank regulatory law which are to apply to KfW by analogy and assigns the supervision of compliance with these provisions to BaFin. In exercising its supervision, BaFin cooperates with the Deutsche Bundesbank in accordance with normal bank supervisory procedures. For further details, see "Supervision and Regulation—Regulation."

Regulation

Overview of KfW's Regulatory Status

KfW is generally exempt from bank regulatory laws and regulations, as it qualifies neither as a "credit institution" or "financial services institution" within the meaning of the German Banking Act (*Gesetz über das Kreditwesen*, or "KWG"), nor as a "credit institution" within the meaning of relevant EU directives and regulations, including in particular the EU Capital Requirements Directive (Directive 2013/36/EU, as amended) ("CRD") and the CRR. However, by operation of the KfW Regulation, which has been in effect since January 1, 2016, considerable portions of the KWG and the CRR, including relevant implementing rules and regulations, apply by analogy to KfW. The KfW Regulation takes into account KfW's special status as an entity not generally engaged in deposit taking, characterized by a low-risk profile in its lending business and benefiting from the Guarantee of the Federal Republic. It therefore provides for certain modifications and exceptions in connection with the analogous application of the relevant rules and regulations.

The analogous application of EU and national bank regulatory law imposed by the KfW Regulation is without prejudice to KfW's status as a "public sector entity" within the meaning of article 4 paragraph 1 no. 8 of the CRR. This status confers certain advantages to KfW's refinancing activities given the fact that exposures to public sector entities held by banks are privileged as to capital requirements, large exposures limitations and liquidity measurement under EU and national bank regulatory law. Securities issued by KfW, such as bonds and notes, are eligible in the EU as level 1 assets pursuant to article 10 paragraph 1 lit. (c) (v) of the Commission Delegated Regulation (EU) 2015/61 of October 10, 2014 ("Delegated Regulation"), subject to all other requirements stated in the Delegated Regulation being met.

Bank Regulatory Rules and Regulations Applied by Analogy

By operation of the KfW Regulation, bank regulatory requirements for corporate governance set forth in Sections 25c through 25d of the KWG apply to KfW by analogy. To comply with these requirements, certain adjustments were made to the committee structure of KfW's Board of Supervisory Directors in 2014. For more information on the committee structure of KfW's Board of Supervisory Directors, see "Management and Employees—Board of Supervisory Directors."

Since January 1, 2018, the bank regulatory requirements for remuneration policies set forth in Section 25a of the KWG and further specified in the German Remuneration Regulation for Credit Institutions (*Institutsvergütungsverordnung*, or "IVV") apply to KfW.

The capital adequacy regime set forth in part 2 titles I through III and part 3 titles I through VI of the CRR has become applicable to KfW by analogy virtually in its entirety with effect from January 1, 2016, including the calculation of regulatory own funds and own funds requirements on a consolidated basis. KfW is also subject to the capital buffers regime introduced by CRD and transposed into national law in Sections 10c through 10i of the KWG. In June 2017, KfW received approval from BaFin to calculate its regulatory capital requirements in accordance with the advanced IRBA for the vast majority of its portfolio as of June 30, 2017. KfW's total capital ratio according to article 92 of the CRR as well as its Tier 1 capital ratio amounted to 27.9% both as of December 31, 2023 (not taking into account the interim profit of the second half of 2023)[1]. The increase of the total capital ratio as well as of the Tier 1 capital ratio compared to the figures as of December 31, 2022, which amounted to 25.2% and 25.0%, respectively, was mainly due to the recognition of the profit of the second half of 2022 and the first half of 2023, as well as a reduced total risk exposure amount resulting from the changed recognition of stuctured funds due to the introduction of the risk-adequate standard approach for securitizations (SEC-SA) in accordance with CRR and rating improvements of banks.

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1 According to article 26(2) CRR.

2022.

As of January 1, 2016, KfW, by analogy, became subject to the large-exposures regime of part IV of the CRR as supplemented by the KWG and relevant implementing rules and regulations. Under this regime, exposures to any one client or group of connected clients are limited to 25% of eligible own funds and exposures exceeding 10% of eligible own funds are subject to special internal monitoring requirements and a reporting obligation to the German bank supervisory authorities.

In addition, KfW has been applying the provisions concerning leverage ratio with effect from January 1, 2016 by analogy. Under this regime, the ratio of KfW's Tier 1 capital to the carrying value of assets and off-balance sheet exposures is calculated on a consolidated basis. The leverage ratio is monitored internally and has been part of the prudential requirements since June 2021.

According to a decision made by BaFin in December 2015, certain provisions of the CRR such as own funds requirements, large exposures and leverage need only be considered at the group level (i.e., on a consolidated basis) and not at the entity level.

Although it was already subject to the German Anti-Money Laundering Act (*Geldwäschegesetz*), on January 1, 2016 KfW also became subject to the provisions of the KWG concerning money laundering, terrorist financing and other criminal offences at the group and entity levels.

Finally, the bank regulatory requirements for risk management systems set forth in the KWG and in the German Minimum Requirements for Risk Management (*Mindestanforderungen an das Risikomanagement*, or "MaRisk") became applicable to KfW by analogy with effect from January 1, 2016, and provide for sound systems for risk strategy planning, the implementation of risk management and financial and operational controls as well as requirements for credit decision-making processes. Certain exemptions are granted in this context for special mandates by the Federal Government (*Zuweisungsgeschäfte*) in accordance with article 2 paragraph 4 of the KfW Law, i.e., those activities which KfW carries out as requested by the Federal Government, usually at the Federal Republic's economic risk.

The KfW Regulation does not encompass the application of the liquidity regime set forth in the CRR and the KWG. On the same grounds, KfW is generally exempt from EU and national disclosure requirements and from the EU Bank Recovery and Resolution Directive (Directive 2014/59/EU).

Supervisory Structure and Enforcement Powers

The supervision of KfW's compliance with bank regulatory laws and regulations is assigned to BaFin in cooperation with Deutsche Bundesbank in accordance with BaFin's general risk-oriented supervisory review and evaluation process. In this context, Deutsche Bundesbank undertakes the ongoing audit and analysis of banks with regard to both their financial stability and the adequacy of their internal governance and risk-management systems. Deutsche Bundesbank receives and preprocesses relevant data, while final decision-making and the exercise of enforcement powers are reserved for BaFin.

in the national and EU bank supervisory structure that have taken effect in recent years. In particular, KfW is not subject to supervision by the ECB pursuant to Council Regulation (EU) No. 1024/2013 establishing the European Single Supervisory Mechanism ("SSM"). KfW IPEX-Bank was included in the ECB's comprehensive assessment of large banks conducted in 2014 in cooperation with national supervisory authorities of member states participating in the SSM. According to a decision made by the ECB in September 2014, KfW IPEX-Bank did not qualify as a significant credit institution and to date it has not been qualified as such in connection with subsequent annual reviews of large German financial institutions conducted by the ECB. Accordingly, KfW IPEX-Bank is currently not supervised directly by the ECB, but continues to be supervised by BaFin in cooperation with Deutsche Bundesbank. Given the fact that as of December 31, 2023, KfW IPEX-Bank's total assets (IFRS, before consolidation) amounted to EUR 32.8 billion, KfW IPEX-Bank may be qualified as a significant credit institution in the near future, which could lead to direct supervision by the ECB from as early as 2025 onwards. For more information on KfW IPEX-Bank, see "Business—Export and Project Finance (KfW IPEX-Bank)." For more information on the SSM, see "Federal Republic of Germany—Monetary and Financial System—Financial System—European Financial System—European System of Financial Supervision and European Banking Union."

Corporate Background

KfW was established in 1948 by the Administration of the Combined Economic Area, the immediate predecessor of the Federal Republic. Originally, KfW's purpose was to distribute and lend funds of the European Recovery Program (the "ERP"), which is also known as the Marshall Plan. Even today, several of KfW's programs to promote the German and European economies are supported using funds to subsidize interest rates from the so-called "ERP Special Fund." KfW has expanded and internationalized its operations over the past decades. In 1994, following the reunification of the Federal Republic and the former German Democratic Republic ("GDR"), KfW assumed the operations of the former central bank of the GDR (*Staatsbank*), which was located in Berlin, Germany.

In September 2001, KfW acquired DEG from the Federal Republic. DEG is a limited liability company that acts as the German development finance institution for the promotion of private enterprises in developing countries and emerging economies. For more information on DEG, see "Business—DEG—Deutsche Investitions- und Entwicklungsgesellschaft mbH."

In 2003, Deutsche Ausgleichsbank ("DtA"), which was based in Bonn, Germany, merged into KfW. DtA was formed in 1950 as a public law institution and promotional bank, and was particularly active in the area of lending to SMEs and start-up businesses. The merger was accomplished through the Promotional Bank Restructuring Act and was designed to restructure and simplify promotional banking in the Federal Republic and harmonize it with the understanding reached with the European Commission.

Sustainable Promotion

KfW Group has set sustainable promotion as its primary strategic objective and aims to improve economic, social and environmental conditions around the world, with an emphasis on promotion of the German economy. For more information on KfW's strategic objectives, see "Combined Management Report — Basic Information on KfW Group — Strategic Objectives 2028" included in Exhibit (e) to this annual report. Against this background, KfW supports the sustainability goals of the Federal Republic, the EU and the international community and is taking action to help implement the Federal Government's National Sustainable Development Strategy, to achieve the United Nations' Agenda 2030 objectives together with its Sustainable Development Goals ("SDGs") and to put the Paris Agreement into practice. In addition, the new "Policy Statement of KfW and its Subsidiaries on Human Rights and its Human Rights Strategy" from 2023, which replaces the previous "Declaration by KfW Bankengruppe on the consideration of human rights in its business operations" from 2008, reflects the crucial importance of human rights for all of KfW's activities. Apart from financing investments for a more sustainable economy, KfW, on its own initiative and in cooperation with other financial market participants, strives to set benchmarks and standards for credit and capital markets, to act as a driving force for national and international sustainability initiatives and to offer its expertise to political decision-makers in Germany, Europe and worldwide.

the environment" megatrend, KfW has been aiming to maintain an environmental ratio of at least 38% for its new commitments since 2020 as part of its strategic management system. In 2023, the environmental ratio was 35% (compared to 36% in 2022). KfW's environmental ratio reflects the percentage of KfW's loan commitments for activities in the fields of climate protection (such as renewable energy, energy-efficient projects, sustainable mobility or climate change adaptation) and the protection of resources and environment (such as waste avoidance, wastewater treatment, air pollution control or noise protection) in relation to KfW's overall new loan commitments for a certain period. To qualify for the calculation of the environmental ratio, the loan commitments taken into account also have to fulfill certain minimum requirements, for example, in terms of CO_2 or energy reductions to be achieved by the projects which are financed with these commitments. Adjusted for loan facilities related to the energy crisis, the environmental ratio was 45% (compared to 59% in 2022). For information on the loan facilities related to the energy crisis, see "Business—Domestic Promotional Business—KfW measures to mitigate the economic impact in Germany of Russia's invasion of Ukraine." The decline in the adjusted environmental ratio was mainly driven by a record volume of environmental financing in KfW's domestic business in 2022 due to the launch of newly designed programs. In addition, KfW is committed to contributing to the achievement of each of the 17 SDGs, which are part of the United Nations' Agenda 2030 for Sustainable Development, under its promotional and financing mandate. To create transparency, KfW has developed a group-wide reporting method by mapping new commitments to the SDGs. While new commitments in 2023 contributed to all 17 SDGs, the most significant contributions were made to SDG 8 "Decent Work and Economic Growth", SDG 7 "Affordable and Clean Energy" and SDG 13 "Climate Action."

In terms of customers, important target groups for KfW's activities include Germany's small- and medium-sized enterprises, private households, municipalities, developing countries, as well as export and project finance borrowers. KfW takes ecological and social factors into account in every financing decision based on specific sustainability guidelines, which are in place for all its business sectors. In the case of promotional and project financing in developing countries and emerging economies, as well as in all export and project finance activities around the world, KfW regularly applies internationally recognized environmental and social standards (Environmental and Social Impact Assessment). KfW refuses to fund projects that could conceivably cause unacceptable environmental or social harm, and the group-wide Exclusion List of KfW Group applies to all new financing and promotional activities. In 2021, KfW introduced science-based sector guidelines in accordance with the targets of the Paris Climate Agreement as an additional element to steer KfW's new financing activities in particularly greenhouse-gas-intensive sectors. Initially, these Paris-compatible sector guidelines were aligned with the 1.65°C climate target. In 2022, KfW revised the sector guidelines to align with the 1.5°C climate target with the aim of providing even more targeted support for the transformation process towards greenhouse gas neutrality. The revised sector guidelines covering the sectors automotive, iron and steel production, building, power generation, aviation and shipping were implemented at the beginning of 2023. In December 2023, KfW introduced an additional sector guideline for the oil and gas sector.

KfW's Sustainability Report 2023, which was published in April 2024, complies with the Core option of the Global Reporting Initiative (GRI) standards and also contains KfW Group's non-financial report in accordance with the German Commercial Code (*Handelsgesetzbuch*). Based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the report includes a special chapter outlining KfW's climate-related risks and associated processes in a transparent manner. KfW is preparing to publish a report in accordance with the Corporate Sustainability Reporting Directive (CSRD, Directive (EU) 2022/2464) for fiscal year 2024 in 2025.

Banking Operations

The regulatory framework applicable to KfW's activities explicitly includes compliance with legal rules and regulations relating to environmental, social and economic matters, as well as the prevention of money laundering, terrorist financing, corruption, fraud, breaches of data protection, insider trading and embargo provisions. In addition, as a public law institution, KfW adheres to the principles of the Federal Government's Public Corporate Governance Code. Furthermore, KfW is a corporate member of Transparency International and DEG represents KfW Group in its capacity as a supporting member of the Extractive Industries Transparency Initiative. While adverse environmental impacts caused by KfW's banking operations are limited, KfW strives to reduce the ecological footprint of its banking operations and compensates the remaining greenhouse gas emissions of KfW Group by purchasing high-value Clean Development Mechanism (CDM) credits on the market and discontinuing them for perpetuity. Among other matters, KfW's procurement guidelines require that suppliers and potential subcontractors comply with the prohibition of child and forced labor and afford protection against inhumane working conditions. Within the scope of possibilities provided by public procurement law, KfW includes social and ecological requirements in its contract conditions for Europe-wide tenders.

Sustainability Management System and Sustainability Communications

KfW's sustainability management system establishes responsibilities and procedures to further develop sustainability matters within KfW Group. Overall responsibility for the group's sustainability strategy and communication rests with KfW's Chief Executive Officer who is supported by sustainability officers and managers at the group, business sector, central unit and site levels. Specific sustainability guidelines for the business sectors and relevant central units set out detailed rules.

To ensure continuous progress of the group-wide sustainability commitment, beginning in 2023, KfW's strategic objectives have included as one of its key targets its ranking among the top three development and promotional banks within a peer group, which comprises the top 10 rated development and promotional banks across the peer groups of each of three ESG Rating agencies (ISS, MSCI & Sustainalytics). For these purposes, KfW standardizes the scores achieved by itself and its peers in the rating processes performed by each of the relevant ESG rating agencies. KfW then uses the standardized scores to calculate an average score for itself and each peer, which determines its own ranking in relation to these peers.

KfW regularly interacts openly with its stakeholders about aspects of its business activity related to sustainability with a view to refining its own sustainability goals and enabling stakeholders to address relevant topics. In this context, KfW's Sustainability Report, which also fulfills statutory requirements, and KfW's Sustainability Portal are important communication channels.

examined by a *Wirtschaftsprüfer* (Certified Public Accountant) who is appointed by the Federal Minister of Finance at the proposal of the Board of Supervisory Directors in consultation with the Federal Court of Auditors (*Bundesrechnungshof*). KfW's external auditor for the fiscal year ended December 31, 2023 is Deloitte GmbH Wirtschaftsprüfungsgesellschaft ("Deloitte").

The annual audit is conducted in accordance with German Generally Accepted Auditing Standards.

The auditor's report of Deloitte for the fiscal year ended December 31, 2023, dated March 6, 2024, refers to a combined management report (*zusammengefasster Lagebericht*). The examination of, and the auditor's report upon, this combined management report are required under German generally accepted accounting principles. This examination was not made in accordance with U.S. generally accepted auditing standards ("U.S. GAAS") or U.S. attestation standards. Therefore, Deloitte does not provide any opinion on such examination, on the combined management report or on the financial statements included in Exhibit (e) to this annual report in accordance with U.S. GAAS or U.S. attestation standards. A reprint of the auditor's report can be found starting on page 180 of Exhibit (e) to this annual report.

- Export and Project Finance (KfW IPEX-Bank);
- KfW Entwicklungsbank (KfW Development Bank);
- DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH; and
- Financial Markets.

The following table sets forth the relative size of each of the business sectors in terms of commitments for each of the years indicated.

PROMOTIONAL BUSINESS VOLUME BY BUSINESS SECTOR

	Year ended December 31, 2023	2022	Year-to-Year % change
	(EUR in millions)		(in %)
SME Bank & Private Clients (Mittelstandsbank & Private Kunden)	39,117	64,839	-40
Customized Finance & Public Clients (Individualfinanzierung & Öffentliche Kunden)	35,852	69,970	-49
KfW Capital	2,129	1,259	69
Export and project finance (KfW IPEX-Bank)	24,152	18,120	33
KfW Entwicklungsbank (KfW Development Bank)	9,040	10,931	-17
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	1,869	1,644	14
Financial markets	480	415	16
Total promotional business volume (1) (2)	**111,312**	**166,938**	**-33**

(1) Total promotional business volume for the full year ended December 31, 2023 has been adjusted for commitments of EUR 1.3 billion, compared to EUR 241 million for the corresponding period in 2022, made by KfW IPEX-Bank relating to export and project finance and refinanced under certain promotional programs of SME Bank.

(2) Commitments represent the volume of funds committed for loans and other business transactions (with the exception of global funding facilities and program-based global loans to *Landesförderinstitute*) in the relevant period, including amounts to be disbursed in future periods, and do not include amounts disbursed in the relevant period pursuant to commitments made in prior periods. In the case of global funding facilities and program-based global loans to the *Landesförderinstitute*, commitments represent the actual volume of funds disbursed in the relevant period.

The following table shows the relative size of each of the seven business sectors in terms of percentage of commitments outstanding and economic capital required as of December 31, 2023. In general, a lower percentage in economic capital required compared to the percentage of commitments outstanding illustrates a below average risk associated therewith. The percentage of economic capital required of the business sector Financial Markets also includes the economic capital required for treasury activities.

KfW Entwicklungsbank	7%	3%
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	2%	8%
Financial Markets	10%	8%
Total (in EUR billions)	**640.1**	**19.0**

(1) The balance of economic capital required relates to group functions. The economic capital required has been calculated based on a solvency level of 99.90%. For more information concerning economic capital required of KfW Group, see "Combined management report—Risk report—Risk management approach of KfW Group (overview)—Internal capital adequacy assessment process—Economic risk-bearing capacity" included in Exhibit (e) to this annual report.

Domestic Promotional Business

General

To support the economic and policy objectives of the Federal Government, KfW offers a broad range of financing programs in Germany and, to a limited extent, elsewhere in Europe, as well as grants funded from the federal budget for domestic promotional purposes. KfW's main domestic finance activities are conducted by the business sectors SME Bank & Private Clients, Customized Finance & Public Clients, and by KfW Capital. Certain further promotional activities undertaken in connection with KfW's green bond portfolio and ABS portfolio targeting the domestic market are reported under the Financial Markets business sector.

Under the KfW Law, KfW must generally involve banks or other financing institutions when granting financing. Therefore, KfW involves commercial banks in the handling of its loans by extending loans to commercial banks, which, in turn, on-lend the funds to the ultimate borrowers. To a limited extent, however, KfW is allowed to grant financing directly to ultimate borrowers (e.g., for the financing of municipalities). By lending to commercial banks, KfW, in principle, insulates itself from credit exposure to ultimate borrowers and gains the benefit of the commercial banks' knowledge of their customers as well as their administrative and servicing expertise. KfW monitors its exposures to, and the credit standing of, each bank or other financing institution to which it lends. As of December 31, 2023, KfW had extended loans to approximately 150 commercial banks in its domestic business sectors. In 2023, 60% (2022: 62%) of KfW's total interbank exposure (exposure at default) was attributable to KfW's ten largest banking group counterparties. Most of this exposure relates to KfW's on-lending business, while the portion deriving from other business transactions – including derivatives, securities, money market and global loan transactions – is much more limited.

KfW offers two different models for processing KfW loans to commercial banks. KfW's traditional and most important model for handling its lending business is based on individual loan applications by each borrower within the framework of specified loan or mezzanine capital instruments. Under the other model, KfW extends global funding facilities and program-based global loans to *Landesförderinstitute*, as well as non-program-based global loans to selected financial institutions in Germany and Europe.

Individual Loans

KfW defines detailed formal eligibility requirements for each individual loan that it extends to a commercial bank, as well as for each loan the commercial bank on-lends to the ultimate borrower under each of KfW's lending programs. Borrowers generally do not apply directly to KfW for a loan, but rather may only apply for a KfW loan through a commercial bank. This intermediate bank appraises the financial and business situation of the applicant, takes collateral for the loan and assumes liability for repayment to KfW. KfW loans on-lent by commercial banks are normally collateralized by liens on real property or other assets, or are guaranteed by the Federal Republic or by one of the Länder. The processing of individual loans within KfW's lending programs is characterized by two formally separate loan approvals – first by the intermediate bank and then by KfW. KfW's loan approval, however, in most cases depends solely on a review of the individual loan application in order to assess compliance with the requirements defined for each respective lending program.

KfW. This fixed-rate pricing model is applied to housing investment and some lending programs for start-up financing. It is also applied to education lending programs. Under the risk-adjusted pricing model, KfW establishes pricing categories based on a combination of the borrower's creditworthiness and the collateral securing the loan. Under each lending program, KfW sets maximum interest rates for each pricing category. The on-lending banks assess the risk profile of the ultimate borrower and the collateral securing the loan to determine the applicable pricing category for each loan and the applicable maximum interest rate for the pricing category. KfW's role in the pricing process is limited to verifying that banks derive the appropriate maximum interest rate from the ultimate borrower's creditworthiness and the collateral provided.

Under KfW's traditional SME lending programs, the on-lending banks are liable to KfW and bear the risk of customer default as described above. In recent years, KfW has constantly been reworking and renewing its SME financing programs to increase its support for SMEs. Under some of those lending programs, to which the risk-adjusted pricing model applies, KfW offers the option of a partial exemption from liability to on-lending banks. If the on-lending bank applies for an exemption from liability, KfW bears the risk not retained by the bank and the risk margin is shared pro rata between KfW and the bank. The risk-adjusted pricing model applies to most of SME Bank & Private Clients lending programs. In addition, mezzanine capital offered by SME Bank & Private Clients and its special programs for investments by micro-enterprises are designed so that KfW assumes direct exposure to the credit risk of the ultimate borrowers, which in turn is covered or compensated in different ways: by means of risk premiums included in the interest rate charged to the ultimate borrowers, or by means of guarantees from the Federal Government or the European Investment Fund.

Global Loans and Global Funding Facilities

Global loans and global funding facilities differ from KfW's individual loans primarily in terms of simplified processing, the lack of a requirement for formal loan approval by KfW with respect to each individual ultimate borrower and, in general, a higher degree of flexibility for the on-lending *Landesförderinstitute* and selected financial institutions. KfW expects the receiving institutions to on-lend funds within a reasonable period of time. In contrast to KfW's individual loans, global loans and global funding facilities offer greater loan-structure flexibility. As a result, these instruments, when compared with KfW's traditional lending programs, carry lower administrative costs for both KfW and the on-lending institutions. Accordingly, ultimate borrowers generally benefit from favorable interest rates.

KfW offers different kinds of global loans and global funding facilities: program-based global loans and global funding facilities to *Landesförderinstitute* and non-program-based global loans to selected financial institutions in Germany and Europe. Most *Landesförderinstitute* are independent public law institutions and benefit from explicit statutory guarantees by the respective Land. Each *Landesförderinstitut* is responsible for promotional matters within its federal state.

Landesförderinstitute use KfW's program-based global loans to finance specified investments relating to SMEs, housing projects and municipal infrastructure projects in their respective Land within the framework of cooperative loan programs of the respective *Landesförderinstitut* and KfW. The conditions of each cooperative loan program are required to comply with the conditions of the relevant KfW program. The funds to *Landesförderinstitute* are generally extended in the form of lump sums, which are then broken down and granted to ultimate borrowers as individual loans.

to extend global loans which are designed to promote SME-leasing investments in sustainable and energy efficiency projects.

KfW Measures to Mitigate the Economic Impact in Germany of Russia's Invasion of Ukraine

While KfW's direct exposures in Ukraine and Russia are limited and tightly managed, developments related to Russia's invasion of Ukraine have affected KfW's business and earnings position. For information on the impact of Russia's invasion of Ukraine on KfW's net assets, financial and earnings position, see "Combined management report—Economic Report" in Exhibit (e) to this annual report.

Special Mandates by the Federal Government

Against the background of Russia's invasion of Ukraine, which led to further increases in energy prices and highlighted Germany's dependency on energy imports from Russia, the Federal Government requested that KfW engage in a number of activities under special mandates in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*) with full protection of KfW. These activities aim to stabilize and secure the energy supply in Germany, strengthen the resilience of Germany's economy and are thus in the public interest as required by the KfW Law. These activities are being carried out at the Federal Republic's economic risk.

KfW's activities under special mandates by the Federal Government are of an unplanned nature and do not change KfW's consistent strategic focus on sustainability targets in its banking business. They must therefore be clearly distinguished from KfW's promotional activities as a digital transformation and promotional bank of the Federal Government and the Länder. As of December 31, 2023, these activities, which were mainly conducted in 2022, in particular comprised support measures for systemically important companies in the energy sector that were significantly impacted by the supply reductions and significantly higher gas and electricity prices resulting from Russia's invasion of Ukraine. Debt financing has been committed for gas replacement purchases, to cover short-term liquidity requirements within the scope of "margining" (i.e., the provision of collateral that is mandatory when trading in energy) and to finance the procurement of natural gas for the fulfilment of certain statutorily required levels of natural gas reserves in natural gas storage facilities throughout Germany. As of December 31, 2022, these activities by KfW had led to commitments of EUR 54.2 billion and disbursements to EUR 22.4 billion, whereas as of December 31, 2023, commitments and disbursements had declined signficantly to EUR 11.5 billion and EUR 8.4 billion, respectively. KfW has also been mandated to engage in equity financing, see "Strategic Shareholdings—KfW's Shareholdings Pursuant to Special Mandates of the Federal Government—German LNG Terminal GmbH" below.

Furthermore, at the end of 2022, the Federal Government mandated KfW to act as paying agent in connection with compensatory payments to utility companies for loss of revenues owed to such companies by the Federal Government in connection with government support measures aimed at reducing the burden of high energy costs for end consumers of natural gas and district heating. KfW's role in making the compensatory payments is strictly limited to the payments' disbursement, with the Federal Government providing KfW with the funds necessary to make such payments in advance. Commitments in this context amounted to EUR 4.1 billion in 2022 and EUR 13.7 billion in 2023.

In the aggregate, activities under special mandates by the Federal Government due to Russia's invasion of Ukraine have led to commitments in an aggregate amount of EUR 58.3 billion in 2022 and, in particular, impacted KfW's commitments in the business sector Customized Finance & Public Clients, which increased from EUR 9.5 billion in 2021 to EUR 70.0 billion in 2022. This effect was less pronounced in 2023, when these activities amounted to commitments in an aggregate amount of EUR 25.2 billion, which resulted in a decline in KfW's commitments in the business sector Customized Finance & Public Clients from EUR 70.0 billion in 2022 to EUR 35.9 billion in 2023.

ensured by the Federal Finance Agency, as part of the Federal Government's established money and capital market approach to financing the Federal Budget, and the Federal Government's special funds.

Depending on further developments with respect to Russia's invasion of Ukraine, the Federal Government may in principle request KfW to engage in further activities under special mandates at any time.

KfW Special Program UBR 2022

In May 2022, KfW launched a loan program known as the "KfW Special Program UBR 2022" (*KfW-Sonderprogramm UBR 2022*, with "UBR" standing for "Ukraine, Belarus and Russia") in an aggregate amount of up to EUR 7.0 billion to swiftly safeguard the liquidity of certain companies demonstrably affected by the war in Ukraine. Mostly privately owned companies of all sizes and from many different sectors were able to receive access to low-interest loans in an amount of up to EUR 100 million with extensive liability exemption of their regular banks. A syndicate financing alternative with substantial risk assumption was also offered. The Federal Republic has undertaken to bear all financial risks incurred by KfW in connection with the KfW Special Program UBR 2022. Commitments made under the KfW Special Program UBR 2022 in 2023 amounted to EUR 91 million compared to EUR 148 million. As planned, the program expired at the end of 2023.

SME Bank & Private Clients

KfW's SME Bank & Private Clients business sector supports SMEs, large-scale enterprises, business founders, start-ups and self-employed professionals, and offers financing for various purposes to companies in different stages of development. Additionally, this business sector extends housing-related loans and grants as well as financing for education to private individuals. Financing is provided primarily by means of loan programs (2023: EUR 38.7 billion, 2022: EUR 45.5 billion), mezzanine programs (2023: EUR 11 million, 2022: EUR 133 million) and grant-based programs (2023: EUR 375 million, 2022: EUR 19.2 million).

In 2023, SME Bank & Private Clients committed financing to improve social living conditions and to support the German economy in an amount of EUR 39.1 billion (2022: EUR 64.8 billion). The following table shows commitments by fields of promotional activity for each of the years indicated.

SME BANK & PRIVATE CLIENTS COMMITMENTS

	Year ended December 31,		Year-to-Year
	2023	2022	% change
	(EUR in billions)		(in %)
SME Bank	**20.4**	**33.1**	*-38*
Start-up financing and general investment	7.7	11.6	*-34*
Innovation	1.5	1.9	*-24*
Environmental investment	11.2	19.5	*-42*
Private Clients	**18.8**	**31.8**	*-41*
Housing investment programs	4.6	4.1	*13*
Education programs	1.9	1.9	*-1*
Environmental investment	12.3	25.8	*-52*
Total commitments (1)	**39.1**	**64.8**	***-40***

(1) Commitments represent the volume of funds committed for loans and other business transactions (with the exception of program-based global loans to *Landesförderinstitute*) in the relevant year, including amounts to be disbursed in future years, and do not include amounts disbursed in the relevant year pursuant to commitments made in prior years. In the case of program-based global loans to the *Landesförderinstitute*, commitments represent the actual volume of funds disbursed in the relevant period.

SME Bank

According to a representative KfW survey in the German SME sector, known as KfW SME Panel, Germany had an estimated 3.8 million SMEs (defined for the purposes of the survey as companies with an annual group turnover of up to EUR 500 million) in 2022.

SME Bank primarily offers loan programs. Under some loan programs, SME Bank offers a partial exemption from liability to on-lending banks. If an on-lending bank applies for an exemption from liability, KfW bears the risk not retained by the bank and the risk margin is shared pro rata between KfW and the bank.

SME Bank also extends mezzanine capital in the form of unsecured subordinated loans, which contain equity-like elements, combining characteristics of debt and equity capital. In these financings, on-lending banks are not liable to SME Bank for the subordinated loans. The interest rate of these loans takes into account the prevailing rates in the capital markets as well as the borrower's credit standing and collateral securing the loans. The borrower's creditworthiness is first assessed by the on-lending bank. However, as KfW assumes the credit risk of the loan, it reserves the right to review and, if necessary, to revise the on-lending bank's assessment by applying KfW's own rating standards.

Start-up Financing and General Investment Programs

SME Bank provides start-up financing and financial support for general investments for a wide range of purposes, such as investments in property and buildings, in plants or in machinery and equipment. In 2023, commitments in this field amounted to EUR 7.7 billion compared to EUR 11.6 billion in 2022. This was primarily due to a significantly reduced demand for financings extended under the KfW Special Program, for which the application deadline expired as of June 30, 2022.

Commitments under the KfW Special Program UBR 2022 amounted to EUR 91 million in 2023 compared to EUR 148 million in 2022 and related to low-interest loans, while no commitments were made with respect to the syndicate financing alternative also being offered.

Innovation Programs

SME Bank provides financing for innovations by extending funds for research, development, and digitalization activities, either by providing loans or mezzanine capital. Commitments in the field of innovation financing, with the ERP Promotion for Innovation and Digitalization program being the main contributor, amounted to EUR 1.5 billion in 2023 compared to EUR 1.9 billion in 2022.

Environmental Investment Programs

SME Bank finances environmental protection projects, in particular for measures aiming at increasing energy and resource efficiency, reducing greenhouse gas emissions, or intensifying the use of renewable energy sources. Commitments under SME Bank's environmental investment programs decreased significantly by EUR 8.3 billion to EUR 11.2 billion in 2023 compared to EUR 19.5 billion in 2022, with demand for renewable energy programs declining to EUR 5.5 billion in 2023 compared to EUR 7.1 billion in 2022. The decline in demand for renewable energy programs was mainly due to increased material costs, supply chain issues and a lack of funding opportunities due to the currently high ECB reference interest rate.

funds. Commitments in 2023 increased to EUR 4.6 billion from EUR 4.1 billion in 2022, of which EUR 4.2 billion (2022: EUR 3.1 billion) were granted for home ownership promotion programs.

Education Programs

Private Clients supports students and employees in higher education and advanced occupational training with direct loans. Some of these programs are covered by a credit guarantee of the Federal Government and Länder. In 2023, KfW's commitments remained stable at EUR 1.9 billion. Commitments under the KfW Student Loan Program amounted to EUR 0.3 billion in 2023 (2022: EUR 0.5 billion).

Environmental Investment Programs

The environmental investment programs registered a decrease in 2023 compared to 2022. The decrease was due to a reorganization of the promotion guidelines, mainly the inclusion of higher energy requirements and a greater emphasis being placed on greenhouse gas emissions in the lifecycle of buildings.

Customized Finance & Public Clients

KfW's Customized Finance & Public Clients (*Individualfinanzierung & Öffentliche Kunden*) business sector provides individual financing solutions for municipal and social infrastructure projects, offers corporate loans and project financing and grants global funding instruments to the *Landesförderinstitute* and other financial institutions.

The following table shows Customized Finance & Public Clients' commitments by field of promotional activity for each of the years indicated:

CUSTOMIZED FINANCE & PUBLIC CLIENTS COMMITMENTS

	Year ended December 31,		Year-to-Year
	2023	2022	% change
	(EUR in millions)		(in %)
Municipal infrastructure programs	18,805	11,192	*68*
Corporate loans and project finance	11,906	54,647	*-78*
Global funding facilities to *Landesförderinstitute* (1)	3,668	2,823	*30*
Program for the refinancing of export loans	774	307	*>100*
Global loans to selected financial institutions	700	1,000	*-30*
Total commitments (2)	**35,852**	**69,970**	***-49***

(1) Including global loans to Landesförderinstitute to support start ups and small enterprises, in 2022 as part of the COVID-19 measures and in 2023 through RIG loans.

(2) Commitments represent the volume of funds committed for loans and other business transactions (with the exception of global funding facilities and program-based global loans to *Landesförderinstitute*) in the relevant period, including amounts to be disbursed in future periods, and do not include amounts disbursed in the relevant period pursuant to commitments made in prior periods. In the case of global funding facilities and program-based global loans to the *Landesförderinstitute*, commitments represent the actual volume of funds disbursed in the relevant period.

Customized Finance & Public Clients provides financing for investments in municipal and social infrastructure, either as direct loans to municipalities (i.e., local and municipal authorities and municipal special-purpose associations) or through KfW's ordinary on-lending scheme involving commercial banks. The latter is used for infrastructure investments by private companies that are majority-owned by municipal authorities and social investments made by non-profit organizations. Some of the municipal infrastructure programs are subsidized by federal funds. In total, commitments for municipal infrastructure programs increased significantly by EUR 7.6 billion to EUR 18.8 billion in 2023 from EUR 11.2 billion in 2022. This increase was due to KfW's role as paying agent in the context of government support measures to mitigate high energy costs. For more information see, "Domestic Promotional Business—KfW measures to mitigate the economic impact in Germany of Russia's invasion of Ukraine—Special mandates by the Federal Government."

Global Loans and Global Funding Facilities

The following table shows Customized Finance & Public Clients' commitments designated to global loans and global funding facilities for each of the years indicated:

	Year ended December 31,		Year-to-Year
	2023	2022	% change
	(EUR in millions)		(in %)
Global funding facilities to *Landesförderinstitute* (1)	3,668	2,823	*30*
Program-based global loans to *Landesförderinstitute*	760	607	*27*
Non program-based global loans to selected financial institutions in Germany and Europe	700	1,000	*30*
Total commitments (2)	**5,128**	**4,430**	***16***

(1) Including global loans to *Landesförderinstitute* to support start-ups and small enterprises, in 2022 as part of the COVID-19 measures and in 2023 through RIG loans.

(2) Commitments represent the volume of funds committed for loans and other business transactions (with the exception of global funding facilities and program-based global loans to *Landesförderinstitute*) in the relevant period, including amounts to be disbursed in future periods, and do not include amounts disbursed in the relevant period pursuant to commitments made in prior periods. In the case of global funding facilities and program-based global loans to the *Landesförderinstitute*, commitments represent the actual volume of funds disbursed in the relevant period.

Customized Finance & Public Clients also grants global loans to selected financial institutions in Germany in order to refinance leasing contracts to SMEs, as well as to selected financial institutions in Europe in order to cooperate in the field of SME financing in Europe. The financial institutions in turn break down the global loans and extend individual loans and leases to SMEs. In 2023, global loans to selected financial institutions in Germany and Europe decreased to EUR 0.7 billion compared to EUR 1.0 billion in 2022. This amount is fully attributable to the refinancing of leasing contracts.

The increase in Global Funding Facilities to *Landesförderinstitute* was due to higher refinancing demands by *Landesförderinstitute,* driven by higher market volatility in light of increasing interest rates and less liquidity in capital due to the ECB's changed monetary policy and the run-down of the Eurosystem's targeted longer term refinancing operations (TLTROs).

Corporate Loans and Project Finance

Customized Finance & Public Clients provides corporate loans, project financing and some equity financing. Excluding commitments of EUR 11.5 billion in connection with the support of companies in the energy sector under special mandates by the Federal Government, KfW's commitments in corporate loans and project financing in 2023 were characterized by a normalized credit demand. The situation was similar to 2022, where commitments in connection with the support of companies in the energy sector under special mandates by the Federal Government were even higher, amounting to EUR 54.2 billion.

KfW Capital

KfW Capital, KfW's venture capital subsidiary, was incorporated as a legally independent entity on August 31, 2018. KfW Capital's general partner, KfW Capital Verwaltungs GmbH, is wholly-owned by KfW Capital and was incorporated on August 9, 2018. KfW acts as the limited partner and ultimately is the sole owner of KfW Capital. In the course of 2021, KfW Capital obtained a license as a Class 2 investment firm, i.e., a medium-sized investment firm (*Mittleres Wertpapierinstitut*) pursuant to the German Securities Institution Act (*Wertpapierinstitutsgesetz*, WpIG), the German law based on the EU Investment Firm Directive 2019/2034 (IFD) and Investment Firm Regulation 2019/2033 (IFR). As a medium-sized investment firm, KfW Capital is subject to this specific regulatory regime.

The business objective of KfW Capital is to invest in German and European venture capital and venture debt funds with the aim of improving access to capital for innovative technology-oriented growth companies in Germany through professionally managed funds with a minimum fund size of EUR 50 million. At present, KfW Capital only invests in funds and does not invest directly in companies. For the coming years, the targeted average investment volume is around EUR 400 million per year. KfW Capital intends to invest up to a maximum of EUR 75 million into a fund's capital and to acquire a maximum of 19.99% of a fund's capital and voting rights. Since 2021, KfW Capital has also been mandated on behalf of the Federal Government to promote future technologies through the "Future Fund" (*Zukunftsfonds*). Under the Future Fund, KfW Capital invests its own funds at its own risk ("Future Fund KfW Capital") as well as government funds on a fiduciary basis ("Future Fund Federal Republic").

Commitments related to KfW Capital amounted to EUR 2.1 billion in 2023, compared to EUR 1.3 billion in 2022. This increase was mainly driven by significantly higher commitments made under the Future Fund Federal Republic program, due to first-time commitments into the DeepTech & Climate Fund (EUR 215 million) and the European Tech Champions Initiative (EUR 800 million). Apart from the fiduciary investments under the Future Fund Federal Republic program, commitments of KfW Capital in 2023 mainly reflected investments of EUR 181 million under the ERP/*Zukunftsfonds* Growth Facility, EUR 44 million under the Green Transition Facility (both Future Fund KfW Capital) and EUR 246 million via the ERP Venture Capital Fund investment program. Investments under the Future Fund KfW Capital program declined in line with expectations due to KfW Capital's one-time investment into the *Wachstumsfonds Deutschland I* in 2022. Investments under the Future Fund program of the Federal Republic are guaranteed by the Federal Republic and funding for these programs is refinanced by KfW.

The following table shows the commitments of KfW Capital for each of the years indicated:

of which Green Transition Facility	*44*	*0*	>100
Future Fund Federal Republic	1,657	642	>100
of which GFF EIF Growth Facility	*594*	*474*	*25*
of which Deep Tech Climate Fonds	*215*	*0*	>100
of which Wachstumsfonds Deutschland I	*48*	*168*	*-71*
of which European Tech Champions Initiative (ETCI)	*800*	*0*	>100
Total commitments (1)	2,129	1,259	69

* Amounts in the table may not add up due to rounding differences.

(1) Commitments represent the volume of funds committed for loans and other business transactions in the relevant year, including amounts to be disbursed in future years, and do not include amounts disbursed in the relevant year pursuant to commitments made in prior years.

Export and Project Finance (KfW IPEX-Bank)

Corporate Background

KfW IPEX-Bank conducts export and project finance activities which the European Commission deemed to fall outside the scope of KfW's promotional activities directly and on its own behalf, while it conducts the promotional export and project finance activities in its own name on behalf of KfW on a trust basis. KfW provides funding for KfW IPEX-Bank at market rates based on the ratings assigned to KfW IPEX-Bank by international rating agencies. As of January 1, 2008, and in accordance with the understanding reached between the European Commission and the Federal Republic, KfW IPEX-Bank commenced operations as a legally independent entity wholly-owned by KfW. For more information, see "General—Relationship with the Federal Republic—Understanding with the European Commission."

Total assets of KfW IPEX-Bank (IFRS, before consolidation) amounted to EUR 32.8 billion as of December 31, 2023 (December 31, 2022: EUR 27.6 billion). Total outstanding loans and guarantees (including promotional activities) for KfW's business sector Export and Project Finance amounted to EUR 59.4 billion as of December 31, 2023 (December 31, 2022: EUR 54.9 billion). KfW IPEX-Bank is headquartered in Frankfurt am Main, Germany, and maintains a branch office in London, United Kingdom, a subsidiary in Singapore and representative offices in eight locations outside Germany. As of December 31, 2023, KfW IPEX-Bank employed 932 persons, excluding managing directors but including temporary personnel (December 31, 2022: 899).

In 2022, KfW IPEX-Bank Asia Ltd, a wholly-owned subsidiary of KfW IPEX-Bank, commenced its business activities in Singapore with a share capital of SGD 16.5 million under a merchant bank licence issued by the Monetary Authority of Singapore (MAS). IPEX Asia Ltd. is fully consolidated under the existing profit transfer agreement between KfW IPEX-Bank and KfW Beteiligungsholding GmbH, a wholly-owned subsidiary of KfW, described below.

In accordance with the understanding with the European Commission, KfW IPEX-Bank has obtained a banking license and is subject to the KWG and the corporate tax regime. KfW IPEX-Bank is approved as an IRBA (internal ratings-based approach) bank under the Basel II rules by the relevant German supervisory authorities – BaFin and the Deutsche Bundesbank. With respect to the SSM, KfW IPEX-Bank to date does not qualify as a significant credit institution and is therefore not directly supervised by the ECB, but rather continues to be supervised by BaFin in cooperation with Deutsche Bundesbank. Given the fact that as of December 31, 2023, KfW IPEX-Bank's total assets (IFRS, before consolidation) amounted to EUR 32.8 billion, KfW IPEX- Bank may be qualified as a significant credit institution in the near future, which could lead to direct supervision by the ECB from as early as 2025 onwards. For additional information on KfW IPEX-Bank and the SSM, see "KfW—General—Supervision and Regulation—Regulation—Supervisory Structure and Enforcement Powers." For more information on the SSM, see "Federal Republic of Germany—Monetary and Financial System—Financial System—European Financial System—European System of Financial Supervision and European Banking Union."

of amortizing loans, guarantees or leasing financing as well as project, object and acquisition financing. KfW IPEX-Bank also offers derivative instruments to allow its clients to hedge interest and currency risk and instruments for short-term trade financing, such as participations in letters of credit.

With the consent of the Federal Government, KfW delegated the mandate of the management of the Shipping CIRR Program and the ERP (European Recovery Program) Export Financing Program to KfW IPEX-Bank. Both programs are executed by KfW IPEX-Bank, applying strict ethical walls. The programs offer fixed interest rate loans to buyers based on the CIRR (Commercial Interest Reference Rate), which is a minimum interest rate prescribed by the OECD for officially supported financings in order to ensure competitive neutrality. The Shipping CIRR Program is open to banks financing ships built in German shipyards and offers a refinancing option through KfW. The ERP Export Financing Program supports lending for German exports to emerging and developing countries combined with fixed refinancing through KfW. These loans are supported through the ERP. In the past, lending of CIRR based loans in the ERP Program was provided through KfW IPEX-Bank and via AKA Ausfuhrkredit-Gesellschaft mit beschränkter Haftung, both as lenders of record. Since January 2017, all banks eligible for buyer credit cover (Hermes cover) may directly apply to the ERP Export Financing Program.

KfW, on behalf of the Federal Ministry for Economic Affairs and Energy (now named Federal Ministry for Economic Affairs and Climate Action), has launched the Africa CIRR export financing program ("Africa CIRR"). The program aims to strengthen economic cooperation with Africa. Specifically, Africa CIRR is designed to support loans to finance large-volume German exports and to promote the economy in African buyer countries. All credit institutions eligible to apply for buyer credit cover from the Federal Republic (so-called Hermes cover) are eligible for the Africa CIRR. The Federal Republic mandated KfW and KfW designated KfW IPEX-Bank to administer the program.

KfW IPEX-Bank's principal customers are German and European companies (and their customers) with international operations and larger medium-sized companies in basic and manufacturing industries as well as in the retail, health, telecommunications, power/renewables, water, shipping, aviation, rail, transport and social infrastructure sectors. In 2022, the KfW IPEX-Bank Management Board together with KfW, its sole shareholder, decided to implement an oganizational repositioning within its business model. Following the technical implementation of this decision, the seven sectors in place until December 31, 2023, have been grouped into four future-oriented sectors: (1) the energy sector aiming at the transformation of the energy industry, primarily via wind power, solar energy and hydrogen, as well as water and waste management infrastructure; (2) the mobility sector striving for the transformation of the maritime and aviation industries, as well as climate-friendly mobility and transport; (3) the infrastructure sector supporting the roll-out of digital infrastructure, charging infrastructure, grid-based energy infrastructure, air and sea ports, as well as the construction industry, among others; and (4) the industry & commerce sector for metal and mining, commodity trading, financial institutions, and the automotive industry and retail, among others. In addition, KfW IPEX-Bank will continue to provide structured financing for exports and infrastructure, as well as financing for global climate change mitigation and raw materials supplies in Europe. The sectoral repositioning described above took effect as of January 1, 2024, and KfW IPEX-Bank's commitments will be reported accordingly beginning with the first quarter of 2024.

through risk-participations, for which KfW IPEX-Bank pays a fee to the bank assuming the risk. KfW IPEX-Bank is eligible to act as on-lending bank under certain of KfW's promotional programs. In 2023, KfW IPEX-Bank refinanced loan commitments for export and project finance under KfW's promotional programs in an amount of EUR 1.3 billion (2022: EUR 241 million).

From time to time, KfW IPEX-Bank also enters into framework loan agreements with non-German banks, which enable such banks to extend loans to their customers for the purpose of importing equipment from German or other European exporters. Because the amounts of individual loans are usually small, the related transaction costs are relatively high. The framework agreements help to reduce these transaction costs.

Loans extended by KfW IPEX-Bank are usually secured by collateral and often benefit from a payment guarantee or other security arrangement. Loans extended to finance direct investments may benefit from an investment guarantee against political risk by the Federal Republic if the host country risk is assessed to be substantial.

A portion of export finance loans extended by KfW IPEX-Bank is guaranteed by the Federal Republic through HERMES, the official German export credit insurer. HERMES insurance covers up to 95% – in some instances even up to 100% – of KfW IPEX-Bank's export and project finance business risk, so that the risk of the portion covered is the equivalent of the Federal Government's risk. HERMES also provides coverage for related deliveries from other, mainly European, countries provided that they do not exceed a certain portion of the total delivery for which an export finance loan was extended. Furthermore, KfW IPEX-Bank's financing frequently benefits from a guarantee by a foreign export credit agency or a government instrumentality in the buyer's country.

For borrowers in other European and OECD countries where the country risk is not considered high, KfW IPEX-Bank has been increasingly extending loans on the basis of ordinary banking collateral (e.g., mortgages on aircraft or ships) without seeking the benefit of HERMES or similar coverage. In addition, even when HERMES coverage is sought, KfW IPEX-Bank often extends loans on which the insured portion is less than 95%. As of December 31, 2023, outstanding loans and guarantees (including promotional activities) outside Germany for KfW's business sector Export and Project Finance amounted to EUR 44.8 billion, of which EUR 8.0 billion, or 18%, were export finance loans which are fully or partly guaranteed by HERMES.

Commitments

The following table shows commitments in KfW's business sector Export and Project Finance for each of the years indicated:

EXPORT AND PROJECT FINANCE COMMITMENTS

	Year ended December 31,				Year-to-Year
	2023		2022		% change
	(EUR in millions)	(in % of total)	(EUR in millions)	(in % of total)	(in %)
Commercial business	17,470	*72*	12,369	*68*	*41*
Promotional business (conducted on behalf of KfW)	6,683	*28*	5,751	*32*	*16*
Total commitments (1)	**24,152**	***100***	**18,120**	***100***	***33***

(1) Commitments represent the volume of funds committed for loans and other business transactions in the relevant year, including amounts to be disbursed in future years, and do not include amounts disbursed in the relevant year pursuant to commitments made in prior years.

	Year ended December 31,		Year-to-Year
	2023	2022	% change
	(EUR in millions)		(in %)
Industries and services	4,496	2,914	*54*
Power, renewables and water	5,759	2,821	*104*
Aviation, mobility, and transport	2,995	2,633	*14*
Financial institutions, trade and commodity finance	1,879	2,458	*-24*
Basic industries	3,072	2,420	*27*
Maritime industries	3,730	2,152	*73*
Infrastructure	1,369	2,105	*-35*
CIRR scheme for bank refinancing (Ship + Africa + ERP finance) (1)	851	616	*38*
Total commitments	**24,152**	**18,120**	*33*

(1) Starting in 2021 the CIRR scheme for bank refinancing includes commitments in an amount of EUR 100 million under the Africa CIRR scheme designed to support German exports to Africa and to promote the economy in African buyer countries.

Despite continuous challenging market conditions, commitments in export and project finance increased in 2023 compared to 2022, due to, among others, higher demand for financing for on- and off-shore windparks, the expansion of fiber optic connections and battery cell production. Commitments (excluding those under the CIRR scheme for bank refinancing) amounted to EUR 23.3 billion in 2023 (2022: EUR 17.5 billion). The highest commitment volumes were achieved in the sectors Power, renewables and water with EUR 5.8 billion (2022: EUR 2.8 billion), Industries and services with EUR 4.5 billion (2022: EUR 2.9 billion), followed by Maritime industries with EUR 3.7 billion (2022: EUR 2.2 billion) and Basic Industries with EUR 3.1 billion (2022: EUR 2.4 billion). For a description of the re-grouping of KfW IPEX-Bank's sectors with effect from January 1, 2024, see "—Business" above.

Commitments under the CIRR scheme for bank refinancing increased slightly in 2023 to EUR 0.9 billion (2022: EUR 0.6 billion).

Commitments by Geographic Area

In 2023, KfW IPEX-Bank's commitments were reported for the following three regions: (1) Germany; (2) Europe (excluding Germany, but including Russia and Turkey); and (3) the rest of the world. In 2023, KfW IPEX-Bank's commitments for project and export financing (excluding the CIRR scheme for bank refinancing) within Germany increased to EUR 6.0 billion from EUR 4.7 billion in 2022. In 2023, commitments in Europe (excluding Germany, but including Russia and Turkey) increased to EUR 8.9 billion from EUR 8.0 billion in 2022. KfW IPEX-Bank's commitments in the rest of the world increased to EUR 8.4 billion in 2023 compared to commitments of EUR 4.9 billion in 2022. Commitments under the CIRR scheme for bank refinancing (2023: EUR 0.9 billion; 2022: EUR 0.6 billion) are trans-regional.

Revolving credit facilities for cash drawings	*2,480*	*2,136*	*16*
Guarantees	*1,557*	*1,636*	*-5*
Lease finance	*290*	*50*	*>100*
Project finance (1)	6,575	4,534	*45*
Acquisition finance (1)	396	203	*95*
Asset finance (1)	139	157	*-11*
Loans to funds	101	0	*100*
CIRR scheme for bank refinancing (ship + ERP + Africa)	851	616	*38*
Total commitments	**24,152**	**18,120**	***33***

(1) The product categories project finance, asset finance and acquisition finance may also include loans, guarantees, lease finance or revolving credit facilities that are not attributed to any sub-category under the corporate transactions product category.

Funding

The funds for KfW IPEX-Bank's commitments are mainly provided by KfW through borrowings in the capital markets. KfW provides funding to KfW IPEX-Bank's international project and export finance business at market rates based on the ratings assigned to KfW IPEX-Bank by international rating agencies. For those areas of export finance which the European Commission has deemed to fall within the scope of the promotional activities of KfW, funds from the ERP Special Fund may also be used to subsidize interest rates. In 2023, EUR 18 million of loan disbursements were supported by the ERP Special Fund (2022: EUR 33 million).

The terms of export and project finance loans funded in the capital markets are based on the cost of funds to KfW, plus a margin intended to cover the administrative cost of the loan, the credit risk and a return on capital. Because the Federal Republic is a member of the OECD, loans financed with funds from the ERP Special Fund or under the CIRR scheme for the shipping industry are required to comply with OECD regulations, which provide for minimum interest rates and maximum credit periods. Margins on these loans are generally intended to cover all the risks of such loans as well as administrative costs and a return on capital. In addition, KfW IPEX-Bank charges customary banking fees for reserving and providing financing and for processing. Loans denominated in currencies other than euros are hedged through matched funding or other mechanisms.

KfW Entwicklungsbank (KfW Development Bank)

Under the brand name KfW Entwicklungsbank, KfW acts as the Federal Republic's international development bank, extending loans and disbursing grants mainly to foreign public sector borrowers and recipients. In 2023, approximately 41% of these loans and grants were refinanced from federal budget funds provided to KfW. All of KfW's international development activities are made according to instructions from the Federal Government or, in the case of mandates, i.e., grants funded by governmental or supranational entities and distributed using KfW's expertise and channels, from the respective donor. Mandates and all funds from the Federal Government involved in loan commitments and grants do not, by their nature, appear on KfW's consolidated statement of financial position.

KfW extends financial cooperation (*Finanzielle Zusammenarbeit,* "FZ") loans in three ways:

These loans may meet the requirements for recognition as ODA as they offer more favorable terms to the borrower than market terms. As of December 31, 2023, approximately 89% of outstanding Financial Cooperation Promotional Loans were guaranteed by a special guarantee facility of the Federal Republic.

Generally, interested foreign governments submit applications for financial cooperation to the Federal Government, which then asks KfW to appraise the proposed projects. In the case of Financial Cooperation Promotional Loans, project sponsors may submit their proposals directly to KfW. KfW maintains a staff of economists, engineers and other specialists to assist in the appraisal and development of projects. KfW receives fees from the Federal Republic for loans and grants extended for the account of the Federal Government and Financial Cooperation Development Loans, calculated as a percentage of outstanding loans and grants, as far as they are financed out of the federal budget. Based on KfW's appraisal and its recommendation, the Federal Republic decides whether it will fund a particular project. Upon a favorable decision and upon determination of the terms and conditions of financing, KfW enters into a loan or grant agreement with the recipient country or, if applicable, the individual agency responsible for the project, in which case the obligations under that agreement would then usually be fully guaranteed by the respective recipient country.

Financial cooperation loans and grants are disbursed according to the progress of the relevant project, and KfW monitors the utilization of funds to ensure compliance with the provisions of the loan or grant agreement.

The following table shows KfW Entwicklungsbank's commitments for each of the years indicated:

KFW ENTWICKLUNGSBANK COMMITMENTS

	Year ended December 31,		Year-to-Year
	2023	2022	% change
	(EUR in millions)		(in %)
Loan commitments	5,290	6,109	*-13*
of which federal funds	*372*	*825*	*-55*
of which KfW's funds refinanced in the capital markets	*4,918*	*5,285*	*-7*
Grant commitments	3,375	4,534	*-26*
Mandates	375	288	*30*
Total commitments	**9,040**	**10,931**	***-17***

Total commitments of KfW Entwicklungsbank decreased by 17% to EUR 9.0 billion in 2023 from EUR 10.9 billion in 2022. The relative share of loan commitments that were refinanced in the capital markets increased to 93% in 2023, from 86% in 2022.

In 2023, Asia accounted for 22% of KfW Entwicklungsbank's commitments (2022: 28%); Sub-Saharan Africa accounted for 29% (2022: 24%); Middle East/North Africa accounted for 15% (2022: 16%); Europe/Caucasus accounted for 19% (2022: 14%); Latin America accounted for 13% (2022: 14%); and trans-regional commitments accounted for 3% (2021: 4%).

Others (1)	1,341	*15*	1,540	*14*	*-13*
Total commitments	**9,040**	***100***	**10,931**	***100***	***-17***

(1) Consists mainly of commitments made for multi-sector projects and emergency assistance in crisis situations.

DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH

DEG, a German limited liability company, is a legally independent entity founded in 1962. DEG is based in Cologne, Germany. In 2001, KfW acquired DEG from the Federal Republic. Since then, KfW has been DEG's sole shareholder and DEG has been fully consolidated in KfW's consolidated financial statements. As of December 31, 2023, DEG maintained 12 representative offices in developing countries or emerging economies. In 2023, DEG employed an average of 724 persons (2022: 704). As of December 31, 2023, DEG's total assets (IFRS, before consolidation) amounted to EUR 8.3 billion (2022: EUR 7.8 billion).

DEG's activities focus on corporates, project finance, financial institutions and funds investing in Africa, Asia, Latin America, and Central and Eastern Europe. DEG promotes private enterprise structures, thus contributing to sustainable economic growth, lasting improvement in the living conditions of the local population and the global Sustainable Development Goals. To this end, DEG provides long-term financing for private enterprises investing in developing countries. In addition, DEG offers customized consultancy services, for example, in the areas of environmental management, corporate governance, resource efficiency or training and skills.

DEG conducts its activities in accordance with the principles of subsidiarity, thus in cooperation with commercial banks rather than in competition with them. It does not provide subsidized financing, but instead offers financing solely on commercial terms and conditions (apart from smaller state support programs within the framework of the support for German companies in Africa). DEG also seeks to mobilize other partners in order to raise additional capital for its clients' investments.

Serving public policy objectives of the Federal Government, DEG has been granted a favorable tax status under which only part of DEG's activities are subject to CIT. DEG does not distribute profits but instead re-channels them into new investments.

DEG's obligations do not benefit from the Guarantee of the Federal Republic or from *Anstaltslast*, and while DEG's indebtedness is reflected in KfW's consolidated statement of financial position, its debt represents obligations of DEG and not of KfW. KfW and DEG have a refinancing agreement in place, pursuant to which KfW acts as sole issuer in the capital markets and provides DEG with mid- and long-term capital market funds according to DEG's capital needs. In addition, internal agreements have been reached concerning the respective fields of business activities, the mutual use of offices abroad, joint public relations activities and joint usage of several information technology services.

The following table shows DEG's commitments for each of the years indicated:

Financial Markets

KfW's Financial Markets business sector comprises the group's treasury activities, including its funding activities and its financial asset management. Furthermore, this business sector manages KfW's asset-backed securities ("ABS") as well as KfW's green bond portfolio, which are all part of KfW's promotional activities, as well as other capital markets-related activities currently consisting of privatization initiatives relating to Deutsche Telekom AG ("Deutsche Telekom") and Deutsche Post AG ("Deutsche Post").

Funding

KfW's principal sources of funds are the international financial markets and public funds, with the majority of lending in its business sectors being financed from funds raised by KfW in the international financial markets. KfW Group's consolidated balance sheet total assets at December 31, 2023 amounted to EUR 560.7 billion. EUR 507.4 billion, or 90.5% of this amount, was financed through borrowings (i.e., from financial market funds or public funds). In addition, as of December 31, 2023, KfW had EUR 21.3 billion in liabilities held in trust (for which the Federal Government mostly provides the funding and assumes all risks), which do not appear on KfW's consolidated statement of financial position. In line with the focus on mid-term and long-term loans within its loan portfolio resulting from its promotional business, as of December 31, 2023, 81% of KfW's consolidated total borrowings outstanding had remaining maturities of one year or more.

Financial-Market Funds

KfW raises short-term and long-term funds in the international financial markets through the issuance of bonds and notes (including commercial paper) and by incurring loans against debt certificates (*Schuldscheindarlehen* or "promissory note loans"). Long-term funding with initial maturities of more than one year ("capital-market funding") represents the most important source of funding. Short-term borrowings with initial maturities of less than one year in the form of commercial paper ("money-market funding") are primarily used for purposes of KfW's liquidity management. As of December 31, 2023, the percentage of capital-market funding outstanding out of total financial-market funds outstanding was 92%.

All amounts stated in connection with KfW's capital-market and money-market funding transactions or funding volume are, unless stated otherwise, based on net proceeds to KfW, which are calculated as principal amount less discount and underwriting commissions, if any.

Capital-Market Funding. KfW's capital-market funding policy pursues a dual objective: to achieve the most favorable terms possible for funds raised in the capital markets; and to minimize, to the extent practicable, the effects of changes in interest rates and foreign exchange rates mainly through interest rate and currency risk hedging instruments and, to a more limited extent, by matching funding liabilities with loan assets. In order to achieve favorable terms for funds raised, KfW maintains an active presence in all major capital markets and utilizes a broad range of funding instruments in various currencies, covering a wide range of maturities.

KfW's capital-market funding instruments comprise four categories of instruments: bonds issued under KfW's benchmark programs (in euro or U.S. dollar, under KfW's European medium-term note program or its SEC-registered debt shelf); bonds publicly placed outside the benchmark programs; bonds sold in "private placements," a term KfW uses in the commercial sense to refer to sales to a specific investor or a limited number of investors; and "green bonds", which comprise bonds from any of the first three categories, the proceeds of which are linked to investments financed by KfW currently in the project categories Renewable Energy, Green Buildings (formerly Energy Efficiency), Clean Transportation, Biodiversity and Climate Protection Programme for Corporates. In 2023, benchmark bonds accounted for a funding volume of EUR 57.9 billion, or 64%, of KfW's total capital-market funding, while bonds placed publicly outside the benchmark programs accounted for EUR 14.3 billion, or 16%. The volume of bonds sold in private placements and of green bonds amounted to EUR 5.1 billion, or 6%, and EUR 12.9 billion, or 14%, respectively. Total capital-market funding in 2023 amounted to EUR 90.2 billion (2022: EUR 89.4 billion). With respect to refinancing its funding requirements resulting from the KfW Special Program and from its support of companies in the energy sector under special mandates by the Federal Government, KfW has had access to an additional source of financing through the WSF. Refinancing through the WSF in 2023 totaled EUR 6.9 billion (2022: EUR 31.6 billion), of which EUR 2.0 billion related to the KfW Special Program and EUR 4.9 billion related to the support of companies in the energy sector.

	amount in billions	Maturity at issuance (in years)	in % per annum
KfW U.S. $-Benchmark I/2023	USD 4.0	5	3.750
KfW U.S. $-Benchmark II/2023	USD 3.0	3	3.625
KfW U.S. $-Benchmark III/2023	USD 4.0	5	3.875
KfW U.S. $-Benchmark IV/2023	USD 4.0	10	4.125
KfW U.S. $-Benchmark V/2023	USD 5.0	3	4.625
KfW U.S. $-Benchmark VI/2023 (Dual Tranche)	USD 4.0	2	5.125
KfW U.S. $-Benchmark VI/2023 (Dual Tranche)	USD 2.0	7	4.750
KfW Euro-Benchmark I/2023	EUR 6.0	5	2.750
KfW Euro-Benchmark II/2023	EUR 5.0	7	3.125
KfW Euro-Benchmark III/2023	EUR 3.0	10	2.875
KfW Euro-Benchmark IV/2023	EUR 5.0	3	2.875
KfW Euro-Benchmark V/2023	EUR 4.0	5	3.125
KfW Euro-Benchmark I/2022 (re-opening)	EUR 1.0	10	0.125
KfW Euro-Benchmark V/2022 (re-opening)	EUR 1.0	5	1.250
KfW Euro-Benchmark VII/2022 (re-opening)	EUR 1.0	3	2.500
KfW Euro-Benchmark IV/2021 (re-opening)	EUR 1.0	7	0.000
KfW Euro-Benchmark III/2022 (re-opening)	EUR 1.0	3	0.125
KfW Euro-Benchmark I/2023 (re-opening)	EUR 1.0	5	2.750
KfW Euro-Benchmark V/2022 (re-opening)	EUR 1.0	5	1.250
KfW Euro-Benchmark I/2019 (re-opening)	EUR 1.0	10	0.750
KfW Euro-Benchmark V/2019 (re-opening)	EUR 1.0	7	0.000
KfW Euro-Benchmark III/2023 (re-opening)	EUR 1.0	10	2.875
KfW Euro-Benchmark II/2020 (re-opening)	EUR 1.0	7	0.000
KfW Euro-Benchmark V/2023 (re-opening)	EUR 1.0	5	3.125

In 2023, KfW's total new capital-market funding was raised in 10 different currencies and 186 separate capital markets transactions. KfW's core currencies are the euro and the U.S. dollar, which together accounted for 83% of KfW's total new capital-market funding in 2023 (2022: 84%). The percentage of new funds raised in euros, which continues to be KfW's most significant funding currency, decreased from 65% in 2022 to 54% in 2023, whereas the percentage of new funds raised in U.S. dollars increased from 19% to 29% over the same period. The percentage of new funds raised in pounds sterling remained stable at 9% in 2023, which made it KfW's third most significant funding currency in 2023.

Total	**90.2**	***100***

* Amounts in the table may not add up due to rounding differences.
(1) CAD, CNY, HKD, PLN and SEK.

In connection with its green bond issuances, KfW has a Green Bond Framework in place that reflects international best practices and is aligned with the 2021 edition of the “Green Bond Principles” (including June 2022 Appendix 1) supported by the International Capital Market Association (“ICMA”). In December 2023, KfW published an updated Green Bond Framework on its website, which is applicable to issuances of green bonds by KfW from January 1, 2024 onwards. Under the updated Green Bond Framework, the proceeds from such green bond issuances may be linked to promotional loan programs and to financing provided by KfW in the context of international cooperation and project and export finance in the eligible project categories Renewable Energy, Green Buildings (formerly Energy Efficiency), Clean Transportation, Biodiversity and Climate Protection Programme for Corporates. Through its green bond issuances, KfW aims to broaden its investor base by addressing socially responsible investors and to enhance the capital markets’ infrastructure for financing environmental projects that have the reduction of greenhouse gas emissions as their common objective. Net proceeds from the sale of its green bonds and requests for disbursements under the eligible environmental projects are tracked by KfW in an appropriate manner. KfW provides investors with information regarding the use of proceeds in terms of disbursements on a regular basis on its website. Unless otherwise indicated, information available on, or accessible through, KfW’s website is not incorporated herein by reference. In 2023, KfW conducted 15 new green bond issuances in 9 currencies as well as 7 re-openings. In total, green bonds accounted for a funding volume of EUR 12.9 billion, or 14%, of KfW’s total capital-market funding.

The most important sources of capital-market funding for KfW are bond and note issuances followed by promissory note loans. As of December 31, 2023, the amount of outstanding bonds and notes issued by KfW totaled EUR 414.6 billion, representing a EUR 28.7 billion increase from EUR 385.8 billion outstanding as of December 31, 2022.

Of outstanding borrowings, promissory note loans continue to be KfW’s second most important capital-market funding instrument, with a book value of EUR 40.2 billion as of December 31, 2023. Of this amount, EUR 39.1 billion was recognized as financial liabilities at amortized cost (of which EUR 1.1 billion as liabilities to banks and EUR 38.0 billion as liabilities to customers) and EUR 1.0 billion was recognized as financial liabilities at fair value (of which EUR 0.2 billion as liabilities to banks and EUR 0.8 billion as liabilities to customers). The decrease in the book value of promissory note loans from EUR 53.5 billion in 2022 to EUR 40.2 billion in 2023 is largely due to decreased refinancing via the WSF. Promissory note loans are a special instrument of the German capital markets, under which the lending entity (generally a bank, insurance company or public pension fund) receives a certificate evidencing its loan to the borrower and the terms of such loan. Maturities on promissory note loans range from one to 30 years, thereby providing a high degree of flexibility to both the borrower and the lender. Transferable only by way of assignment, promissory note loans have only limited liquidity in the interbank secondary market.

The following table sets forth summary information concerning KfW’s outstanding bonds and notes as well as promissory note loans with an initial maturity of more than one year and issued in the capital markets.

DKK	1	FIXED	0.00	2022	2024	0.88	1,000,000,000.00	134,175,958.35
EUR	414	FIXED	0.82	1999-2023	2024-2053	4.65	319,216,715,060.41	319,216,715,060.41
EUR	16	FLOATING	3.71	2004-2023	2024-2034	4.18	1,050,910,531.65	1,050,910,531.65
GBP	23	FIXED	2.57	2000-2023	2024-2037	2.85	29,106,803,000.00	33,492,667,855.70
GBP	1	FLOATING	6.22	2021	2024	0.45	500,000,000.00	575,340,889.48
HKD	3	FIXED	2.95	2021-2023	2024-2027	2.08	900,000,000.00	104,270,454.39
HUF	2	FIXED	10.32	2022	2024	0.59	85,000,000,000.00	222,048,066.88
JPY	7	FIXED	2.29	2004-2008	2024-2038	5.67	138,290,000,000.00	884,603,083.22
JPY	162	FLOATING	2.81	2002-2019	2024-2049	13.13	78,400,000,000.00	501,503,230.35
MXN	1	FIXED	4.40	2021	2025	1.57	1,000,000,000.00	53,409,958.82
NOK	16	FIXED	3.27	2004-2023	2024-2036	3.36	34,700,000,000.00	3,087,051,287.75
NZD	2	FIXED	2.13	2018-2021	2028	4.41	190,000,000.00	108,546,617.92
PLN	4	FIXED	2.98	2006-2022	2024-2025	0.65	1,605,668,840.50	370,012,407.07
SEK	9	FIXED	1.83	2011-2023	2024-2031	4.04	15,400,000,000.00	1,387,887,527.04
USD	62	FIXED	2.35	2002-2023	2024-2046	3.05	97,452,414,303.83	88,192,230,139.21
USD	2	FLOATING	4.76	2021-2023	2026	0.80	2,000,000,000.00	1,809,954,751.13
ZAR	16	FIXED	7.30	2020-2022	2028-2031	5.86	3,741,000,000.00	183,853,703.37
Total	**782**					**4.11**		**468,208,451,077.33**

(1) Interest rate of floating rate note means the applicable interest rate as of December 31, 2023. For floating rate notes with interest rates that are fixed in arrears, the latest fixed interest rate was used. Zero coupon bonds are included in the calculation with their average effective interest rates.

(2) Averages have been calculated on a capital-weighted basis taking into account the aggregate principal amount outstanding in euro.

(3) Conversion into euro at the spot rate using the ECB reference rates on December 31, 2023.

Money-Market Funding. KfW issues commercial paper under two commercial paper programs: the EUR 90 billion multicurrency commercial paper program and the USD 30 billion commercial paper program. As of December 31, 2023, KfW Group's commercial paper outstanding totaled EUR 37.7 billion (December 31, 2022: EUR 39.1 billion).

Public Funds

As of December 31, 2023, the proportion of public funds in KfW Group's borrowings was 9%. The most important source of public funds for KfW is the budget of the Federal Republic. Total long-term and short-term borrowings from funds provided by the federal budget (excluding loans on a trust basis) amounted to EUR 44.2 billion as of December 31, 2023 (December 31, 2022: EUR 61.0 billion). KfW Group's long-term and short-term borrowings from the ERP Special Fund amounted to EUR 315 million as of December 31, 2023 (December 31, 2022: EUR 283 million). Public funds are made available to KfW Group for use in special categories of KfW's domestic activities and certain export and project finance transactions with developing countries.

Public funds are particularly important in the area of financial cooperation, where KfW Entwicklungsbank extends loans and disburses grants to foreign public sector borrowers and recipients in developing countries and emerging economies. Federal budget funds constituted approximately 41% of the sources of funding for KfW Entwicklungsbank's commitments in 2023. Funds from the Federal Government involved in loan commitments and grants of KfW Entwicklungsbank do not, by their nature, appear on KfW's consolidated statement of financial position. For more information see "KfW Entwicklungsbank (KfW Development Bank)."

	Notional value As of December 31, 2023	Notional value As of December 31, 2022	Fair value As of December 31, 2023 Positive	Fair value As of December 31, 2023 Negative	Fair value As of December 31, 2022 Positive	Fair value As of December 31, 2022 Negative
	(EUR in millions)		(EUR in millions)		(EUR in millions)	
Interest-related derivatives	662,522	621,417	3,861	7,417	4,478	9,268
Currency-related derivatives (1)	156,750	148,515	3,799	4,590	6,846	5,227
Credit derivatives as protection buyer	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Total derivatives (2)(3)	**819,271**	**769,932**	**7,660**	**12,007**	**11,324**	**14,496**
Embedded derivatives accounted for separately	—	—	106	6	163	5
Total balance sheet items "derivatives designated for hedge accounting" and "financial assets/liabilities at FV - other derivatives"	**819,271**	**769,932**	**7,766**	**12,013**	**11,487**	**14,501**

* Amounts in the table may not add up due to rounding differences.

(1) Includes cross-currency swaps.

(2) Includes derivative financial instruments which are offered by KfW's wholly-owned subsidiary KfW IPEX-Bank to its customers as hedging instruments in connection with, and related to, financing in the context of its export and project financing activities. In order to hedge the risk arising from these derivative transactions, KfW IPEX-Bank enters into hedging transactions with KfW. In the context of centralizing and aggregating market-facing hedging activities within the group at the parent level, KfW, in turn, hedges itself with corresponding offsetting transactions in the market to the extent necessary. These risk-mitigating hedging transactions entered into by KfW are also disclosed.

(3) Includes derivative contracts in closed risk positions entered into in connection with special mandates by the Federal Government in accordance with article 2 paragraph 4 of the KfW Law.

	As of December 31, 2023	As of December 31, 2022
	(EUR in millions)	
Total positive fair value before netting	**7,660**	**11,324**
Total positive fair value after netting (1)	**6,598**	**10,129**
Collateral received	6,359	10,096
of which cash collateral	*6,359*	*10,096*
Total positive fair value after netting and collaterals	**239**	**33**

(1) Presents the effects of netting agreements that do not fulfill the offsetting criteria under IFRS. Due to the strict criteria for offsetting financial instruments under IAS 32, KfW Group's consolidated statement of financial position does not reflect any netting effects with respect to its derivatives.

38.1 billion). See “Combined management report—Economic report—Development of net assets of KfW Group” included in Exhibit (e) to this annual report for more information concerning securities and investments. EUR 34.1 billion, or 84%, of all securities and investments were held in the form of fixed-income securities for liquidity purposes in KfW’s liquidity portfolio. The remaining securities and investments were securities held as a surrogate for loans or as equity investments in the context of KfW Group’s promotional business (e.g., KfW’s ABS portfolio or DEG’s direct investments). Equity participations held directly or indirectly by KfW made up only a very limited amount of KfW Group’s securities and investments.

Liquidity Portfolio

KfW pursues a conservative liquidity management strategy. For this purpose, KfW holds financial assets in its liquidity portfolio in an amount of EUR 34.1 billion as of December 31, 2023 (December 31, 2022: EUR 32.9 billion). The bulk of securities held in this portfolio is denominated in euro. KfW purchases medium-term securities issued by banks, primarily covered bonds (*Pfandbriefe*), bonds of public sector issuers and supranational institutions or agencies as well as ABS and ABCP investments. The bulk of euro-denominated bonds included in KfW’s liquidity portfolio is eligible as collateral with the ECB and enables KfW to enter into repurchase agreements in refinancing operations within the European System of Central Banks via the Deutsche Bundesbank. For financial reporting purposes, securities denominated in U.S. dollar or GBP were converted into euro at the currency exchange rate as of December 31, 2023. In addition to these securities, as of December 31, 2023, KfW held money-market assets (overnight and term loans as well as reverse repurchase transactions) for liquidity management purposes in an amount of EUR 20.7 billion (December 31, 2022: EUR 5.2 billion).

As a signatory to the United Nations-supported “Principles for Responsible Investment” (PRI), KfW is committed to managing its liquidity portfolio in a sustainable manner. For KfW, this means integrating ESG criteria in its investment approach. In 2023, the integration of ESG criteria was based on a best-in-class approach that stipulated that for its liquidity portfolio, based on sustainability ratings from an external provider, KfW would only invest in bonds of issuers whose sustainability rating was among the best 50% of the respective sector. Sovereign bonds were eligible for such investments, provided that the relevant issuing country had reached “prime” status regarding its sustainability rating. In the context of its strategic tranSForm project, KfW has strengthened its ESG risk management and introduced a tool referred to as the “ESG risk profile” to consider and evaluate ESG risks in a structured manner and take them into account in the internal rating process. Against this background, from 2024 onwards, KfW has ceased applying the best-in-class approach for purposes of integrating ESG criteria in its investment decisions, but rather has been using its ESG risk profile tool.

In addition, KfW uses exclusion criteria for its liquidity portfolio that are based on the the exclusion list of KfW Group. KfW also engages in regular dialogues with issuers on sustainability matters.

ABS Portfolio

As of December 31, 2023, the promotional ABS portfolio volume amounted to EUR 17 million (December 31, 2022: EUR 129 million). KfW’s capital markets-based promotional activities for SMEs ended as of December 31, 2019. The remaining outstanding portfolio volume will decrease gradually with amortizations.

bonds will be held to maturity.

Privatization Initiatives

The Federal Government mandated KfW to take measures with respect to the privatization of Deutsche Telekom and Deutsche Post. Pursuant to a special mandate by the Federal Government and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*), KfW has acquired and sold shares of both Deutsche Telekom and Deutsche Post in various transactions since 1997. In furtherance of the privatization initiatives of the Federal Government, KfW sold those shares through German and international public offerings, private placements, block trades, exchangeable bonds and other transactions. Pursuant to an arms-length agreement with the Federal Government, KfW is protected against the market risk of these transactions. The agreement provides that KfW will receive a percentage of any market value increase in the shares acquired and sold, plus a fee for its services.

As of December 31, 2023, KfW's total ownership interest in Deutsche Telekom remained unchanged compared to December 31, 2022 with approximately 829.2 million ordinary shares. This represented a stake of approximately 16.6% in Deutsche Telekom (December 31, 2022: 16.6%).

As of December 31, 2023, KfW's total ownership interest in Deutsche Post remained unchanged compared to December 31, 2022 with approximately 253.9 million ordinary shares. This represented a stake of approximately 20.5% in Deutsche Post (December 31, 2022: 20.5%). On February 9, 2024, KfW sold 50 million shares of Deutsche Post AG on the basis of an accelerated bookbuild offering to institutional investors. As a result, KfW's stake in Deutsche Post AG decreased from approximately 20.5% to approximately 16.5%.

Given the agreement with the Federal Government described above, KfW's holdings in shares of Deutsche Post and Deutsche Telekom are presented on KfW's consolidated statement of financial position as Financial Assets at Fair Value, which are classified as "Loans and advances to customers – FVM."

Loan Facility to Greece Mandated by the Federal Government

KfW supports the Federal Republic in conducting EU-wide financial support measures for Greece. In 2010, the Federal Government mandated KfW in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*) to participate in a loan facility to Greece on behalf of the Federal Republic. All risks resulting from this loan facility are covered by a guarantee of the Federal Republic. As of December 31, 2023, the total amount outstanding of this loan to Greece amounted to EUR 11.4 billion (December 31, 2022: EUR 12.9 billion).

Strategic Shareholdings

KfW manages a number of direct and indirect strategic shareholdings, which include wholly-owned subsidiaries as well as shareholdings in other companies taken in the ordinary course of KfW's business as well as a number of investments made in companies pursuant to special mandates (*Zuweisungsgeschäfte*) by the Federal Government in accordance with article 2 paragraph 4 of the KfW Law.

KfW's Subsidiaries and Other Shareholdings

KfW's most important strategic shareholdings are DEG (100%) and KfW Capital (100%), which are both directly held by KfW, as well as KfW IPEX-Bank GmbH (100%), which is held indirectly via KfW's wholly-owned subsidiary KfW Beteiligungsholding GmbH. For a description of these entities and their operations, see "KfW Capital", "Export and Project Finance (KfW IPEX-Bank)" and "DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH" above.

KfW's investments in Airbus SE, 50Herz Transmission GmbH, CureVac N.V., HENSOLDT AG ("Hensoldt"), TransnetBW GmbH and German LNG Terminal GmbH, as well as KfW's investments in Deutsche Telekom and Deutsche Post (see "Financial Markets—Privatization Initiatives"), were made pursuant to a special mandate by the Federal Government in accordance with article 2 paragraph 4 of the KfW Law, which authorizes the Federal Government to direct KfW to take measures in connection with matters in which the Federal Republic has an interest (*Zuweisungsgeschäft*). These investments were made at the Federal Republic's economic risk and the opportunities and risks of these investments lie with the Federal Republic.

The stakes in CureVac N.V. (13.3%), HENSOLDT AG (25.1%) and German LNG Terminal GmbH (50.0%) are held directly by KfW. KfW's shareholding in Airbus SE (9.1%) is held indirectly via various entities. KfW's shareholding in 50Herz Transmission GmbH (20.0%) is held indirectly via a subsidiary of KfW (Selent Netzbetreiber GmbH), and KfW's shareholding TransnetBW GmbH (24.95%) is also held via a subsidiary of KfW (Expand Netzbetreiber GmbH).

Airbus SE

In 2007, KfW, together with 14 other investors, agreed to jointly acquire from DaimlerChrysler group (now Mercedes-Benz Group) a stake of, at that time, 7.5% in European Aeronautic Defence and Space Company N.V. ("EADS"), the economic interest of which was held through the special purpose vehicle Dedalus GmbH & Co. KGaA ("Dedalus"). In connection with a further reduction by the Daimler group (now Mercedes-Benz Group) of its stake in EADS in December 2012, the Federal Government, which regards the ownership structure of EADS as a matter of strategic national interest, agreed on a revised government shareholding agreement with EADS, France and Spain, which allows the Federal Government to directly or indirectly own an equity stake of up to 12% in EADS. In this context, the Federal Government mandated KfW to directly or indirectly acquire and hold an equity stake of up to 12% in EADS on behalf of the Federal Republic.

At the beginning of April 2013, France, Germany and Spain entered into a supplemental shareholders' agreement, which provided for the dissolution of the Dedalus consortium and for KfW and the remaining investors to hold their respective equity stakes in EADS directly and indirectly through Gesellschaft zur Beteiligungsverwaltung GZBV mbH & Co. KG ("GZBV"). At the end of 2013, GZBV increased its equity stake in EADS by buying approximately 1.87 million shares. In 2015, EADS transformed its legal form into a European company (*Societas Europaea*) and changed its legal name to Airbus Group SE. In April 2017, following approval by the annual general meeting, the legal name was changed into Airbus SE. As of December 31, 2023, KfW held, through GZBV, an equity stake of approximately 9.1% in Airbus SE. Together with the other investors' interests in GZBV, GZBV held a total equity stake of 10.84% in Airbus SE.

50Hertz Transmission GmbH

In July 2018, the Federal Government mandated KfW pursuant to and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*), to acquire a 20% shareholding in Eurogrid International CVBA/SCRL ("Eurogrid International", now Eurogrid International SA/NV). The transaction closed in August 2018. Under the mandate, all economic risks resulting from KfW's investment are covered by a guarantee of the Federal Republic. At the time of the acquisition, Eurogrid International indirectly held all shares in the German transmission systems operator 50Hertz Transmission GmbH via its wholly-owned subsidiary Eurogrid GmbH.

2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*), to contribute an amount of EUR 24 million via KfW's wholly-owned subsidiary Selent Netzbetreiber GmbH into the capital reserves of Eurogrid GmbH. This amount was provided to Eurogrid GmbH on August 9, 2023.

CureVac N.V.

In June 2020, the Federal Government mandated KfW pursuant to and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*) to make an investment of approximately EUR 300 million through the acquisition of a stake in biopharmaceutical company CureVac AG ("CureVac"). CureVac is a German stock corporation under German law with its registered seat in Tübingen, Germany, which focuses on the research and development of medicines based on messenger ribonucleic acids (mRNA). The investment occurred at the end of July 2020. In August 2020, CureVac B.V., a private company with limited liability under Dutch law, offered and sold in an underwritten initial public offering (the "CureVac IPO") new common shares, which were listed on the Nasdaq Global Market. In connection with the consummation of the CureVac IPO, all shares of CureVac AG were contributed into CureVac B.V. in exchange for shares of CureVac B.V., and CureVac B.V. was converted to a public company under Dutch law and accordingly renamed CureVac N.V. As a consequence, KfW's investment is in shares of CureVac N.V.

HENSOLDT AG

In March 2021, the Federal Government mandated KfW pursuant to and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*) to acquire 25.1% of the outstanding shares in Hensoldt. Hensoldt is a stock corporation under German law with its registered seat in Taufkirchen, Germany, which focuses on electronic sensor solutions and optronics. The acquisition was completed in May 2021. In December 2023, the Federal Government mandated KfW, pursuant to and in accordance with the original special mandate of March 2021 and article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*), to acquire new shares in Hensoldt's capital increase announced on December 7, 2023, pro-rata to their 25.1% shareholding.

TransnetBW GmbH

In November 2023, the Federal Government mandated KfW pursuant to and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*) to acquire a 24.95% stake in TransnetBW GmbH held by EnBW Übertragungsnetz Immobilien GmbH & Co. KG ("UENI"). At the time of the acquisition, UENI directly held all shares in the German transmission systems operator TransnetBW GmbH. KfW's stake in TransnetBW GmbH is held via Expand Netzbetreiber GmbH, a wholly-owned subsidiary of KfW.

German LNG Terminal GmbH

In August 2022, the Federal Government mandated KfW to acquire a 50.0% equity participation in German LNG Terminal GmbH ("GLNG") and to provide subsequent pro rata payments to the capital reserve of GLNG. To this end, KfW has entered into a share purchase agreement and a shareholders' agreement with Gasunie LNG Holding B.V. and GBV Zweiunddreißigste Gesellschaft für Beteiligungsverwaltung mbH, a wholly owned subsidiary of RWE AG, regarding the equity participation and subsequent pro rata payments to the capital reserve. GLNG is a project company that is developing a liquefied natural gas (LNG) import facility in Brunsbüttel, Germany. The closing of the transaction took place in July 2023.

Total borrowings	507,352
Equity	
Paid-in subscribed capital (2)	3,300
Capital reserve	8,447
Reserve from the ERP Special Fund	1,191
Retained earnings	25,150
Fund for general banking risks	0
Revaluation reserve	-15
Total equity	38,073
Total capitalization	**545,425**

(1) Includes long-term and short-term borrowings from the ERP Special Fund of EUR 315 million.

(2) KfW’s equity capital, 80% of which is held by the Federal Republic and the remaining 20% by the Länder, amounted to EUR 3,750 million in 2023, of which EUR 3,300 million has been paid in pro rata by the Federal Republic and the Länder.

the responsibility for actions taken by the Executive Board.

The following biographical information on the current members of the Executive Board includes their dates of birth, the year in which they were appointed, their terms of office, their current positions and their areas of responsibility.

For information on the remuneration of the Executive Board, see note 68 to the financial statements included in Exhibit (e) to this annual report.

Stefan Wintels

Date of birth: November 17, 1966

Stefan Wintels joined KfW's Executive Board as Co-CEO in October 2021 and became the sole CEO in November 2021. He is in charge of the General Secretariat, Group Communications, Internal Auditing, Financial Markets, Group Development and Economics, as well as Legal Affairs. Mr. Wintels was appointed until September 2025.

Prior to joining KfW, Mr. Wintels worked at Citigroup for 20 years from 2001 to 2021 in various leadership roles. Most recently, he was the Global Co-Head Financial Institutions Group and a member of the Global BCMA Executive Committee. Before that, he was Vice Chairman of Citigroup in Germany, Citi's Chief Country Officer for Germany as well as Chief Executive Officer of Citigroup Global Markets Europe AG until March 2020.

Stefan Wintels began his professional career in 1994 at Deutsche Bank AG and left in 2001 as Managing Director at Deutsche Bank's Corporate Development / Group Strategy Department.

He received a Master's degree in Business Administration from the Technische Universität Berlin and participated in the second year of a two year MBA program at the University of Illinois, Urbana-Champaign.

Stefan Wintels also chairs the supervisory board of KfW Capital, Frankfurt am Main, Germany. In addition, he is a member of the supervisory boards of Deutsche Post AG, Bonn, Germany and of Deutsche Telekom AG, Bonn, Germany.

Katharina Herrmann

Date of birth: October 27, 1968

Katharina Herrmann joined KfW as General Manager in April 2022 and became a member of KfW's Executive Board in April 2023. She is in charge of KfW's Domestic Promotional Business (Individual Financing Solutions & Public Clients, SME Bank & Private Clients), Sales Digital Development and KfW Capital. Ms. Herrmann was appointed until April 2026.

Prior to joining KfW she was Head of Platforms and New Business at ING-DiBa AG, Frankfurt am Main, Germany, as well as Global Head of Platforms and Beyond Banking at ING Group, Amsterdam, Netherlands. During her time at ING from 1998 until 2021 Ms. Herrmann held various leadership positions. From 1996 until 1998 Ms. Herrmann worked as a Specialist in Marketing at COMMERZBANK AG, Frankfurt am Main, Germany. In 1995 she started her professional career at Nassauische Sparkasse, Wiesbaden, Germany, where she worked in junior and senior positions in marketing.

Ms. Kehr studied Business Administration at the University of Bielefeld, Germany, and also holds a Master's degree in Economics from Purdue University, Indiana, USA. In 1999, she started her professional career at the consulting firm Andersen Consulting Unternehmensberatung GmbH (renamed Accenture in 2001) where she became Managing Director for Industry Financial Services in 2012. In 2014, she was appointed Group Chief Information Officer of Bayerische Landesbank, Munich, Germany, and served in this position until July 2018.

Ms. Kehr is also a member of the supervisory board of Deka Bank Deutsche Girozentrale, Frankfurt am Main, Germany.

Christiane Laibach

Date of birth: November 9, 1961

Christiane Laibach joined KfW's Executive Board in June 2021. She leads the international financing activities consisting of KfW Entwicklungsbank and the two affiliates KfW IPEX GmbH (Export and Project Finance) and KfW DEG mbH. Ms. Laibach was appointed until May 2025.

Prior to joining KfW's Executive Board she was member of DEG's Management Board for six years, the last year as CEO. From 2008 to 2015 she was part of KfW-IPEX Bank's Management Board, including Chief Risk and Financial Officer. She has been holding leadership positions at KfW Group for 25 years after having joined in 1990, including as global head of aviation for seven years.

Ms. Laibach holds a Master's degree in Economics from University of Mainz, Germany, and completed the Executive Management Program at Wharton Business School, Philadelphia, USA.

Ms. Laibach also chairs the supervisory board of KfW IPEX GmbH. Further, she serves as first deputy chair of the supervisory board of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany.

Bernd Loewen

Date of birth: October 23, 1965

Bernd Loewen joined KfW as a member of KfW's Executive Board in July 2009. He is in charge of Finance, Human Resources, Central Services as well as Organization and Consulting. Mr. Loewen acts as Chief Financial Officer of KfW after initially running both the risk and finance departments at KfW up to the separation of the CRO and CFO functions as of January 1, 2016. Mr. Loewen was appointed until June 2027.

After graduating with a Business Administration degree from the University of Muenster, Germany, he started his professional career at an auditing firm and completed the tax consultant exam. Subsequently, Mr. Loewen joined the Corporate Development department at COMMERZBANK Aktiengesellschaft, Frankfurt am Main, Germany, before moving on to Equity Derivatives Trading. From 2002 onwards, Bernd Loewen worked as Co-Managing Director at Commerz Capital Markets Corporation, a subsidiary of COMMERZBANK Aktiengesellschaft, in New York, USA. In 2005, he was appointed Member of the Management Board of mBank (formerly BRE Bank SA), a Polish subsidiary of COMMERZBANK Aktiengesellschaft and relocated from New York to Warsaw, Poland.

doctorate in political science (Dr. oec. publ.) from the university's Institute for Risk Management and Insurance. In 1995, he started his career in the Real Estate Department of Bayerische Landesbank, Germany. He then transferred to the Risk Management Department, where he held management positions as Head of Team (client portfolio and strategic controlling) and Head of Department (portfolio controlling and controlling systematics, risk controlling trading activities). In 2007, Dr Peiß became Head of the Risk Operations Division, and in 2008, he was promoted to Head of Group Risk Control Division. Dr Peiß joined KfW in 2009 as Senior Vice President and Head of Risk Management and Controlling.

Dr Peiß is a member of the supervisory board of KfW IPEX-Bank, Frankfurt am Main, Germany and serves as deputy chairman of KfW Capital's supervisory board, Frankfurt am Main, Germany.

Board of Supervisory Directors

The Board of Supervisory Directors generally has 37 members and consists of the Federal Minister of Finance; the Federal Minister for Economic Affairs and Climate Action; the Federal Minister for Foreign Affairs; the Federal Minister of Food and Agriculture; the Federal Minister of Transport and Digital Infrastructure; the Federal Minister for Economic Cooperation and Development; the Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection; seven members appointed by the Bundesrat; seven members appointed by the Bundestag; five representatives of commercial banks; two industry representatives; one representative each of the local municipalities, agricultural, skilled crafts, trade and housing sectors; and four representatives of the trade unions. The representatives of the commercial banks, industry, the local municipalities, agricultural, skilled crafts, trade and housing sectors, and the trade unions are appointed by the Federal Government after consultation with their constituencies.

The Federal Minister of Finance and the Federal Minister for Economic Affairs and Climate Action serve as Chairman and Deputy Chairman of the Board of Supervisory Directors on a year-by-year rotating basis, with the latter chairing for the year 2024. The term of office of all Federal Ministers on KfW's Board of Supervisory Directors corresponds to their term of office as Federal Minister of such Federal Ministry, while the other members of the Board of Supervisory Directors are personally appointed for a term of three years.

The Board of Supervisory Directors supervises the overall conduct of KfW's business and the administration of its assets. It may give the Executive Board general directives. In particular, the Board of Supervisory Directors (via its Risk and Credit Committee) generally must approve, inter alia, loans to members of management bodies (*Organkredite*), short-term financing, loan commitments to a single borrower exceeding EUR 50 million for non-investment grade or unrated borrowers, certain unsecured loans and loan commitments exceeding EUR 100 million to investment grade borrowers. The Board of Supervisory Directors may reserve the right to approve other transactions or types of transactions. However, it is not authorized to represent KfW or to commit funds on KfW's behalf.

Board. The Risk and Credit Committee advises the Board of Supervisory Directors regarding, in particular, the current and future overall risk tolerance and strategy of KfW. It is responsible for approving loans and equity investments at the operational level that exceed certain thresholds as set forth in KfW's Bylaws, as well as for authorizing the issuance of debt securities, borrowings in foreign currencies and swap transactions. The Audit Committee monitors in particular the accounting process and the effectiveness of the risk management system, especially the internal control system and the internal audit system. It monitors the performance of the audits of the annual financial statements and the timely correction of any errors identified by the auditor. Furthermore, the Audit Committee provides recommendations to the Board of Supervisory Directors regarding the approval of the annual unconsolidated financial statements and the adoption of the annual consolidated financial statements. The Presidial and Nomination Committee and the Remuneration Committee will, as a general rule, be chaired by the Chairperson of the Board of Supervisory Directors. The Risk and Credit Committee and the Audit Committee, as a general rule, will be chaired by a representative of the banking sector.

As of May 13, 2024, the members of the Board of Supervisory Directors were:

Name	Position
Annalena Baerbock	Federal Foreign Minister
Katharina Beck	Member of Parliament; appointed by the Bundestag
Volker Bouffier	Former Minister President of the State of Hesse; appointed by the Bundesrat
Dr Andreas Dressel	Senator for Finance of the Free and Hanseatic City of Hamburg; appointed by the Bundesrat
Yasmin Fahimi	Chair of the Confederation of German Trade Unions (DGB), representative of the trade unions
Björn Fecker	Mayor and Senator for Finance of the Free Hanseatic City of Bremen; appointed by the Bundesrat
Robert Feiger	Chair of the Federal Executive Committee of the IG Bauen-Agrar-Umwelt Trade Union (IG Bau); representative of the trade unions
Tanja Gönner	CEO and Director General of the Federation of German Industries (BDI); representative of the industry
Olav Gutting	Member of Parliament; appointed by the Bundestag
Dr Robert Habeck	Federal Minister for Economic Affairs and Climate Action; Chair in 2024
Gerald Heere	Minister of Finance of the State of Lower Saxony; appointed by the Bundesrat
Prof Dr Hans-Günter Henneke	Managing Member of the Executive Committee of the Federation of German Districts (DLT); representative of the municipalities
Marion Höllinger	Member of the Board of Directors of the Association of German Banks (BdB); representative of the commercial banks

	the trade unions
Ulrich Lange	Member of Parliament; appointed by the Bundestag
Steffi Lemke	Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection
Christian Lindner	Federal Minister of Finance; Deputy Chair in 2024
Rainer Neske	Chair of the Board of Managing Directors at Landesbank Baden-Württemberg (LBBW); representative of credit institutions prominent in the field of industrial credit
Cem Özdemir	Federal Minister of Food and Agriculture
Dr Marcus Optendrenk	Minister of Finance of the State of North Rhine-Westphalia; appointed by the Bundesrat
Dr Bettina Orlopp	Deputy Chair of Commerzbank AG; representative of the mortgage banks
Daniel Quinten	Member of the Board of Managing Directors of the National Association of German Cooperative Banks (BVR); representative of the cooperative banks
Prof Dr Ulrich Reuter	President of the German Savings Banks Association (DSGV); representative of the savings banks
Michael Richter	Minister of Finance of the State of Saxony-Anhalt; appointed by the Bundesrat
Dr Thorsten Rudolph	Member of Parliament; appointed by the Bundestag
Joachim Rukwied	President of the German Farmers' Association (DBV); representative of the agricultural sector
Frank Schäffler	Member of Parliament; appointed by the Bundestag
Jan Wenzel Schmidt	Member of Parliament; appointed by the Bundestag
Svenja Schulze	Federal Minister for Economic Cooperation and Development
Holger Schwannecke	Secretary General of the German Confederation of Skilled Crafts (ZDH); representative of the skilled crafts sector
Dr Martin Wansleben	Chief Executive of the Association of German Chambers of Commerce and Industry (DIHK); representative of the industry
Dr Kai H Warnecke	President Haus & Grund Germany; representative of the housing sector
Dr Volker Wissing	Federal Minister for Digital and Transport

Of KfW Group's staff, approximately 19.1% is engaged in KfW's domestic business activities, 28.6% in promotion of developing countries and emerging economies (KfW Entwicklungsbank and DEG), 11.3% in Export and Project Finance (KfW IPEX-Bank), and the remaining balance in KfW's accounting, disbursements, collateral, funding and lending support departments and in general administrative and staff functions.

KfW Group has defined employee relations as one of its key sustainability action areas and attaches great importance to treating its employees with respect and appreciation. Because KfW recognizes that its success is based on its skilled and motivated staff, employer attractiveness, including by achieving top positions in the main employer rankings, has been defined as one of the key targets within KfW Group's strategic objectives. KfW believes that a fair remuneration system, group-wide diversity and equal opportunities for the professional development of all employees, irrespective of gender, origin, ethnicity, religion, disability, age, sexual identity or social background, provide a solid basis for achieving this target. KfW emphasizes the importance of achieving target quotas for women in leadership positions and a good work-life balance. As a future-oriented organization, KfW offers a variety of part-time work and mobile work options as well as professional development and training opportunities and supports responsible health management.

For more information concerning KfW Group's employees, see note 67 to the financial statements included in Exhibit (e) to this annual report.

The Federal Republic is situated in central Europe and comprises an area of approximately 358,000 square kilometers (about 138,000 square miles). According to a first estimate of the Federal Statistical Office, approximately 84.7 million people were living in Germany at the end of 2023, which represents an increase of 0.3 million compared to the end of 2022. The increase corresponds to the average increase for the years 2012 to 2021 and was significantly lower than in 2022, when the population increased by 1.1 million people, mainly due to strong immigration from Ukraine. Net immigration (defined as immigration minus emigration) was the sole cause of population growth in 2023. According to the first estimate, in 2023 between 680,000 and 710,000 more people came to Germany than left the country. Compared to the years with particularly high refugee migration (2015: +1.14 million; 2022: +1.46 million), net immigration in 2023 was significantly lower. From a long-term perspective, however, net immigration remained at a high level, only comparable to the years 1991 (+603,000) and 1992 (+782,000), when many ethnic German repatriates from the former Soviet Union and war refugees from the former Yugoslavia came to Germany. In contrast, as in all years since German reunification in 1990, more people died than were born in 2023, which had a dampening effect on population growth. In 2023, the number of births fell by around 7% compared to 2022 and is expected to be between 680,000 and 700,000 (2022: 738,819), whereas the number of deaths decreased by around 4% to at least 1.02 million (2022: 1.07 million), resulting in a birth deficit (difference between births and deaths) of at least 320,000. At the end of 2022, approximately 17.5% of the total population was concentrated in metropolitan areas with more than 500,000 inhabitants; the largest of these areas were (in descending order) Berlin, Hamburg, Munich, Cologne and Frankfurt am Main.

Sources: Statistisches Bundesamt, Bundesländer mit Hauptstädten nach Fläche, Bevölkerung und Bevölkerungsdichte am 31.12.2022 (September 2023) (https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/02-bundeslaender.html); Statistisches Bundesamt, Bevölkerung wächst im Jahr 2023 um gut 0,3 Millionen Personen, press release of January 25, 2024 (https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/01/PD24_035_124.html); Statistisches Bundesamt, Städte (Alle Gemeinden mit Stadtrecht) nach Fläche, Bevölkerung und Bevölkerungsdichte am 31.12.2022 (September 2023) (https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/05-staedte.html).

40-60	27.3	27.7	28.1	28.4	28.8
60-80	22.2	22.0	21.8	21.7	21.7
80 and more	7.2	7.3	7.1	6.8	6.5
Growth rate	(percent change on the previous year)				
Total population	0.1	0.1	0.0	0.2	0.3
Under 20	2.8	0.6	0.0	0.2	0.3
20-40	1.6	-0.3	-0.5	0.1	0.5
40-60	-0.3	-1.3	-1.1	-1.1	-0.8
60-80	2.3	0.9	0.5	0.4	0.3
80 and more	0.0	3.0	4.5	5.4	4.6

Source: Statistisches Bundesamt, Bevölkerung, Bevölkerungsstand, Bevölkerung nach Altersgruppen (ab 2011) (https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsstand/Tabellen/liste-altersgruppen.html).

Without the surplus resulting from net immigration, the total population would have fallen every year since German reunification in 1990 because more people died than were born in each year. These developments are expected to continue, together with the continued aging of the population. According to the 15th coordinated population projection of the Federal Statistical Office published in December 2022 and covering the period until 2070, the number of people of retirement age (which will be 67 years from 2031 onwards) or over in Germany will rise by roughly 4 million to at least 20 million by the mid-2030s. The number of people of working age (20 to 66 years), which currently comprises 51.4 million people, will decrease by between 1.6 and 4.8 million in the next 15 years, which may result in a downward pressure on Germany's growth potential in the long term. The number of those aged 80 or over will remain relatively stable until the middle of the 2030s, amounting to between 5.8 and 6.7 million. Subsequently, this elderly population is expected to increase massively, along with the related need for long-term care. If net immigration remains at the level of the past decade of about 400,000 persons per year on average, roughly 90 million people would live in Germany in 2070. However, with a low level of net immigration of 180,000 people per year, the population would fall to 75 million people in 2070.

Sources: Statistisches Bundesamt, Bevölkerung wächst im Jahr 2023 um gut 0,3 Millionen Personen, press release of January 25, 2024 (https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/01/PD24_035_124.html); Federal Statistical Office, 4 million more people aged 67 or over will live in Germany in 2035, press release of December 2, 2022 (https://www.destatis.de/EN/Press/2022/12/PE22_511_124.html; German version: https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/12/PD22_511_124.html).

Government

The Federal Republic is a federated republic whose constitution is codified in the *Grundgesetz* of 1949. The capital of the Federal Republic is Berlin. The Federal Republic consists of 16 federal states (Länder). The Länder have legislative sovereignty over matters not expressly reserved to the legislative, executive and judicial bodies of the Federal Republic.

The *Grundgesetz* provides for a Federal President (*Bundespräsident*), two Houses of Parliament (the Bundestag and the Bundesrat, the latter consisting of representatives of the 16 Länder governments), a Chancellor (*Bundeskanzler*) and a Federal Constitutional Court (*Bundesverfassungsgericht*). The Chancellor heads the Federal Government (*Bundesregierung*), consisting of the Chancellor and the Federal Ministers. The *Bundespräsident* acts as head of state.

(CDU) and its Bavarian sister party, the Christian Social Union (CSU); the Greens (Bündnis 90/Die Grünen); the Free Democratic Party (FDP); the Alternative for Germany (AfD); the Left-Wing Party (Die Linke) and the Südschleswigscher Wählerverband (SSW), which participates in the distribution of seats of the Bundestag as a party representing the Danish minority in Federal State of Schleswig-Holstein, to which the five percent of the votes cast or three direct mandates threshold for participation in the Bundestag does not apply.

Since 1949, the Federal Republic has been governed by nine Chancellors over 20 electoral periods. The most recent general election, held in September 2021, resulted in a coalition between the Social Democratic Party (SPD), the Greens (Bündnis 90/Die Grünen) and the Free Democratic Party (FDP). On December 8, 2021, the Bundestag elected Olaf Scholz (SPD), who served as Finance Minister in the previous Federal Government, Chancellor for the first time.

Sources: The Federal Returning Officer, 2021 Bundestag Election: final result, press release of October 15, 2021 (https://www.bundeswahlleiterin.de/en/info/presse/mitteilungen/bundestagswahl-2021/52_21_endgueltiges-ergebnis.html); Deutscher Bundestag, Election of Members and the allocation of seats, October 18, 2021 (https://www.bundestag.de/en/parliament/elections/arithmetic); The Federal Government, New Federal Government in office, December 8, 2021 (https://www.bundesregierung.de/breg-en/service/archive/federal-chancellor-election-1989862).

The following table shows the results of the five most recent general elections for the Bundestag.

ELECTION RESULTS TO THE BUNDESTAG

	2021 Elections		2017 Elections		2013 Elections		2009 Elections		2005 Elections	
	% of Votes	Seats	% of Votes	Seats	% of Votes	Seats	% of Votes	Seats	% of Votes	Seats
SPD	25.7	206	20.5	153	25.7	193	23.0	146	34.2	222
CDU/CSU	24.1	197	33.0	246	41.5	311	33.8	239	35.2	226
Bündnis 90/Die Grünen	14.8	118	8.9	67	8.4	63	10.7	68	8.1	51
FDP	11.5	92	10.7	80	4.8	—	14.6	93	9.8	61
AfD	10.3	83	12.6	94	4.7	—	—	—	—	—
Die Linke.	4.9	39	9.2	69	8.6	64	11.9	76	8.7	54
SSW (1)	0.1	1	—	—	—	—	—	—	—	—
Others	8.6	—	5.0	—	6.2	—	6.0	—	3.9	—
Total		**736**		**709**		**631**		**622**		**614**

(1) SSW (Südschleswigscher Wählerverband), representing the Danish minority in the federal state of Schleswig-Holstein, is exempt from the five percent of the votes cast or three direct mandates threshold for representation in the Bundestag.

Sources: The Federal Returning Officer, 2021 Bundestag Election: final result, press release of October 15, 2021 (https://www.bundeswahlleiterin.de/en/info/presse/mitteilungen/bundestagswahl-2021/52_21_endgueltiges-ergebnis.html); The Federal Returning Officer, Bundestag election 2017 (https://www.bundeswahlleiterin.de/en/bundestagswahlen/2017/ergebnisse/bund-99.html); Statistisches Bundesamt, Statistisches Jahrbuch 2016, Tables 10.1.1 and 10.1.2; Statistisches Bundesamt, Statistisches Jahrbuch 2011, Tables 4.3.1, 4.3.2 and 4.6.

The European Union and European Integration

The Federal Republic was one of the six founding members of the European Coal and Steel Community in 1951, which later developed into the EU. Since its foundation, the EU has grown considerably. Following the withdrawal of the United Kingdom from the EU on January 31, 2020, 27 countries currently form part of the EU. These include Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain and Sweden (together, the "EU Member States"). According to provisional data, the aggregate population of the 27 EU Member States was approximately 448 million as of January 1, 2023. Formal accession negotiations are currently being conducted with Montenegro, Serbia, Albania, North Macedonia and Türkiye. While Türkiye is a key strategic partner of the EU on issues including migration, security, counter-terrorism, and the economy, accession negotiations with Türkiye have not progressed in recent years. In 2022 the European Council granted Ukraine, Moldova and Bosnia and Herzegovina the status of candidate countries. In addition, in 2023 Georgia was granted candidate status by the European Council, on the understanding that it will take relevant steps, as set out in the European Commission recommendation dated November 2023. Kosovo applied for EU membership in December 2023. Since 2016, a Stabilization and Association Agreement between the EU and Kosovo has been in force.

Sources: European Union, Principles, countries, history, History of the EU (https://european-union.europa.eu/principles-countries-history/history-eu_en); European Union, Principles, countries, history, History of the EU, History of the European Union 1945-59 (https://european-union.europa.eu/principles-countries-history/history-eu/1945-59_en); European Union, Principles, countries, history, EU countries (https://european-union.europa.eu/principles-countries-history/eu-countries_en#the-27-member-countries-of-the-eu); Statistical Office of the European Communities, Total population (https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en); European Commission, Enlargement Policy (https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy_en).

Political Integration

The EU is based on treaties that are binding agreements between the EU Member States and have been approved voluntarily and democratically by all EU Member States. The treaties set out the EU's objectives, the rules governing the EU institutions, the way decisions are taken and the relationship between the EU and the EU Member States. Treaties are amended from time to time to make the EU more efficient and transparent, to prepare for the accession of candidate countries as new EU Member States and to introduce new areas of cooperation. Under the treaties currently in place, EU institutions can adopt legislation, which, depending on the subject matter, either becomes directly applicable law or requires further implementation by the EU Member States.

The EU's three main institutions are the Council of the EU (representing the governments of the EU Member States) (the "Council"), the Parliament (elected by and representing the citizens of the EU Member States) and the European Commission (the executive body of the EU). In addition, the European Council, which consists of the heads of state or government of the EU Member States, the European Council President and the President of the European Commission, defines the EU's overall political direction and priorities. It is not one of the EU's legislating institutions, but rather sets the EU's policy agenda, traditionally by adopting conclusions during European Council meetings which identify issues of concern and actions to take.

Article 50 of the Treaty on European Union provides for a mechanism for the voluntary and unilateral withdrawal of an EU Member State from the EU. Pursuant to Article 50, the withdrawal process is initiated by a notification from the EU Member State wishing to withdraw to the European Council. The EU treaties cease to apply to an EU Member State from the later of the date of entry into force of an agreement setting out arrangements for the EU Member State's withdrawal, or within two years of the notification of the withdrawal. The European Council may, in agreement with the EU Member State concerned, unanimously decide to extend the period beyond two years.

policy change gained particular traction in the context of Russia's invasion of Ukraine.

As part of the EU response to Russia's invasion of Ukraine the EU adopted a set of comprehensive restrictive measures against Russia and Russian individuals in addition to the prior sanctions that were imposed after the illegal annexation of Crimea in 2014. In addition, sanctions were issued against Belarus in response to their involvement in this invasion and against Iran in relation to the manufacturing and supply of drones. The sanctions imposed comprise, among others, individual and economic sanctions. In March 2024, 1,706 Russian individuals, including Russian President Vladimir Putin and Russian Foreign Minister Sergey Lavrov, and 419 entities were subjected to an asset freeze and/or a travel ban because their actions undermined Ukraine's territorial integrity, sovereignty and independence. The lists of sanctioned persons and entities are kept under constant review and are subject to periodic renewals by the Council. The economic sanctions, which target exchanges with Russia and Belarus in specific economic sectors, include restricted access to EU capital markets for certain Russian banks and companies, a ban on transactions with the Russian Central Bank and the Central Bank of Belarus, a ban of a number of Russian and Belarusian banks from the SWIFT messaging network, a prohibition on the provision of euro-denominated banknotes to Russia and Belarus, a prohibition on the provision of crypto-wallets to Russia, a ban on coal and other solid-fossil-fuel imports from Russia, a price cap related to the maritime transport of crude oil and petroleum products, a ban on use of EU airspace and EU airports by Russian-owned, Russian-registered or Russian-controlled aircraft, a ban on exports to and imports from Russia of raw materials, goods and technology in various sectors, a ban on exports to Russia of dual-use goods, an export and import ban on arms and a prohibition on the provision of certain services to Russia or Russian persons, including the provision of software for the management of enterprises.

Sources: European Commission, Europe in 12 lessons by Pascal Fontaine (https://op.europa.eu/en/publication-detail/-/publication/a5ba73c6-3c6a-11e8-b5fe-01aa75ed71a1); EUR-Lex, Treaties currently in force (https://eur-lex.europa.eu/collection/eu-law/treaties/treaties-force.html); European Council, Council of the European Union, The European Council (https://www.consilium.europa.eu/en/european-council/); EUR-Lex, Consolidated versions of the Treaty on European Union, Article 50 (https://eur-lex.europa.eu/eli/treaty/teu_2016/art_50/oj); European Council, Council of the European Union, Policies, Why the EU adopts sanctions, accessed on May 3, 2024 (https://www.consilium.europa.eu/en/policies/why-sanctions/); European Council, Council of the European Union, Policies, EU sanctions against Russia, accessed on May 3, 2024 (https://www.consilium.europa.eu/en/policies/sanctions-against-russia/); European Council, Council of the European Union, Policies, EU sanctions against Belarus, accessed on May 3, 2024 (https://www.consilium.europa.eu/en/policies/sanctions-against-belarus/).

Economic Integration

From its inception, the EU has had the fundamental objective, in line with its predecessors, of economic integration of its member states. After a long process, a single market that provides for the free movement of goods and services, persons and capital among the EU Member States was established as of January 1, 1993. The integration of the EU Member States' economies and the completion of a single market are also promoted by a European competition policy, which aims at creating a level-playing field for EU Member States' companies, thereby promoting economic efficiency, and by a European consumer policy. In addition, various liberalization and harmonization measures are being implemented, for example in the telecommunication and energy sectors. In the financial sector, the single market has been fostered by providing for the free movement of capital and the freedom to perform banking services throughout the EU under the "single passport," which enables financial institutions to provide financial services throughout the EU based on a single license obtained in one EU Member State. The EU promotes economic integration with regional aid, which is designed to focus development efforts on certain disadvantaged regions and sections of population of the EU. Another important policy area for the EU has been agriculture and fisheries.

direct grants, until June 30, 2023. The COVID Temporary Framework provided the basis for a number of German governmental support measures at the federal and regional (Länder) levels in connection with the COVID-19 pandemic, including for example the KfW Special Loan Program.

Similar considerations led to the adoption of a temporary crisis framework for state aid in March 2022 as part of the EU response to Russia's invasion of Ukraine. This framework is referred to as "Temporary Crisis and Transition Framework" and has been amended and extended several times. The framework provides for several types of aid that may be granted by the EU Member States. The allowance for the provision of liquidity support in the form of state guarantees and subsidized loans, which help ensure that sufficient liquidity remains available to businesses, expired in December 2023. Pursuant to the framework, EU Member States are still permitted to compensate companies for the additional costs incurred due to exceptionally high gas and electricity prices, to incentivize the reduction of electricity consumption and to grant limited amounts of aid to companies affected by the current crisis until June 30, 2024. In addition, until December 31, 2025, EU Member States may grant support to foster the transition to a net-zero economy. In particular, state aid may be granted to accelerate the roll-out of renewable energy, including renewable energy storage and renewable heat technologies, and to decarbonize industrial production processes.

The EU Budget and the EU Recovery Instrument. The EU's expenditures are governed by a long-term budget, also referred to as multiannual financial framework ("MFF"). The MFF is meant to ensure that the EU's expenditures develop in an orderly manner and within the limits of its own resources. It aims to align spending with policy priorities, to increase predictability of EU finances for co-financers and beneficiaries, to ensure EU budgetary discipline and to facilitate the adoption of the annual EU budget. It sets overall spending limits by determining annual maximum amounts for commitment appropriations, which cover commitments made to spend funds over one or more years in certain expenditure categories and for payment appropriations.

The regulation laying down the MFF of the EU for the years 2021 to 2027 was formally adopted in December 2020. In February 2024, the Council revised the MFF, making additional funding available to address new and emerging challenges in the EU. The long-term EU budget provides EUR 1.211 trillion (in current prices) in commitment appropriations. Together with the new temporary Next Generation EU recovery instrument (the "EU Recovery Instrument") of up to EUR 806.9 billion (in current prices), which is specifically aimed at addressing the socioeconomic consequences of the COVID-19 pandemic, this allows the EU to provide an unprecedented amount of approximately EUR 2.018 trillion to help repair the economic and social damage caused by the COVID-19 pandemic in Europe and support the transition towards a modern and more sustainable Europe, including the green and digital transitions. Following Russia's invasion of Ukraine, the EU budget was used to provide emergency assistance and support in Ukraine and in the EU Member States, and to alleviate the humanitarian consequences of the war.

The most important component of the EU Recovery Instrument is the Recovery and Resilience Facility ("RRF"), with up to EUR 723.8 billion (in current prices) in loans and grants available to support reforms and investments undertaken by the EU Member States. The balance of the funds under the EU Recovery Instrument is being employed through existing EU instruments and assistance programs. To access the RRF, EU Member States are required to submit national recovery and resilience plans which are assessed by the European Commission and then approved by the Council of the EU on a case-by-case basis. After a prefinancing of 13% of the total support available to the relevant EU Member State, an EU Member State may request further disbursements up to twice a year upon reaching certain agreed milestones and targets. As of February 2024, the European Commission had disbursed EUR 224.2 billion to EU Member States under the RRF, thereof EUR 144.0 billion in the form of grants and EUR 80.2 billion in the form of loans. In February 2023, the European Parliament and the Council adopted an amending regulation to include REPowerEU chapters in the RRF. The purpose of REPowerEU is to strengthen the strategic autonomy of the EU by diversifying its energy supplies and ending its dependency on Russian fossil fuel imports. EU Member States may add a new REPowerEU chapter to their national recovery and resilience plans, in order to finance key investments and reforms that will help achieve the REPowerEU objectives. To this end the RRF financial envelope has been increased by EUR 20.0 billion for new grants. The RRF provides EUR 300.0 billion of funding for the REPowerEU Plan, which amounts to a great part of its funding. The 2024 EU budget, which was adopted by the Council and the European Parliament in November 2023, amounts to EUR 189.4 billion in commitment appropriations and EUR 142.6 billion in payment appropriations.

18.0 billion were used for the Macrofinancial Assistance of Ukraine. At the end of 2023, the overall outstanding amount of EU bonds reached EUR 443.0 billion, of which EUR 36.5 billion were raised through green bonds. In addition, as of December 31, 2023, EUR 15.2 billion of short-term debt in EU bills was outstanding. The European Commission has announced plans to issue long-term EU bonds in an amount of EUR 75 billion between January and June 2024, to be complemented by short-term EU bills.

Sources: European Commission, Europe in 12 lessons by Pascal Fontaine (https://op.europa.eu/en/publication-detail/-/publication/a5ba73c6-3c6a-11e8-b5fe-01aa75ed71a1); European Banking Authority, Regulation and policy, Passporting and supervision of branches (https://eba.europa.eu/regulation-and-policy/passporting-and-supervision-branches); European Commission, Competition Policy, State Aid (https://competition-policy.ec.europa.eu/state-aid_en); European Commission, Competition Policy, State Aid, Coronavirus, The State Aid Temporary Framework (https://competition-policy.ec.europa.eu/state-aid/coronavirus/temporary-framework_en); European Commission, Competition Policy, State Aid, Ukraine (https://competition-policy.ec.europa.eu/state-aid/temporary-crisis-and-transition-framework_en); European Council, Council of the European Union, Policies, The EU's annual budget (https://www.consilium.europa.eu/en/policies/eu-annual-budget/); European Council, Council of the European Union, Policies, The EU long-term budget, Timeline - EU long-term budget 2021-2027 (https://www.consilium.europa.eu/en/policies/eu-long-term-budget/timeline-long-term-eu-budget-2021-2027/#:~:text=The%20budget%20will%20support%20investment,%E2%82%AC360%20billion%20in%20loans); Official Journal of the European Union, Council Regulation (EU, Euratom) 2024/765 of 29 February 2024 amending Regulation (EU, Euratom) 2020/2093 laying down the multiannual financial framework for the years 2021 to 2027 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202400765); European Commission, The 2021-2027 EU budget – What's new? (https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/whats-new_en#revision-of-the-eu-budget-2021-2027); Publications Office of the European Union, The EU's 2021-2027 long-term budget and NextGenerationEU, Facts and Figures (https://op.europa.eu/en/publication-detail/-/publication/d3e77637-a963-11eb-9585-01aa75ed71a1/language-en); European Commission, Strategy and policy, Recovery Plan for Europe (https://commission.europa.eu/strategy-and-policy/recovery-plan-europe_en); European Council, Council Decision (EU, Euratom) 2020/2053 (https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32020D2053); European Commission, Questions and Answers: An adjusted package for the next generation of own resources (https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_3329); European Commission, Recovery and Resilience Scoreboard (https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html); European Commission, Business, Economy, Euro, Economic recovery, Recovery and Resilience Facility (https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility_en); European Commission, Mid-Term Evaluation of the Recovery and Resilience Facility, February 2024 (https://economy-finance.ec.europa.eu/document/download/85f0c9e6-6832-4d07-abf3-2a9280ff7cc8_en?filename=ip269_en.pdf); European Council, Council of the European Union, EU recovery plan: Council adopts REPowerEU, press release of February 21, 2023 (https://www.consilium.europa.eu/en/press/press-releases/2023/02/21/eu-recovery-plan-council-adopts-repowereu/); European Council, Council of the European Union, EU budget for 2024 (https://www.consilium.europa.eu/en/policies/eu-annual-budget/2024-budget/), accessed on May 3, 2024; European Commission, REPowerEU (https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en); Official Journal of the European Union, Definitive adoption (EU, Euratom) 2024/207 of the European Union's annual budget for the financial year 2024 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202400207); European Council, Council of the European Union, Green light from all member states for EU recovery spending, press release of May 31, 2021 (https://www.consilium.europa.eu/en/press/press-releases/2021/05/31/green-light-from-all-member-states-for-eu-recovery-spending/); European Commission, Half-yearly report on the implementation of borrowing, debt management and related lending operations pursuant to Article 12 of Commission Implementing Decision C(2022)9700, February 22, 2024 (https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52024DC0093&qid=1710429189518).

comprehensive economic sanctions, including trade restrictions. For more information on the trade restrictions, see "Political Integration—EU Sanctions".

Sources: European Commission, EU trade relationships by country/region, Making trade policy (https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/making-trade-policy_en); Federal Ministry for Economic Affairs and Climate Action, Trade Policy, Fostering international trade and reducing barriers (https://www.bmwk.de/Redaktion/EN/Dossier/trade-policy.html).

EU Response to the Energy Crisis. Since the fall of 2022, and significantly exacerbated by Russia's invasion of Ukraine, Europe has been facing an unprecedented energy crisis involving hikes in energy prices and disruptions to energy supply. In response, the EU Member States implemented several measures on the national and supranational levels to ensure affordable and competitive energy for EU consumers, increase the EU's energy security and preparedness in the event of emergencies, and strengthen the energy resilience and autonomy of EU Member States. In early 2022, the heads of the EU Member States had jointly decided to phase out the EU's dependency on Russian fossil fuels. In this context, the European Commission initiated the REPowerEU plan discussed above under "—The EU Budget and the EU Recovery Instrument" and put in place the Temporary Crisis and Transition Framework discussed above under "—State Aid". The joint action was successful. In December 2023, gas prices were almost nine times less compared to the peak of the crisis and the share of Russian gas imports had fallen from more than 45% to 15%. To further enhance the security of the gas supply and strengthen energy market resilience, several European emergency energy rules have been prolonged. For instance, in December 2023, the Council prolonged the emergency regulation on the security and supply of energy prices. This regulation implemented a temporary market correction mechanism, which is intended to limit episodes of extraordinarily high gas prices in the EU and reduce the impact of price hikes on EU citizens and the EU economy. It will remain in force until January 31, 2025. Furthermore, the measures adopted by the EU Member States to improve solidarity across the EU and better coordinate the joint purchasing of natural gas in the global markets have been extended until the end of 2024. The Council also extended the agreement to accelerate the deployment of renewable energy by fast-tracking the approval processes of relevant projects until mid-2025. In March 2024, the EU Member States agreed to continue reducing their gas consumption for another year on a voluntary basis. In June 2022, the Council had adopted the gas storage regulation which considers gas storage facilities as critical infrastructure that require certification and sets out intermediate targets for gas storage levels. In November 2023, the European Commission announced the gas storage targets for 2024.

Sources: European Council, Council of the European Union, Policies, Energy prices and security of supply, accessed on May 3, 2024 (https://www.consilium.europa.eu/en/policies/energy-prices-and-security-of-supply); European Council, Council of the European Union, Prolongation of emergency regulations on security of supply and energy prices: Council adopts measures, press release of December 22, 2023 (https://www.consilium.europa.eu/en/press/press-releases/2023/12/22/prolongation-of-emergency-regulations-on-security-of-supply-and-energy-prices-council-adopts-measures); European Council, Council of the European Union, Infographics, A market mechanism to limit excessive gas spikes (https://www.consilium.europa.eu/en/infographics/a-market-mechanism-to-limit-excessive-gas-price-spikes); European Commission, Intermediate gas storage filling targets for 2024 announced, press release of November 20, 2023 (https://energy.ec.europa.eu/news/intermediate-gas-storage-filling-targets-2024-announced-2023-11-20_en).

Monetary Integration

The Federal Republic is a signatory to and has ratified the Treaty on European Union of February 1992 (also known as the "Maastricht Treaty"). The Maastricht Treaty was the basis for the establishment of the European Economic and Monetary Union ("EMU"). The EMU led, in turn, to the adoption of irrevocable conversion rates between the euro and the national currencies of the initial participating member states on December 31, 1998, and the introduction of the euro as the single European currency in the euro area on January 1, 1999. On January 1, 2002, banknotes and coins denominated in euro were introduced as legal tender to replace the national currencies in the twelve member states forming the euro area at that time (Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain). Slovenia, Malta, Cyprus, Slovakia, Estonia, Latvia, Lithuania and Croatia subsequently joined the euro area.

(https://www.ecb.europa.eu/euro/intro/html/index.en.html); European Central Bank, Monthly Bulletin, 10th Anniversary of the ECB (https://www.ecb.europa.eu/pub/pdf/other/10thanniversaryoftheecbmb200806en.pdf).

EU Economic Governance

The EU economic governance framework aims to detect, prevent and correct problematic economic trends such as excessive government deficits or public debt levels, which can stunt growth and put economies at risk. The framework consists of the following main components.

Stability and Growth Pact. To strengthen the monitoring and coordination of national fiscal and economic policies, the EU Member States established the Stability and Growth Pact ("SGP") in 1997. In February 2024, the European Parliament and Council agreed to reform the economic governance rules of the SGP, based on a March 2023 proposal by the European Commission. The main objective of the new framework is to strengthen the EU Member States' debt sustainability and promote sustainable and inclusive growth. Under the new framework, EU Member States are given a timeframe within which, through a combination of fiscal adjustment, growth-enhancing reforms and priority investments, their debt level is to be put on a downward path. The SGP reference values of 3% for the GDP budget deficit and 60% for the GDP debt level remain in force. The new rules were adopted by the Parliament on April 23, 2024 and by the Council of the EU on April 29, 2024. They came into effect with their publication in the Official Journal of the EU on April 30, 2024. During 2024, fiscal surveillance will be based on the country-specific recommendations issued in Spring 2023, in accordance with the rules of the SGP currently in effect.

The new framework requires EU Member States to set up a medium-term fiscal-structural plan for the next four years, extendable to up to seven years. The net expenditure path is intended to be the single operational indicator for the national plans. After the initial submission of the medium-term fiscal structural plans, the plans will be assessed by the European Commission and endorsed by the Council. Every April, EU Member States will be required to submit a progress report on the medium-term structural plan, which replaces the Stability and Convergence Programmes of the SGP. In addition, to ensure the coordination of fiscal policies among Euro Area Member States, governments are required by European economic governance rules to submit their draft budgetary plans for the following year to the European Commission by October 15 of each year. The European Commission will then assess whether the Members States' draft budgetary plans are consistent with their net expenditure paths, pursuant to the new regulation.

The preventive arm of the SGP binds EU Member States to their commitments towards sound fiscal policies. In this respect the new framework introduces risk-based surveillance which differentiates between EU Member States and their fiscal situation. For EU Member States with a government deficit greater than 3% of GDP or a public debt level greater than 60% of GDP, the European Commission will issue a country-specific "reference trajectory" and a corresponding level of the structural primary balance to be reached by the end of the adjustment process. This primary structural balance target is defined as the cyclically adjusted general government balance net of temporary measures and net of interest expenditure. Quantitative safeguards are intended to ensure declining debt and to provide a safety margin below the Maastricht Treaty deficit reference value of 3% of GDP in order to create fiscal buffers. Thus, the new rules replace the 1/20 debt reduction requirement for EU Member States with a debt level above 60% of GDP.

The corrective arm of the SGP consists of the excessive deficit procedure ("EDP"). The EDP ensures the correction of excessive budget deficits (defined as a deficit greater than 3% of GDP), excessive public debt levels (defined as a debt ratio greater than 60% of GDP without an adequate diminishing trend) or excessive control account deviations (defined as deviations from the "reference trajectory" in the EU Member State's net expenditure). EU Member States that fail to respect the SGP's preventive or corrective rules may ultimately face sanctions. For Euro Area Member States, these could take the form of warnings and financial sanctions including fines. In addition, all EU Member States could face a suspension of commitments or payments from the EU's structural and investment funds if they fail to abide by the corrective rules. The SGP contains rules for exceptional situations. In particular, in case of an unusual event outside the control of the EU Member State concerned, which has a major impact on the financial position of its general government, or in periods of severe economic downturn for the euro area or the EU as a whole, upon proposal of the European Commission and endorsement of the Council, EU Member States are allowed to depart from the budgetary requirements that would normally apply, provided that this does not endanger fiscal sustainability in the medium-term. When applied in the case of a severe economic downturn for the euro area or the EU as a whole, this rule is referred to as the "general escape clause."

sustainability and sustainable and inclusive growth, press release of March 8, 2023 (https://ec.europa.eu/commission/presscorner/detail/%20en/ip_23_1410); European Commission, Economy and Finance, Economic and fiscal governance, Stability and Growth Pact (https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact_en); European Commission, Economy and Finance, Economic and fiscal governance, Stability and Growth Pact, Annual draft budgetary plans (DBPs) of euro area countries (https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact/annual-draft-budgetary-plans-dbps-euro-area-countries_en); European Commission, Economy and Finance, Economic and fiscal governance, Stability and Growth Pact, The preventive arm (https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact/preventive-arm_en); European Commission, Economy and Finance, Economic and fiscal governance, Stability and Growth Pact, The corrective arm / Excessive Deficit Procedure (https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact/corrective-arm-excessive-deficit-procedure_en); European Council, Council of the European Union, Statement of EU ministers of finance on the Stability and Growth Pact in light of the COVID-19 crisis, press release of March 23, 2020 (https://www.consilium.europa.eu/en/press/press-releases/2020/03/23/statement-of-eu-ministers-of-finance-on-the-stability-and-growth-pact-in-light-of-the-covid-19-crisis/); European Commission, 2022 European Semester - Spring Package, Communication from the Commission of May 23, 2022 (https://commission.europa.eu/system/files/2022-05/2022_european_semester_spring_package_communication_en.pdf); European Parliament, New EU fiscal rules approved by MEPs, press release of April 23, 2024 (https://www.europarl.europa.eu/news/en/press-room/20240419IPR20583/new-eu-fiscal-rules-approved-by-meps); European Council, Council of the European Union, Economic governance review: Council adopts reform of fical rules, press release of April 29, 2024 (https://www.consilium.europa.eu/en/press/press-releases/2024/04/29/economic-governance-review-council-adopts-reform-of-fiscal-rules/); EUR-Lex, Regulation (EU) 2024/1263 of the European Parliament and of the Council of 29 April 2024 on the effective coordination of economic policies and on multilateral budgetary surveillance and repealing Council Regulation (EC) No 1466/97 (https://eur-lex.europa.eu/eli/reg/2024/1263/oj); EUR-Lex, Council Regulation (EU) 2024/1264 of 29 April 2024 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure (https://eur-lex.europa.eu/eli/reg/2024/1264/oj); EUR-Lex, Council Directive (EU) 2024/1265 of 29 April 2024 amending Directive 2011/85/EU on requirements for budgetary frameworks of the Member States (https://eur-lex.europa.eu/eli/dir/2024/1265/oj).

Macroeconomic Imbalance Procedure. Established in 2011, the macroeconomic imbalance procedure ("MIP") is a surveillance mechanism for the EU and the EU Member States that aims to identify potential economic risks early on, prevent the emergence of harmful macroeconomic imbalances and correct any existing excessive imbalances. EU Member States' medium-term fiscal-structural plans described above under "—Stability and Growth Pact" are required to ensure the delivery of investments and reforms to correct the imbalances identified under the MIP. The preventive arm of the procedure relies on an early warning system that uses a scoreboard of indicators and in-depth country reviews. This preventive arm allows the European Commission and the Council to provide preventive recommendations to the respective EU Member State at an early stage. In case of an EU Member State with excessive macroeconomic imbalances, the corrective arm may open an excessive imbalance procedure, under which the EU Member State concerned will have to submit a revised fiscal-structural plan and regular progress reports. The enforcement regime within the corrective arm comprises the option of imposing financial sanctions for Euro Area Member States, including fines of up to 0.1% of such Euro Area Member State's GDP, if a Euro Area Member State repeatedly does not comply with its obligations.

In the 2023 surveillance cycle, eleven EU Member States, including Germany, were found to be experiencing imbalances or excessive imbalances. Consequently, during the 2024 surveillance cycle, these EU Member States, and additionally Slovakia will be subject to an in-depth review in the context of the MIP (see also "—Stability and Growth Pact" and "—The Economy—International Economic Relations—Germany's Current Account Surplus and the Macroeconomic Imbalance Procedure").

Sources: European Commission, Economy and Finance, Economic and fiscal governance, Macroeconomic Imbalance Procedure, Dealing with macroeconomic imbalances (https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/macroeconomic-imbalance-procedure/dealing-macroeconomic-imbalances_en); European Commission, Publications, 2024 European Semester: Alert Mechanism report (https://commission.europa.eu/publications/2024-european-semester-alert-mechanism-report_en); European Commission, Regulation of the European Parliament and the Council on the effective coordination of economic policies and the multilateral budgetary surveillance and repealing Council Regulation (EC) No 1466/97 (https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52023PC0240).

(https://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/128454.pdf); Deutsche Bundesbank, Glossary: Treaty on Stability, Coordination and Governance in the EMU (TSCG) (https://www.bundesbank.de/dynamic/action/en/homepage/glossary/729724/glossary?firstLetter=T&contentId=653696#panel-653696); European Commission, Regulation of the European Parliament and the Council on the effective coordination of economic policies and the multilateral budgetary surveillance and repealing Council Regulation (EC) No 1466/97 (https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52023PC0240).*

Financial Assistance in the EU

EU countries experiencing or threatened by financing difficulties can request access to several financial assistance mechanisms. The main ones are described below.

Temporary Financial Stability Mechanism. In May 2010, the EU and Euro Area Member States established a temporary stability mechanism to safeguard the financial stability amid severe tensions in euro area sovereign debt markets, consisting of the European Financial Stabilisation Mechanism ("EFSM") and the European Financial Stability Facility ("EFSF"). Through the EFSM the European Commission is allowed to borrow up to a total of EUR 60 billion on behalf of the EU under an implicit EU budget guarantee. The EFSF was created as a temporary institution and since July 1, 2013 no longer engages in new financing programs. As of March 2024, the EFSF had outstanding loans to Ireland, Portugal and Greece of approximately EUR 170 billion. Debt securities issued by the EFSF to finance these loans are backed by irrevocable and unconditional guarantees and over-guarantees extended by the Euro Area Member States. The Federal Republic accounts for approximately 29% of the guarantees according to the contribution key. The EFSF will be dissolved and liquidated when all financial assistance provided to Euro Area Member States and all funding instruments issued by the EFSF have been repaid in full.

Sources: European Commission, Economy and Finance, EU financial assistance, How is financial assistance provided? (https://economy-finance.ec.europa.eu/eu-financial-assistance/how-financial-assistance-provided_en); European Commission, Economy and Finance, EU financial assistance, Euro area countries, European Financial Stabilisation Mechanism (EFSM) (https://economy-finance.ec.europa.eu/eu-financial-assistance/euro-area-countries/european-financial-stabilisation-mechanism-efsm_en); European Commission, Economy and Finance, EU financial assistance, Euro area countries, European Financial Stability Facility (EFSF) (https://economy-finance.ec.europa.eu/eu-financial-assistance/euro-area-countries/european-financial-stability-facility-efsf_en); European Stability Mechanism, Financial Assistance, Programme Database, Programme Overview (https://www.esm.europa.eu/financial-assistance/programme-database/programme-overview); European Financial Stability Facility, Financial Statements, Management Report and Independent Auditor's Report 2021 (https://www.esm.europa.eu/system/files/document/2022-06/EFSF_Financial%20Statements_31.12.21.pdf); European Stability Mechanism, Explainers, Guarantees by EFSF Countries (https://www.esm.europa.eu/about-us/explainers#guarantees-by-efsf-countries).

European Stability Mechanism. Since October 2012, the European Stability Mechanism ("ESM"), which was established as an intergovernmental organization under public international law by the Euro Area Member States, has been assisting in preserving the financial stability of the EMU. As of July 1, 2013, it assumed the tasks fulfilled by the EFSF and the EFSM and is currently the primary support mechanism for Euro Area Member States experiencing or threatened by severe financing problems, if such assistance is deemed essential to safeguard financial stability in the euro area as a whole. The ESM issues bonds or other debt instruments on the financial markets to raise capital to provide assistance, subject to certain conditions, to Euro Area Member States. Unlike the EFSF, which is based upon guarantees by Euro Area Member States, the ESM has total subscribed capital of EUR 708.5 billion provided by Euro Area Member States, which provides it with a lending capacity of EUR 500 billion. EUR 81 billion of the ESM's subscribed capital is in the form of paid-in capital with the balance of EUR 627.5 billion being callable capital. The contribution of each Euro Area Member State is based on the paid-in capital for the ECB. On this basis, the Federal Republic's contribution amounts to approximately 27% of the aggregate contributions to the ESM. The Federal Republic contributed approximately EUR 22 billion of paid-in capital to the ESM.

is threatened, the mutual agreement rule is replaced by a qualified majority of 85%. Given its voting rights of approximately 27%, the Federal Republic may veto any decision even under the emergency voting rule. As of March 2024, the ESM had loans in an aggregate principal amount of approximately EUR 81 billion outstanding to Spain, Cyprus and Greece.

Sources: European Stability Mechanism, Who we are, History (https://www.esm.europa.eu/about-us/history); European Commission, Economy and Finance, EU financial assistance, Euro area countries, European Stability Mechanism (ESM) (https://economy-finance.ec.europa.eu/eu-financial-assistance/euro-area-countries/european-stability-mechanism-esm_en); European Stability Mechanism, Who we are (https://www.esm.europa.eu/about-us#headline-who_we_are); European Stability Mechanism, Explainers, The ESM, Capital Structure (https://www.esm.europa.eu/about-us/explainers#capital-structure); European Stability Mechanism, Explainers, The ESM, Basic information (https://www.esm.europa.eu/about-us/explainers#basic-information); European Stability Mechanism, Financial Assistance, Financial assistance instruments, Lending toolkit (https://www.esm.europa.eu/financial-assistance/lending-toolkit); European Stability Mechanism, Explainers, Lending, Policy conditions attached to loans (https://www.esm.europa.eu/about-us/explainers#are-policy-conditions-always-tied-to-esm-loans-); European Stability Mechanism, Explainers, The ESM, ESM decision making (https://www.esm.europa.eu/about-us/explainers#esm-decision-making); European Stability Mechanism, Financial Assistance, Programme Database, Programme Overview (https://www.esm.europa.eu/financial-assistance/programme-database/programme-overview).

On January 27 and February 8, 2021, the Euro Area Member States signed an agreement amending the treaty establishing the ESM. The reform establishes a common backstop to the Single Resolution Fund (“SRF”) in the form of a credit line from the ESM to replace the direct recapitalization instrument for financial institutions, providing a financial safety net for bank resolutions in the European banking union (the “Banking Union”), which will help to protect financial stability (see “—Monetary and Financial System—Financial System—European Financial System—European System of Financial Supervision and European Banking Union” for more information on the Banking Union and the SRF). The maximum amount of ESM loans to the SRF is set at EUR 68 billion. The credit line may only be used as a last resort and to the extent that it is fiscally neutral in the medium term, i.e., it is repaid through ex-post contributions by banks over a period of three to five years. Moreover, the revised ESM Treaty envisages the introduction of single-limb collective action clauses for bonds with maturities of more than a year issued by governments of Euro Area Member States, which, if required, would facilitate orderly and predictable sovereign debt restructuring by allowing certain cross-series modifications to the terms of bonds provided the issuer consents and there is an affirmative vote or written resolution of the holders of not less than 66⅔% of the aggregate principal amount of the outstanding debt securities of all relevant series (taken in the aggregate). Furthermore, the reformed ESM Treaty enables the ESM to have a stronger role in future economic adjustment programs and crisis prevention. The reform clarified that ESM precautionary instruments provide support to Euro Area Member States with sound fundamentals that could be affected by an adverse shock beyond their control in order to safeguard the financial stability of the euro area as a whole. The eligibility criteria for granting a precautionary credit line were tightened accordingly. If a Euro Area Member State meets certain quantitative benchmarks and complies with qualitative conditions related to EU surveillance, it is eligible to request a precautionary credit line based on a letter of understanding. Access to the credit line shall be discontinued, however, if the Beneficiary Member State (“BMS”) no longer respects the eligibility criteria. If the non-compliant BMS has drawn funds from the credit line, an additional margin will be imposed. The reformed ESM Treaty will come into force once it has been ratified by the parliaments of all Euro Area Member States.

Sources: ESM, About us, ESM Reform (https://www.esm.europa.eu/about-esm/esm-reform); ESM, About ESM, ESM Treaty Reform - Explainer (https://www.esm.europa.eu/about-esm/esm-treaty-reform-explainer#ui-id-5); European Union, Economic and Financial Committee, EFC Sub-Committee On EU Sovereign Debt Markets, Collective Action Clauses in the Euro area, “Single-limb” CAC (https://economic-financial-committee.europa.eu/efc-sub-committee-eu-sovereign-debt-markets/collective-action-clauses-euro-area_en?prefLang=de); European Union, Terms of Reference of the 2022 CAC (https://economic-financial-committee.europa.eu/system/files/2021-04/EA%20Model%20CAC%20-%20Draft%20Terms%20of%20Reference.pdf); European Council, Council of the European Union, Infographics, Reform of the European Stability Mechanism (ESM) (https://www.consilium.europa.eu/en/infographics/reform-of-the-european-stability-mechanism-esm/); European Council, Council of the European Union, Documents & Publications, Agreement Amending the Treaty Establishing the European Stability Mechanism (ESM) (https://www.consilium.europa.eu/en/documents-publications/treaties-agreements/agreement/?id=2019035&DocLanguage=en).

bi-annual report (https://economy-finance.ec.europa.eu/document/download/f6ac72fb-92cb-40a9-bde8-0895ed341257_en?filename=COM_2023_291_1_en.pdf).

Statistical Standards

Statistical Standard for the National Accounts

Since August 2014, the Federal Statistical Office has been calculating the German national accounts in accordance with the European System of National and Regional Accounts 2010 (ESA 2010) which, in turn, is based on the System of National Accounts (SNA 2008) of the United Nations. In 2024, a major revision of the National Accounts that is harmonized Europe-wide will take place in Germany. The main purpose of the revision is to refine results by introducing new data sources, a new classification of private consumption expenditure and new calculation methods. The entire national accounting system will be reviewed and revised and, if necessary, new findings will be integrated into the calculations. To avoid breaks in time series, the results for Germany will be recalculated from 1991 onwards. The revised results will be published for the first time in summer 2024.

Sources: Statistisches Bundesamt, National Accounts, ESA 2010 methods and sources for the German GNI and its components, published on April 6, 2022 (https://www.destatis.de/EN/Themes/Economy/National-Accounts-Domestic-Product/Publications/Downloads-National-Accounts-Domestic-Product/esa-2010-methods.pdf?__blob=publicationFile); Statistisches Bundesamt, National accounts, domestic product, Major Revision of National Accounts 2024 (https://www.destatis.de/EN/Themes/Economy/National-Accounts-Domestic-Product/InfoRevision2024.html).

Statistical Standard for the Balance of Payments

Since July 2014, the methodological concept of the German balance of payments statistics follows the sixth edition of the Balance of Payments and International Investment Position Manual ("BPM6"), the revised standard of the IMF. The application of BPM6 is binding for EU Member States by virtue of a regulation adopted by the European Commission. Balance of payments data since 1971 have been recalculated in accordance with BPM6.

Source: Bundesbank, Statistics, External Sector, Balance of Payments, Methodological notes (https://www.bundesbank.de/en/statistics/external-sector/balance-of-payments/methodological-notes-794532).

Key Economic Figures

The German economy is one of the world's largest economies, with an annual GDP of EUR 4,121.2 billion in 2023. After the COVID-19 pandemic-induced recession, price-adjusted GDP increased by 3.2% in 2021 and by 1.8% in 2022. Thus, the German economy managed to recover from the sharp decline experienced during the first year of the COVID-19 pandemic and price-adjusted GDP in 2022 was 1.0% higher than in 2019, the year before the start of the COVID-19 pandemic. In 2023, price-adjusted GDP decreased by 0.3% against the backdrop of Russia's invasion of Ukraine. Compared to the level of 1991, which represents the first full year after German reunification on October 3, 1990, price-adjusted GDP increased by 47.1%. Productivity gains contributed to the growth in price-adjusted GDP since 1991, given that price-adjusted GDP per employee has risen by 24.5% since 1991. In calculating price-adjusted GDP, the Federal Statistical Office (*Statistisches Bundesamt*) uses a chain index based on the previous year's prices. In 2023, the GDP per capita at current prices was EUR 48,750 while the GDP per person employed at current prices was EUR 89,721.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 1.1 and 1.4.

As in many advanced economies, the services sector of the Federal Republic has become the largest contributor to GDP (in terms of gross value added). In 2023, services accounted for 68.5% of gross value added, measured at current prices, compared to 61.9% in 1991. The two most important subsectors were "trade, transport, accommodation and food services," accounting for 16.4% in 2023, compared to 16.1% in 1991, and "public services, education, health," accounting for 18.5% of gross value added in 2023, compared to 15.9% in 1991. The production sector (excluding construction) generated 24.5% of gross value added compared to 30.8% in 1991. Construction contributed 6.2% to gross value added in 2023, compared to 6.0% in 1991, and agriculture, forestry and fishing accounted for 0.8% of gross value added in 2023, compared to 1.2% in 1991.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Table 2.1.

In 2023, private final consumption expenditure totaled 50.7%, gross capital formation amounted to 23.6% and government final consumption expenditure equaled 21.6%, in each case of GDP at current prices. Exports and imports of goods and services accounted for 47.1% and 43.0% of GDP at current prices, respectively. In 2022, Germany's trade surplus decreased substantially because of the deterioration of terms of trade as a result of Russia's invasion of Ukraine. In 2023, the trade surplus rebounded substantially and was almost as high as in 2021. In 2023, the trade balance (according to national accounts) showed a surplus equal to 4.2% of GDP (2022: 2.0% of GDP).

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Table 3.1.

In the spring of 2022, virtually all COVID-19 protection measures were lifted. This contributed to the recovery of the German economy. However, Russia's invasion of Ukraine at the end of February 2022 and the subsequent extreme rise in energy prices and its knock-on effects on consumer price inflation have dampened economic activity in Germany. In 2023, annual price-adjusted GDP was 0.3% lower than in 2022 and GDP adjusted for both price and calendar effects decreased by 0.1%. Household final consumption expenditure decreased by a price-adjusted 0.8% year on year. Exports decreased by 2.2%, while imports decreased by 3.4%, all on a price-adjusted basis. Accordingly, the growth contribution of net exports was 0.6 percentage points. Gross fixed capital formation decreased by 0.7%, in price-adjusted terms. Government final consumption expenditure decreased by 1.5% on a price-adjusted basis as measures related to the COVID-19 pandemic expired.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 1.1, 3.2, 3.5 and 3.17.

Reihen ab 1948 - Januar 2024, Table 611xx-02; Deutsche Bundesbank, Statistics, Time series databases, Time series BBK01.BJ9059: General government debt as defined in the Maastricht Treaty — Germany — overall (https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/745582/745582?listId=www_v27_web011_21a&tsId=BBK01.BJ9059).

The following table shows selected key economic figures for the Federal Republic for each of the years indicated.

KEY ECONOMIC FIGURES

	2023	2022	2021	2020	2019
	(EUR in billions, unless otherwise indicated)				
GDP - at current prices	4,121.2	3,876.8	3,617.5	3,403.7	3,473.1
(change from previous year in %)	6.3	7.2	6.3	-2.0	3.2
GDP - price-adjusted, chain-linked index (2015=100), not adjusted for calendar effects	107.9	108.2	106.3	103.0	107.1
(change from previous year in %)	-0.3	1.8	3.2	-3.8	1.1
GDP - price-adjusted, chain-linked index (2015=100), adjusted for calendar effects	107.9	108.0	106.0	102.8	107.3
(change from previous year in %)	-0.1	1.9	3.1	-4.2	1.1
Unemployment rate (ILO definition) (in %) (1)	2.8	2.9	3.3	3.3	2.8
Inflation (year-to-year change in the consumer price index (CPI) in %)	5.9	6.9	3.1	0.5	1.4
Balance of payments - current account	243.1	164.6	263.5	222.5	283.8
General government gross debt (2)	2,622.7	2,561.7	2,495.5	2,340.8	2,069.9

(1) Unemployed persons, available and seeking work.

(2) Definition according to Maastricht Treaty.

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 1.1 and 1.11; Statistisches Bundesamt, Consumer price indices, Consumer price index - overall index and by 12 divisions, Change on previous year (https://www.destatis.de/EN/Themes/Economy/Prices/Consumer-Price-Index/Tables/Consumer-prices-12-divisions.html#242118); Deutsche Bundesbank, Balance of payments statistics 11-04-2024, Table I. Major items of the balance of payments (https://www.bundesbank.de/resource/blob/810958/84f5a1f1ba0be67eb64435fc07098b7f/mL/i-wichtige-posten-data.pdf); Deutsche Bundesbank, Statistics, Time series databases, Time series BBK01.BJ9059: General government debt as defined in the Maastricht Treaty - Germany - overall (https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/745582/745582?tsId=BBK01.BJ9059&listId=www_v27_web001_02a&dateSelect=2023).

Economic Outlook

The German economy has proven resilient to the steep energy price increases following Russia's invasion of Ukraine and the cut of pipeline gas supply from Russia. Nevertheless, high inflation rates, the subsequent sharp rise in interest rates, weak foreign demand and an unusually high level of sick leaves of employees had a dampening effect on economic growth, with price-adjusted GDP falling by 0.3% in 2023.

In the Spring Forecast published on April 24, 2024, the Federal Government projects that the German economy will gradually recover and gain some momentum over the course of 2024 as a result of lower inflation, lower interest rates, rising wages, a robust labor market and an increase in foreign demand. Overall, price-adjusted GDP is expected to increase by 0.3% in 2024 and by 1.0% in 2025.

2025: +3.6%). In 2024 and 2025, the current account balance is expected to be close to its level before the energy crisis in 2022 (7.1% and 6.9% of GDP, respectively).

The inflation rate, as measured by the percentage change of the national consumer price index compared to the pervious year, is expected to average 2.4% in 2024, a significant decrease compared to 2023 (+5.9%). This is due to the decline in energy and food price inflation, while core inflation, i.e., consumer price inflation excluding energy and food, is expected to remain elevated. Some volatility is expected in the course of 2024 due to one-off and base effects (such as the expiry of the temporary VAT rate reduction on gas and district heating at the end of March 2024 and the introduction of the Germany ticket in May 2023). For 2025, an annual average inflation rate of 1.8% is expected.

The labor market has fared robustly against the background of weak economic growth. Along with the gradual economic recovery, employment is projected to continue growing, albeit at declining rates due to demographic factors (2024: +0.4%, 2025: +0.1%), while the unemployment rate is expected to decline gradually (annual average unemployment rate according to the ILO definition in 2024: 3.0 %; 2025: 2.8 %).

Source: Bundesministerium für Wirtschaft und Klimaschutz, Frühjahrsprojektion 2024, April 24, 2024 (https://www.bmwk.de/Redaktion/DE/Artikel/Wirtschaft/Projektionen-der-Bundesregierung/projektionen-der-bundesregierung-fruehjahrsprojektion-2024.html).

General Economic Policy

The Federal Government is focusing on a wide range of supply-side policy measures to strengthen the competitiveness, resilience, and growth potential of the German economy. All policies aim for a transformation towards carbon-neutral prosperity and the preservation of biodiversity.

The Federal Government is pursuing the implementation of targeted tax incentives for private investment as a means of boosting investment via the proposed Growth Opportunities Act. Meanwhile, the Federal Government's Climate and Transformation Fund (*Klima- und Transformationsfonds*) is being used to accelerate the green transformation, strengthen growth potential in the long term and promote investment in climate protection, the energy transition, mobility and digitalization.

The Federal Government is committed to reducing unnecessary bureaucracy and significantly shortening approval procedures, for instance, via the proposed Bureaucracy Reduction Act IV (*Bürokratieentlastungsgesetz IV*), among other measures. In order to improve the investment environment, the federal and state governments are also working together on the digitalization of administration and on the implementation of more efficient planning and approval procedures, as set forth in the Pact for Germany (*Deutschland-Pakt*).

The ability to innovate is key for the future competitiveness and resilience of the German economy. The Federal Government therefore intends to support companies' research and development activities by further improving the relevant tax allowance. At the same time, the Federal Government seeks to promote the digitalization of businesses, govnerment administration and general society. For instance, through its Gigabit Strategy, the Federal Government is supporting comprehensive interconnectivity by implementing broadband fiber optics and up-to-date mobile-communication standards.

treaty negotiations with the MERCOSUR states, India, Indonesia, Thailand, Mexico and Australia, to be essential.

As part of its Skilled Strategy, the Federal Government is implementing new measures to increase the supply of labor by making Germany more attractive to qualified workers from abroad. To make greater use of its domestic potential, the Federal Government's activities aim to employ currently unemployed persons and improve employment incentives and opportunities, particularly for older people and second earners.

In order to promote an efficient allocation of capital and trigger investment, the capital markets should be deepened and financing conditions improved. To this end, the Federal Government supports the creation of an EU Capital Markets Union. Moreover, the Federal Government is looking to increase the attractiveness of Germany as an investment location for innovative founders and start-ups with the implementation of the Future Financing Act (*Zukunftsfinanzierungsgesetz*), which aims to improve financing conditions and contribute to the further development of company law.

Recognizing climate protection as a fundamental global challenge, Germany was among the 197 states at the World Climate Conference in Paris in 2015 committed to limiting global warming to well below 2°C, preferably to 1.5°C, and to achieving greenhouse gas neutrality worldwide by the second half of the century. At the national level, the Federal Climate Protection Act (*Bundes-Klimaschutzgesetz*, "KSG") provides the central legal framework for climate protection policy in Germany. In terms of greenhouse gas reduction targets, the KSG prescribes a reduction target of at least 65% for 2030 compared to 1990 levels, an interim reduction target of at least 88% for 2040 and greenhouse gas neutrality by 2045; after 2050, negative emissions are to be achieved across all sectors. To this end, the Federal Government has adopted a climate protection program for the period until 2030. The program provides for measures in all sectors and consists of four elements: a more comprehensive pricing of CO_2, support programs and further incentives for CO_2 savings, relief for citizens and the economy, and regulatory measures that will demonstrate their effectiveness by 2030 at the latest. In 2023, the Federal Government reduced hurdles for the expansion of renewable energies and the necessary grid infrastructure through amendments to the Renewable Energy Sources Act (*Erneuerbare-Energien-Gesetz*), the Wind Energy at Sea Act (*Windenergie-auf-See-Gesetz*) and the Energy Industry Act (*Energiewirtschaftsgesetz*) as well as through the adoption of the Wind on Land Act (*Wind-an-Land-Gesetz*). Together with Solar Package I, a draft law seeking to expand photovoltaic energy generation, these legislative measures are expected to strengthen the decentralized participation of private households and companies in the energy transition. In addition to expanding the energy supply, the Federal Government regards increasing energy efficiency and adapting the design of the electricity market as crucial for a successful energy transition. In view of the high electricity costs in the short- and medium-term, the Federal Government has introduced relief measures for manufacturing companies within the Electricity Price Package (*Strompreispaket*). Moreover, the Federal Government is helping to accelerate modernization processes in energy intensive sectors by reducing economic uncertainties through supplementary measures, such as carbon contracts for difference (*Klimaschutzverträge*), i.e., contracts that aim to compensate companies in energy-intensive industries for additional cost arising in connection with climate-friendly projects compared to conventional processes, or financial support for specific projects, e.g. for the production and use of hydrogen.

Sufficient and affordable housing contributes significantly to quality of life and represents an important prerequisite for economic growth, being necessary to attract skilled workers and create innovation hubs. Against this background, the Federal Government is promoting the construction of housing, for example through the Alliance for Affordable Housing (*Bündnis für bezahlbares Wohnen*), while promoting the decarbonization of the building sector, even under difficult macroeconomic conditions, such as the sharp rise in interest rates. Due to the particularly tense situation in the construction sector, the Federal Government has also presented a comprehensive package of measures for investment in the construction of affordable and climate-friendly housing and for the economic stabilization of the construction and real estate industries, including the provision of tax incentives and targeted funding programmes.

the Federal Government's ability to act in such cases.

For further information on the Federal Republic's fiscal situation and prospects, see "—Public Finance—Germany's General Government Deficit/Surplus and General Government Gross Debt" and "—Public Finance—Fiscal Outlook." For information on government measures to stabilize Germany's financial system, see "—Monetary and Financial System—Financial System—German Financial System." For information on government budgets, see "—Public Finance."

Sources: Bundesministerium für Wirtschaft und Klimaschutz, Jahreswirtschaftsbericht 2022 (https://www.bmwk.de/Redaktion/DE/Publikationen/Wirtschaft/jahreswirtschaftsbericht-2022.pdf?__blob=publicationFile&v=18); Bundesministerium für Wirtschaft und Klimaschutz, Jahreswirtschaftsbericht 2023 (https://www.bmwk.de/Redaktion/DE/Publikationen/Wirtschaft/jahreswirtschaftsbericht-2023.pdf?__blob=publicationFile&v=10); Bundesministerium für Wirtschaft und Klimaschutz, Jahreswirtschaftsbericht 2024 (https://www.bmwk.de/Redaktion/DE/Publikationen/Wirtschaft/jahreswirtschaftsbericht-2024.pdf?__blob=publicationFile&v=10).

Gross Domestic Product

The following tables show the structure of the Federal Republic's GDP at current prices by use and origin for each of the years indicated along with changes over the respective preceding period.

STRUCTURE OF GDP — USE

	2023	2022	2021	2020	2019	2023	2022	2021	2020
	(EUR in billions)					(change in %)			
Domestic uses	3,949.6	3,800.5	3,422.2	3,206.1	3,267.9	3.9	11.1	6.7	-1.9
Final private consumption	2,089.7	1,979.3	1,785.5	1,708.7	1,804.5	5.6	10.9	4.5	-5.3
Final government consumption	888.5	850.9	796.8	749.6	703.5	4.4	6.8	6.3	6.6
Gross fixed capital formation	904.2	856.2	770.5	733.2	740.5	5.6	11.1	5.1	-1.0
Machinery and equipment	275.5	253.4	227.5	217.1	241.2	8.7	11.4	4.8	-10.0
Construction	486.8	463.5	406.5	384.6	363.1	5.0	14.0	5.7	5.9
Other products	141.9	139.3	136.5	131.4	136.3	1.9	2.1	3.8	-3.5
Changes in inventories (1)	67.2	114.1	69.4	14.6	19.2	—	—	—	—
Net exports (1)	171.5	76.3	195.3	197.6	206.3	—	—	—	—
Exports	1,942.5	1,974.2	1,710.3	1,479.8	1,637.3	-1.6	15.4	15.6	-9.6
Imports	1,771.0	1,897.9	1,515.0	1,282.2	1,431.0	-6.7	25.3	18.2	-10.4
Gross domestic product	**4,121.2**	**3,876.8**	**3,617.5**	**3,403.7**	**3,474.1**	**6.3**	**7.2**	**6.3**	**-2.0**

(1) Percentage changes are not presented due to the potentially changing signs of these net positions.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 3.1 and 3.9.

Trade, transport, accommodation, and food services	616.0	591.8	515.0	481.0	502.6	4.1	14.9	7.1	-4.3
Information and communication	189.5	176.2	167.5	154.2	152.3	7.5	5.2	8.6	1.3
Financial and insurance services	143.3	139.0	138.6	125.2	121.7	3.1	0.3	10.7	2.9
Real estate activities	375.7	343.9	336.5	329.1	325.1	9.3	2.2	2.2	1.2
Business services	428.5	400.9	374.9	348.9	359.3	6.9	6.9	7.5	-2.9
Public services, education, health	695.2	657.5	628.3	603.9	583.8	5.7	4.6	4.0	3.4
Other services	130.4	121.7	111.8	110.0	120.7	7.1	8.9	1.6	-8.9
Taxes on products offset against subsidies on products	355.4	367.2	341.1	317.4	343.5	-3.2	7.7	7.5	-7.6
Gross domestic product	**4,121.2**	**3,876.8**	**3,617.5**	**3,403.7**	**3,474.1**	**6.3**	**7.2**	**6.3**	**-2.0**

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 1.14 and 2.1.

Sectors of the Economy

Production Sector

Following German reunification in 1990, industry in the eastern Länder (i.e., the territory of the former German Democratic Republic), has undergone a restructuring process. Today, the German production sector is characterized by a balanced mix of small, medium and large enterprises, and is almost entirely privately owned. Measured by its share in value added, approximately 58% of the production sector is geographically concentrated in the western Länder of Bavaria, Baden-Württemberg and North Rhine-Westphalia. The main segments of the production sector relate to the manufacturing of motor vehicles, machinery and equipment, electrical and optical equipment, basic metals and fabricated metal products, as well as chemicals and chemical products. In 2023, the production sector's aggregate contribution to gross value added at current prices was 24.5% (excluding construction) and 30.7% (including construction), respectively. Its price-adjusted gross value added (excluding construction) decreased by 1.8% year-on-year in 2023.

Sources: Volkswirtschaftliche Gesamtrechnungen der Länder, Reihe 1, Ländererergebnisse Band 1 (March 2024), Table 2.3; Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 2.1 and 2.2.

Durable goods (5)	94.6	101.5	99.2	95.5
Nondurable goods (6)	95.6	100.0	99.4	97.5
Energy (7)	85.2	98.7	99.9	96.9
Construction (8)	95.6	96.7	99.1	101.4

(1) Adjusted for working-day variations.

(2) Manufacturing sector, unless assigned to the main grouping energy, plus mining and quarrying.

(3) Including mining and quarrying except energy-producing goods.

(4) Including manufacture of motor vehicles and components.

(5) Consumption goods that have a long-term use, such as furniture.

(6) Consumption goods that have a short-term use, such as food. Including printing and service activities related to printing.

(7) Electricity, gas, steam and hot water supply, mining and quarrying of energy-producing materials, and especially manufacture of refined petroleum products.

(8) Comprises the economic classifications "Site preparation" and "Building of complete constructions or parts thereof; civil engineering."

Source: Deutsche Bundesbank, Monatsbericht März 2024, Table XI.2.

Services Sector

As in most other industrialized countries, the services sector, which comprises "trade, transport, accommodation and food services," "information and communication," "financial and insurance services," "real estate activities," "business services," "public services, education, health" as well as "other services," has expanded rapidly in recent years and is currently the largest contributor to gross value added. In 2023, the services sector's aggregate contribution to gross value added at current prices was 68.5%, compared to 61.9% in 1991. Within the services sector, "public services, education, health" represented the largest subsector in terms of contribution to total gross value added at current prices, contributing 18.5% in 2022 after 15.9% in 1991.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 2023 (February 2024), Table 2.1.

Employment and Labor

Although economic output decreased in 2023, labor market conditions hardly deteriorated. In 2023, the average unemployment rate according to the national definition was 5.7%, compared to 5.3% in 2022. Under the ILO definition, the average unemployment rate was 2.8% in 2023 compared to 2.9% in 2022. The number of persons resident in Germany who were either employed or self-employed was 45.8 million in 2023 compared to 45.5 million in 2022.

Sources: Bundesagentur für Arbeit, Statistik, Monatsbericht zum Arbeits- und Ausbildungsmarkt: Dezember und Jahr 2023, Table 9. Eckwerte des Arbeitsmarktes – Jahreszahlen (https://statistik.arbeitsagentur.de/Statistikdaten/Detail/202312/arbeitsmarktberichte/monatsbericht-monatsbericht/monatsbericht-d-0-202312-pdf.pdf?__blob=publicationFile&v=1); Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 2023 (February 2024), Table 1.11.

Unemployed (in thousands)–national definition (2)	2,609	2,418	2,613	2,695	2,267
Unemployment rate (in %)–national definition (3)	5.7	5.3	5.7	5.9	5.0

(1) Unemployed persons, available and seeking work.

(2) Registered unemployed persons, available and seeking work (but including persons working up to 15 hours per week).

(3) As a percentage of the total work force (excluding armed forces).

Sources: Bundesagentur für Arbeit, Statistik, Monatsbericht zum Arbeits- und Ausbildungsmarkt: Dezember und das Jahr 2023, Table 9. Eckwerte des Arbeitsmarktes – Jahreszahlen (https://statistik.arbeitsagentur.de/Statistikdaten/Detail/202312/arbeitsmarktberichte/monatsbericht-monatsbericht/monatsbericht-d-0-202312-pdf.pdf?__blob=publicationFile&v=1); Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Table 1.11.

The following table presents data with respect to the employment rate broken down by gender and age for 2023.

EMPLOYMENT RATE – BREAKDOWN BY GENDER AND AGE

	2023		
(Age in years)	Total	Men	Women
15 to 19	28.1	29.5	26.6
20 to 24	70.2	72.2	68.1
25 to 29	82.3	85.5	78.8
30 to 34	84.3	89.9	78.4
35 to 39	84.8	90.4	79.0
40 to 44	86.6	91.0	82.2
45 to 49	87.4	90.3	84.5
50 to 54	86.5	89.6	83.5
55 to 59	83.1	86.7	79.6
60 to 64	65.4	69.4	61.5
65 to 69	20.2	23.9	16.8
15 to 64	77.2	80.8	73.6
65 and older	9.0	11.8	6.7
Total	**60.0**	**65.0**	**55.2**

Source: Statistisches Bundesamt, Erwerbsbeteiligung, Erwerbstätige und Erwerbstätigenquote nach Geschlecht und Alter, Ergebnis des Mikrozensus 2023 (https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/Tabellen/erwerbstaetige-erwerbstaetigenquote.html).

The following table presents data with respect to the structure of employment by economic sector for 2023 and 2013.

STRUCTURE OF EMPLOYMENT – ECONOMIC SECTORS

	2023	2013
	(Percent of total)	
Agriculture, forestry and fishing	1.2	1.5
Production sector (excluding construction)	17.7	18.9
of which: manufacturing	*16.3*	*17.6*
Construction	5.8	5.7
Trade, transport, accommodation and food services	22.1	23.0
Information and communication	3.4	2.9
Financial and insurance services	2.3	2.8
Real estate activities	1.0	1.1
Business services	13.7	13.2
Public services, education, health	26.2	23.9
Other services	6.5	7.0
Total (1)	**100.0**	**100.0**

(1) Figures may not add up due to rounding.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Table 2.2.9.

Change from previous year in %	6.7	3.5	0.0	3.0	3.1

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Tables 2.17 and 2.20.

About one-sixth of the German work force consists of members of unions. The German Trade Union Federation (*Deutscher Gewerkschaftsbund*) serves as an umbrella organization for eight such unions. In 2023, approximately 5.7 million persons were members of a union under the umbrella of the German Trade Union Federation, which is considerably less compared to the 11.8 million members in 1991, the first full year after German reunification. One major reason contributing to the strong decline since 1991 is the significant decline in manufacturing employment in the eastern Länder after reunification.

Each member union typically covers employees of an entire industry, regardless of the precise type of work done by those employees (the "one union, one industry" principle). As a result, employers usually deal with only one negotiating partner on the labor side in each specific industry. The unions and employers of each specific industry enter into collective labor agreements (*Tarifverträge*) without government intervention. The collective labor agreements often apply to all employees of a given industry, regardless of whether or not a particular employee is a member of a union, so long as the employer is a member of the relevant association of employers, which is often the case. Despite their binding character, collective labor agreements in many cases contain opt-out clauses (*Öffnungsklauseln*) allowing for company-specific adjustments to be negotiated between the employer and the works council at the specific company. Moreover, there is a range of additional possibilities to deviate from these agreements. Many employers in the eastern Länder are not members of employers' associations, which means that wages are individually negotiated, often resulting in wage levels that are lower than those provided for by the collective labor agreements.

Sources: Deutscher Gewerkschaftsbund, Broschüre und Flyer, Mitglieder in den DGB-Gewerkschaften 1951 bis 2018 (https://www.dgb.de/fileadmin/download_center/Brosch%C3%BCren_und_Flyer/Mitglieder-in-den-dgb-gewerkschaften-1951-bis-2018-rgb.pdf); European Trade Union Institute, National Industrial Relations, Countries, Germany, Trade Unions (https://www.worker-participation.eu/National-Industrial-Relations/Countries/Germany); Bundeszentrale für politische Bildung, kurz&knapp, Lexika, Handwörterbuch des politischen Systems, Tarifpolitik/Tarifautonomie (https://www.bpb.de/kurz-knapp/lexika/handwoerterbuch-politisches-system/202193/tarifpolitik-tarifautonomie/).

Social Security, Social Protection, and Social Policy

The comprehensive system of social security and protection in effect in the Federal Republic includes in particular health insurance, long-term care insurance, retirement and disability pensions, participation benefits and benefits for medical rehabilitation, protection against the effects of occupational accidents and diseases by means of the mandatory occupational accident insurance, unemployment benefits, compensation for workers in short-time work schemes (*Kurzarbeit*), family benefits, benefits and rehabilitation for persons with disabilities, allowances to orphans and to single persons with dependents, and the provision of general public assistance to persons in need. The majority of the German population is covered by mandatory statutory pensions and health insurance. Hospitals and institutions caring for children and handicapped persons are operated by municipalities, churches, charitable institutions, and private providers.

Most of these social services are mainly funded through social security contributions from employers and employees, and a smaller part is funded through direct contributions by the Federal Republic, the Länder, municipalities and other public institutions, depending notably upon whether the respective social service is provided by an insurance-based system funded through contributions or a social-assistance-like program funded through taxes.

provided.

Statutory health insurance coverage must remain available to all persons fulfilling the applicable eligibility criteria. Within the statutory health insurance system, insured persons may choose among a large number of statutory health insurance funds that have developed historically. Persons whose gross income exceeds certain thresholds as well as civil servants, self-employed persons and members of certain professions may opt out of the statutory system and choose private health insurance coverage, which, in case of opting-out, is obligatory as well. Contributions to the statutory health insurance system are based solely on the insured person's income situation and are independent of the insured person's gender, age and medical risk. By contrast, contributions towards private health insurance coverage are mainly calculated based on age, medical risk and the desired level of coverage.

Pursuant to the Citizen's Benefit Act (*Bürgergeld-Gesetz*), basic income support for jobseekers underwent a reform with effect from January 1, 2023. The citizen's benefit (*Bürgergeld*) is a cash benefit which jobseekers and their families receive from jobcentres to ensure their ability to cover their essential living expenses. Pursuant to the reform, in order to provide a reliable safety net for claimants of the citizen's benefit, among others, the current rate of inflation will be taken into account to a greater extent in the annual process of reviewing citizen's benefit amounts.

In 2023, social security revenue, as shown in the national accounts, amounted to EUR 826.3 billion, and expenditure was EUR 816.3 billion. The social security budget thus incurred a surplus of EUR 10.0 billion in 2023, after a surplus of EUR 8.3 billion in 2022.

Sources: Federal Ministry of Labour and Social Affairs, Citizen's benefits: Basic income support for jobseekers (https://www.bmas.de/SharedDocs/Downloads/EN/PDF-Publikationen/a430e-buergergeld-englisch-pdf.pdf?__blob=publicationFile&v=5); Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Table 3.4.3.7.

In light of a changing population structure, the Federal Government has already implemented structural reforms to the statutory pension system in order to safeguard its long-term sustainability. In addition, the Federal Republic has implemented reforms of the statutory pension insurance, which, since 2012, have gradually raised the regular retirement age by two years to the age of 67. For example, the 1964 birth cohort will reach the regular retirement age of 67 in 2031.

To increase the sustainability of the health care system, the Federal Republic has implemented several structural reform measures to strengthen competition among providers in order to improve the efficiency and quality of health care services.

Sources: Bundesministerium der Gesundheit, Themen, Krankenversicherung, Finanzierung, Gesundheitsfonds (https://www.bundesgesundheitsministerium.de/gesundheitsfonds.html); European Commission, Employment, Social Affairs & Inclusion, Germany - Pensions and other old age benefits (https://ec.europa.eu/social/main.jsp?catId=1111&intPageId=4554&langId=en).

International Economic Relations

International economic relations are of major importance to the German economy. In 2023, exports and imports of goods and services amounted to 47.1% and 43.0% of GDP at current prices, respectively. The Federal Republic supports the EU in pursuing a liberal foreign trade policy aimed at dismantling tariffs and other barriers to trade. The responsibility for trade matters (particularly WTO and free trade agreements) in the EU rests with the European Commission. For further information on the EU's responsibility for trade matters, see "—General—The European Union and European Integration—Economic Integration."

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 2023 (February 2024), Table 3.1.

February 2019, a free trade agreement between the EU and Japan came into force (Economic Partnership Agreement), which is intended to remove the majority of duties and regulatory barriers.

Sources: Federal Ministry for Economic Affairs and Climate Action, Ongoing negotiations for free trade agreements (https://www.bmwk.de/Redaktion/EN/Artikel/Foreign-Trade/ongoing-negotiations-on-free-trade-agreements.html); Federal Ministry for Economic Affairs and Climate Action, CETA – The European-Canadian Economic and Trade Agreement (https://www.bmwk.de/Redaktion/EN/Dossier/ceta.html); European Commission, EU trade relationships by country/region, Countries and Regions, Canada, EU-Canada agreement (https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/canada/eu-canada-agreement_en); Federal Ministry for Economic Affairs and Climate Action, Free Trade Agreements, The EU-Japan Free Trade Agreement (https://www.bmwk.de/Redaktion/EN/Artikel/Foreign-Trade/free-trade-agreement-japan.html).

Balance of Payments

The Federal Republic typically achieves a surplus in the trading of goods. Traditionally, this surplus has been partially offset by deficits in other fields, such as services and secondary income. In 2023, the current account surplus totaled EUR 243.1 billion, compared to EUR 164.6 billion in 2022, an increase of EUR 78.5 billion. Thus, the current account surplus increased by 1.7 percentage points to 5.9% of nominal GDP in 2023. This increase, which follows a significant decline in 2022, was mainly caused by a recovery of the balance in trade in goods due to falling prices for imported raw materials, particularly natural gas and other energy imports. In contrast, the deficit in the German services balance widened, likely due to catch-up effects in cross-border travel after the end of the COVID-19 pandemic.

Source: Deutsche Bundesbank, Monatsbericht März 2024, Chapter: Die deutsche Zahlungsbilanz für das Jahr 2023, Table 4.1.

According to data prepared by the Deutsche Bundesbank, applying the annual averages of a broad monthly indicator of Germany's price competitiveness compared to 60 trading partners based on consumer price indices, Germany's price competitiveness has been relatively stable since 1999, fluctuating within a range of approximately 10% of the average indicator value in the period from 1999 to 2022. In 2023, price competitiveness decreased by 2.9% compared to 2022, mainly due to the apreciation of the euro relative to several currencies, including the U.S. dollar, the Chinese yuan and the Japanese yen. However, the influence of variations in the exchange rates should be viewed in light of the fact that the Euro Area Member States account for a major part of German exports (39% in 2023).

In 2023, the euro appreciated against the U.S. dollar by 2.7%. The appreciation was mainly due to monetary tightening in the euro area being somewhat stronger than expected in 2022.

Source: Deutsche Bundesbank, Monatsbericht März 2024, Statistical Annex, Tables XII.3, XII.9 XII.11.

The following table shows the Federal Republic's balance of payments for each of the years indicated.

BALANCE OF PAYMENTS (BALANCES)

	2023	2022	2021	2020	2019
	(EUR in millions)				
Current account					
Trade in goods (1)	226,821	125,916	196,491	182,725	219,548
Services (2)	-62,994	-37,289	1,615	6,634	-13,553
Primary income	143,901	142,094	123,181	86,037	128,602
Secondary income	-64,616	-66,091	-57,832	-52,889	-50,747
Total current account	**243,112**	**164,630**	**263,454**	**222,507**	**283,849**
Capital account (3)	-27,252	-21,644	-2,593	-10,345	-3,705
Financial account					
Net German investment abroad (increase: +)	260,047	322,457	801,268	719,804	270,041
Net foreign investment in Germany (increase: +)	27,460	124,267	592,289	551,037	69,729
Net financial account (net lending: + / net borrowing: -)	**232,587**	**198,190**	**208,978**	**168,767**	**200,312**
Net errors and omissions (4)	16,727	55,204	-51,883	-43,395	-79,832

(1) Including supplementary trade items.

(2) Including the freight and insurance costs of foreign trade.

(3) Including net acquisition/disposal of non-produced non-financial assets.

(4) Statistical errors and omissions, resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.

Sources: Deutsche Bundesbank, Zahlungsbilanzstatistik, Stand vom 11.4.2024, Table I. Wichtige Posten der Zahlungsbilanz (https://www.bundesbank.de/resource/blob/805258/b557d7333af239540a07f8448366a892/mL/i-wichtige-posten-data.pdf); Deutsche Bundesbank, Zahlungsbilanzstatistik, Stand vom 11.4.2024, Table IV. Kapitalbilanz 1. Übersicht a) Insgesamt (https://www.bundesbank.de/resource/blob/805274/0400f22fabf3c5555707bead12cd7b4b/mL/iv-kapitalbilanz-data.pdf).

Trade balance	**226,821**	**125,916**	**196,491**	**182,725**	**219,548**

(1) Including supplementary trade items.

Source: Deutsche Bundesbank, Zahlungsbilanzstatistik, Stand vom 11.4.2024, Table I. Wichtige Posten der Zahlungsbilanz (https://www.bundesbank.de/resource/blob/805258/b557d7333af239540a07f8448366a892/mL/i-wichtige-posten-data.pdf).

In 2023 the Federal Republic's principal export goods were: (1) motor vehicles, trailers and semi-trailers, (2) machinery and equipment not elsewhere classified, (3) chemicals and chemical products and (4) computer, electronic and optical products. The principal import goods were: (1) motor vehicles, trailers and semi-trailers (2) computer, electronic and optical products, (3) electrical equipment and (4) machinery and equipment not elsewhere classified. The Federal Republic has relatively few resources of industrial raw materials. As a result, it largely depends on imports to satisfy its demand for raw materials. This dependence on foreign supplies is particularly significant in the case of metals such as copper, tungsten, niobium, rare earth, rock phosphate, lithium carbonate, bauxite, manganese, titanium, and tin. The Federal Republic imports about 70% of its energy requirements, including 98% of its oil and 95% of its natural gas requirements.

Sources: Statistisches Bundesamt, Statistischer Bericht Außenhandel - Dezember 2023 (February 2024), Tables 51000-05 and 51000-06 (https://www.statistischebibliothek.de/mir/receive/DEHeft_mods_00158198); Bundesanstalt für Geowissenschaften und Rohstoffe, Deutschland – Rohstoffsituation 2022 (https://www.bgr.bund.de/DE/Themen/Min_rohstoffe/Downloads/rohsit-2022.pdf?__blob=publicationFile&v=4).

Germany's Current Account Surplus and the Macroeconomic Imbalance Procedure

Within the framework of the MIP, in December 2023, the European Commission published the Alert Mechanism Report 2024, which noted that Germany's large current account surplus had moderated substantially in 2022, primarily as a result of much higher energy prices, but widened again in 2023, as energy prices declined and domestic demand remained weak. The scoreboard reading for Germany shows that the current account balance, export market shares and government debt exceeded their indicative thresholds in 2022. However, price and cost competitiveness developments contributed to a more symmetric euro area adjustment, as nominal unit labour costs were expected to grow somewhat faster than in the euro area in 2023. Moreover, there were only limited concerns related to government debt given that the government debt-to-GDP ratio only moderately exceeded the 60% threshold and is forecast to decrease in the future. Until early 2022, nominal house price growth in Germany had been among the highest in the EU. While house prices have declined significantly since then, house prices are still estimated to be overvalued by about 10% and the correction in house prices may continue as the market continues to adjust to higher interest rates.

In the previous round of the MIP, the Commission carried out an in-depth review and concluded that Germany was experiencing macroeconomic imbalances. In the current round of the MIP 2023/2024, the Commission will again examine the persistence of imbalances or their unwinding in an in-depth review of Germany.

The Federal Government supports the European Commission in the implementation of the MIP. Together with its European partners, the Federal Government aims to reduce economic imbalances while complying with the rules of the reformed SGP. However, the Federal Government points out that German foreign direct investments abroad increase the current account balance, as does the interest and capital income generated from past foreign direct investments. Furthermore, the current account surplus is the result of market-based decisions by companies and individuals that determine supply and demand. The German economy's specialization in the export of capital goods also plays a key role in the high surplus. In 2023, the current account balance increased to 6.8% of GDP according to Germany's National Reform Programme 2024. This rebound in the current account balance reflects a countermovement to 2022, when the nominal value of imports had increased strongly due to the sharp rise in fossil fuel prices, meaning that the trade balance in particular had fallen sharply in 2022. Overall, the trade balance remained below pre-COVID-19 pandemic levels in 2023 at 4.3% of GDP. In contrast, the importance of the primary income balance – which reflects cross-border labor income and, above all, capital income – for the current account balance has been increasing and reached a high of 4.0% of GDP in 2023. The development of the primary income balance mainly reflects the returns on German foreign assets and their holdings and is even harder to influence through economic policy than the trade balance. Increasing private investment activity and the expansion of public investment are sustainably strengthening domestic demand, increasing growth potential in the medium term and thus contributing both directly and indirectly to limiting the current account surplus.

	2023 (1)	
	Imports	Exports
	(Percent of total)	
Products of agriculture and hunting	2.6	0.7
Products of forestry	0.0	0.1
Fish and products of fishing	0.1	0.0
Coal and lignite	0.5	0.0
Crude petroleum and natural gas	5.2	0.2
Metal ores	0.7	0.0
Other mining and quarrying products	0.1	0.1
Food products	4.8	4.7
Beverages	0.5	0.5
Tobacco products	0.4	0.2
Textiles	0.8	0.8
Wearing apparel	2.7	1.6
Leather and related products	1.2	0.8
Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	0.5	0.6
Paper and paper products	1.2	1.4
Coke and refined petroleum products	2.4	1.3
Chemicals and chemical products	7.6	9.0
Basic pharmaceutical products and pharmaceutical preparations	5.5	7.2
Rubber and plastic products	2.7	3.5
Other non-metallic mineral products	0.9	1.2
Basic metals	5.1	4.8
Fabricated metal products, except machinery and equipment	2.8	3.2
Computer, electronic and optical products	10.5	8.6
Electrical equipment	8.1	7.2
Machinery and equipment not elsewhere classified	7.7	14.3
Motor vehicles, trailers and semi-trailers	11.0	17.2
Other transport equipment	2.8	3.2
Furniture	1.1	0.8
Energy	0.5	0.4
Other goods	9.8	6.6
Total	**100.0**	**100.0**

(1) Preliminary data. Calculation of percentages by KfW based on import and export values in EUR thousands, respectively, as per the source below; figures may not add up to total due to rounding.

Source: Statistisches Bundesamt, Außenhandel – Erste Detailzahlen zum Außenhandel – Dezember 2023 (February 2024), Table GP (https://www.destatis.de/DE/Themen/Wirtschaft/Aussenhandel/Tabellen/aussenhandel-detaildaten.html).

China (2)	97,331	106,762	103,564
Italy	87,302	89,191	75,526
Austria	81,947	90,270	72,385
United Kingdom	78,466	73,764	65,002
Belgium/Luxembourg	69,272	70,933	58,080
Switzerland	66,569	70,611	60,638
New industrial countries and emerging markets of Asia (3)	60,926	63,344	55,295
Spain	54,472	49,935	43,932
Japan	20,232	20,511	18,245
Imports from:			
Total	**1,364,991**	**1,505,434**	**1,204,050**
of which:			
China (2)	156,741	192,830	142,964
The Netherlands	105,092	114,998	105,113
United States	94,606	93,338	72,316
Italy	72,119	73,177	65,389
France	69,925	69,969	61,921
New industrial countries and emerging markets of Asia (3)	66,219	71,012	55,441
Belgium/Luxembourg	56,913	67,071	55,726
Austria	54,583	58,137	47,492
Switzerland	51,795	55,723	49,247
Spain	39,110	37,756	34,180
United Kingdom	36,704	40,314	32,245
Japan	25,645	25,413	23,477

(1) Exports (f.o.b.) by country of destination, imports (c.i.f.) by country of origin. Special trade consists mainly of goods that are imported into the Federal Republic for use, consumption, adaptation or processing, as well as goods that are produced, manufactured, adapted or processed in the Federal Republic and subsequently exported.

(2) Excludes Hong Kong.

(3) Includes Brunei Darussalam, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand.

Source: Deutsche Bundesbank, Monatsbericht März 2024, Table XII.3.

European Union	488.7	380.4
of which: European Monetary Union	*354.0*	*368.1*
United Kingdom	102.2	40.5
Switzerland	52.9	47.6
Russia	22.1	2.4
United States	408.9	66.9
Canada	22.1	1.3
Central America	24.8	12.8
South America	30.0	1.9
Asia	210.2	46.5
of which: China	*102.7*	*4.6*
of which: India	*20.5*	*0.5*
of which: Japan	*15.4*	*25.7*
Australia	20.2	3.6
Africa	11.5	1.3
Selected economic sectors of investment object		
Manufacturing	490.5	146.6
of which: Chemicals and chemical products	*102.2*	*18.3*
of which: Pharmaceutical products	*37.4*	*18.3*
of which: Machinery and equipment	*46.5*	*16.2*
of which: Motor vehicles, trailers and semi-trailers	*107.8*	*4.8*
Electricity, gas, steam and air conditioning supply	33.9	29.2
Wholesale and retail trade; repair of motor vehicles and motor cycles	235.6	61.1
Information and communication	62.9	46.4
Financial and insurance activities	349.4	207.1
Real estate activities	64.0	34.6
Professional, scientific and technical activities	91.5	54.2

(1) German foreign direct investment abroad.

(2) Foreign direct investment in Germany.

(3) Primary and secondary direct investment (consolidated).

Source: Deutsche Bundesbank, Direktinvestitionsstatistiken, II. Bestandsangaben über Direktinvestitionen (nach dem Erweiterten Richtungsprinzip), Tables II.1.b, II.2.b (https://www.bundesbank.de/de/statistiken/aussenwirtschaft/direktinvestitionen/direktinvestitionsstatistiken-804078).

monetary policy. The ESCB's primary objective is to maintain price stability. Without prejudice to this objective, the ESCB supports the general economic policies of the EU.

The Deutsche Bundesbank – Germany's national central bank within the ESCB – has the responsibility of implementing the single monetary policy in Germany and continues to perform various other tasks, including operating cashless payment systems, cash management and playing an important role in banking and financial market supervision, as further described below under the caption "—Financial System."

Sources: European Central Bank, Annual Report 2016, pages 101-107 (https://www.ecb.europa.eu/pub/pdf/annrep/ar2016en.pdf); European Central Bank, About us, Our Organisation: ECB, ESCB and the Eurosystem (https://www.ecb.europa.eu/ecb/orga/escb/html/index.en.html); Deutsche Bundesbank, Tasks (https://www.bundesbank.de/en/tasks).

Monetary Policy

Monetary Policy Instruments of the ESCB and the ECB

To achieve its operational goals, the ESCB conducts open market operations, offers standing facilities and requires credit institutions to maintain minimum reserves in accounts with the ESCB. Open market operations play an important role in the ESCB's monetary policy for the purposes of steering interest rates and managing the liquidity situation in the market. Available open market operations are short-term and longer-term reverse transactions, outright transactions, the issuance of debt certificates or foreign exchange swaps, and the collection of fixed-term deposits. Standing facilities are designed to provide or absorb overnight liquidity, and the imposition of minimum reserve requirements allows the ESCB to stabilize money market interest rates, create (or enlarge) a structural liquidity shortage and possibly contribute to the control of monetary expansion. In addition the ECB also provides forward guidance, i.e., it provides information about its future monetary policy intentions, based on its assessment of the outlook for price stability. In March 2024, the ECB completed the review of its operational framework for the implementation of monetary policy. The Governing Council agreed to continue to provide liquidity through a broad mix of instruments, including short-term and longer-term refinancing operations and, at a later stage, structural longer-term credit operations and a structural portfolio of securities.

Sources: European Central Bank, Monetary policy & markets, Instruments, The Eurosystem's instruments (https://www.ecb.europa.eu/mopo/implement/html/index.en.html); European Central Bank, Statement by the governing council, Changes to the operational framework for implementing monetary policy, press release of March 13, 2024 (https://www.ecb.europa.eu/press/pr/date/2024/html/ecb.pr240313~807e240020.en.html).

Monetary Policy Strategy and Prices

The ECB presented its revised monetary strategy in July 2021, its first revision since 2003. Its primary goal is to maintain medium-term price stability, which is defined as a year-on-year increase in the harmonized index of consumer prices for the euro area of 2%. The 2% target is symmetric. This means that the ECB considers negative and positive deviations from the target to be equally undesirable. When the economy is operating close to the lower bound on nominal interest rates, particularly forceful or persistent monetary policy action may be required to prevent negative deviations from the inflation target from becoming entrenched. The new strategy considers formerly unconventional measures such as asset purchasing programs to be part of its monetary tool kit for these purposes. The Governing Council of the ECB seeks to achieve price stability over the medium term. This allows for short-term deviations of inflation from its target, provides the necessary flexibility and makes it possible to take other considerations into account. The medium-term orientation indicates the commitment to provide an adequate margin to avoid the risk of deflation. The stability-oriented monetary policy strategy of the Eurosystem used by the ECB to achieve this goal is based on two independent analyses: (1) analysis and assessment of short-to medium-term risks to price stability (economic analysis); and (2) assessment of medium-to long-term monetary and financial developments (monetary and financial analysis).

Source: European Central Bank, Monetary policy & markets, Monetary policy strategy (https://www.ecb.europa.eu/mopo/strategy/html/index.en.html).

(1) Excluding value-added tax.

Sources: Statistisches Bundesamt, Preise, Verbraucherpreisindex und Inflationsrate, Harmonisierter Verbraucherpreisindex, Jahresdurchschnitte, Veränderung zum Vorjahr (https://www.destatis.de/DE/Themen/Wirtschaft/Preise/Verbraucherpreisindex/Tabellen/Harmonisierter-Verbraucherpreisindex.html); Statistisches Bundesamt, Preise, Verbraucherpreisindex und Inflationsrate, Gesamtindex und 12 Abteilungen, Veränderung zum Vorjahr (https://www.destatis.de/DE/Themen/Wirtschaft/Preise/Verbraucherpreisindex/Tabellen/Verbraucherpreise-12Kategorien.html); Deutsche Bundesbank, Monatsbericht Dezember 2022, Table XI.7; Deutsche Bundesbank, Monatsbericht Februar 2024, Table XI.7.

Official Foreign Exchange Reserves

The following table shows the breakdown of the Federal Republic's official foreign exchange reserves as of the end of the years indicated.

OFFICIAL FOREIGN EXCHANGE RESERVES OF THE FEDERAL REPUBLIC (1)

	As of December 31				
	2023	2022	2021	2020	2019
	(EUR in millions)				
Gold	201,335	184,036	173,821	166,904	146,562
Special drawing rights	48,766	48,567	46,491	14,014	14,642
Foreign currency balances	33,376	34,404	32,649	30,066	32,039
Reserve position in the IMF	8,782	9,480	8,426	8,143	6,051
Total	**292,259**	**276,488**	**261,381**	**219,127**	**199,295**

(1) External position of the Deutsche Bundesbank in the EMU. Assets and liabilities vis-à-vis all EMU member countries and non-EMU member countries.

Source: Deutsche Bundesbank, Monatsbericht Februar 2024, Table XII.7.

The Federal Republic's foreign reserve assets are managed by the Deutsche Bundesbank. The Euro Area Member States have transferred foreign reserve assets to the ECB in an aggregate amount equivalent to approximately EUR 40.7 billion, consisting of foreign currency reserves and gold. The ECB manages the foreign reserve assets transferred to it. The foreign reserve assets not transferred to the ECB continue to be held and managed by the national central banks of the Euro Area Member States. In order to ensure consistency within the single monetary and foreign exchange policies of the EMU, the ECB monitors and coordinates market transactions conducted with those assets.

Sources: European Central Bank, Annual Report 1998, page 74 (https://www.ecb.europa.eu/pub/pdf/annrep/ar1998en.pdf); European Central Bank, Annual Accounts 2023, 2.1 Balance Sheet as at 31 December 2023, note 12.1 (https://www.ecb.europa.eu/press/annual-reports-financial-statements/annual/annual-accounts/html/ecb.annualaccounts2023~f5a98cb02b.en.html).

Assets	1,455.8	1,617.1	1,592.8	1,429.2	1,161.0
of which: clearing accounts within ESCB (1)	*1,093.4*	*1,269.1*	*1,260.7*	*1,136.0*	*895.2*
Liabilities (2)	779.8	919.4	1,009.5	781.3	663.3
Net position	675.9	697.6	583.3	647.9	497.7
Banks					
Loans to foreign banks	1,166.9	1,151.3	1,100.7	1,024.3	1,064.2
Loans to foreign non-banks	960.4	913.7	871.2	822.8	795.3
Loans from foreign banks	923.8	998.4	914.6	761.2	680.6
Loans from foreign non-banks	380.6	370.3	288.2	258.5	229.8

(1) Consists mainly of net claims from the interbank payment system for the real-time processing of cross-border transfers throughout the EMU (TARGET2).

(2) Including estimates of currency in circulation abroad.

Source: Deutsche Bundesbank, Monatsbericht März 2024, Tables IV.4 and XII.7.

Foreign Exchange Rates and Controls

Since its introduction in 1999, the euro has become the second most widely used currency internationally. It is recognized by the IMF as a freely usable currency. Neither currency transactions nor capital market transactions require licenses or other permissions. However, in both cases entities or individuals providing related services on a commercial basis must be licensed. Gold may be imported and exported freely, subject only to the levy of VAT on some transactions.

Sources: International Monetary Fund, Selected Decisions and Selected Documents of the IMF, Forty-Second Issue—Freely Usable Currencies, as updated December 31, 2021 (https://www.imf.org/external/pubs/ft/sd/2022/42nd_Sel_Dec_EN_Web_FINAL.pdf); Bank for International Settlements, Triennial Central Bank Survey, OTC Foreign exchange turnover in April 2022, October 2022, Table "OTC foreign exchange turnover by currency", page 12 (https://www.bis.org/statistics/rpfx22_fx.pdf); Bundesanstalt für Finanzdienstleistungsaufsicht, Banken, Finanzdienstleister und Wertpapierinstitute, Markteintritt, Wertpapierdienstleistungen, as updated on November 22, 2021 (https://www.bafin.de/DE/Aufsicht/BankenFinanzdienstleister/Markteintritt/Wertpapierdienstleistungen/wertpapierdienstleistungen_node.html#doc19645032bodyText1); Bundesanstalt für Finanzdienstleistungsaufsicht, Banken, Finanzdienstleister und Wertpapierinstitute, Markteintritt, Finanzdienstleistungen, as updated on August 8, 2023 (https://www.bafin.de/DE/Aufsicht/BankenFinanzdienstleister/Markteintritt/Finanzdienstleistungen/finanzdienstleistungen_artikel.html); Intenational Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions 2022, published on July 26, 2023, page 1579 (https://www.imf.org/en/Publications/Annual-Report-on-Exchange-Arrangements-and-Exchange-Restrictions/Issues/2023/07/26/Annual-Report-on-Exchange-Arrangements-and-Exchange-Restrictions-2022-530144).

The following table shows the annual average exchange rates for selected currencies in relation to the euro for the years indicated.

ANNUAL AVERAGE EXCHANGE RATES OF THE EURO (1)

	2023	2022	2021	2020	2019
U.S. dollars per euro	1.0813	1.0530	1.1827	1.1422	1.1195
Pound sterling per euro	0.86979	0.85276	0.85960	0.88970	0.87777
Japanese yen per euro	151.99	138.03	129.88	121.85	122.01
Swiss franc per euro	0.9718	1.0047	1.0811	1.0705	1.1124
Chinese yuan per euro	7.6600	7.0788	7.6282	7.8747	7.7355

(1) Calculated from daily values.

Source: Deutsche Bundesbank, Monatsbericht Februar 2024, Table XII.9.

the six regional institutions of those savings banks, including DekaBank Deutsche Girozentrale (the central asset managing institution of the German savings banks) and five *Landesbanken* (German public law financial institutions traditionally focusing on the banking business for and in the *Land* in which they operate), with an aggregate balance sheet total of EUR 858.0 billion;

- 18 special-purpose credit institutions, including KfW, KfW IPEX-Bank, promotional banks of the federal states (*Landesförderinstitute*), and, since July 2016, DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (DZ Bank), the only remaining central institution of German credit cooperatives, with an aggregate balance sheet total of EUR 1,584.0 billion;
- 694 credit cooperatives, with an aggregate balance sheet total of EUR 1,172.2 billion;
- 7 mortgage banks, with an aggregate balance sheet total of EUR 224.2 billion;
- 15 building and loan associations, with an aggregate balance sheet total of EUR 259.5 billion; and
- 138 subsidiaries and branches of foreign banks located in the Federal Republic with an aggregate balance sheet total of EUR 2,310.5 billion. These institutions, which are majority-owned by foreign banks, are also included in the totals of the other categories of banks listed above.

Source: Deutsche Bundesbank, Monatsbericht Februar 2024, Table IV.2.

The KWG currently regulates all banks except for the Deutsche Bundesbank and KfW (although it does regulate KfW IPEX-Bank). Many important provisions of the KWG have become applicable by analogy to KfW with effect from January 1, 2016. For more information on the application of the KWG to KfW, see "KfW—General—Supervision and Regulation—Regulation." German commercial banking institutions operate as "universal" banks and are not restricted by law or otherwise from offering a complete range of diverse financial services.

Supervision. The BaFin is responsible for the integrated supervision of financial services. Its primary objective is to ensure the proper functioning, stability and integrity of Germany as a financial center in the context of European integration and international cooperation, as well as to strengthen collective consumer protection through its regulatory actions. The BaFin, which is subject to the legal and technical oversight of the Federal Ministry of Finance, operates exclusively in the public interest. It aims to counteract risks to the assets entrusted to financial institutions, including banks and insurance companies (solvency supervision), and to safeguard fair and transparent conditions in the markets (market supervision). In addition, the BaFin has an investor protection role in that it seeks to prevent unauthorized financial business from being carried out.

The Deutsche Bundesbank is closely involved in the ongoing supervision of credit institutions by the BaFin and has been assigned a substantial number of the ongoing operational tasks in banking supervision. Furthermore, the German Federal Agency for Financial Market Stabilization (*Bundesanstalt für Finanzmarktstabilisierung*, or "FMSA") supervises two wind-up institutions, Erste Abwicklungsanstalt and FMS Wertmanagement, as well as Portigon AG (the legal successor of former Landesbank WestLB which is in the process of being wound-up), all of which were founded under its auspices in order to stabilize the financial market (see "—Wind-up Institutions").

In November 2014, the SSM – as one of the pillars of the Banking Union – became operational. Under the SSM, the ECB is the central prudential supervisor of financial institutions in the euro area as well as in non-euro area EU Member States that choose to join the SSM. The ECB directly supervises the most significant banks, while the national supervisors continue to monitor the remaining banks. The ECB and the national supervisors work closely together to ensure the banks' compliance with EU banking regulations and to be able to address issues early on.

discussing how to deal with warnings or recommendations issued by the European Systemic Risk Board ("ESRB") and reporting to the Bundestag on a yearly basis.

For instance, based on the assessment of the risk situation in Germany as well as the development of supporting indicators, BaFin decided to increase the ratio of the national anticyclical capital buffer to 0.75% from February 1, 2022 onwards and ordered a capital buffer for systemic risks in the amount of 2% for residential real estate financing. This decision was supported by analyses carried out by the FSC and the ESRB. The associated requirements for hard equity became applicable as of February 1, 2023. In January 2024, Bafin confirmed that the national anticyclical capital buffer of 0.75% remains appropriate.

Sources: Bundesministerium der Justiz, Gesetz über das Kreditwesen (https://www.gesetze-im-internet.de/kredwg/index.html); Federal Financial Supervisory Authority, BaFin, Functions & history (https://www.bafin.de/EN/DieBaFin/AufgabenGeschichte/aufgabengeschichte_node_en.html); Deutsche Bundesbank, Tasks, Banking supervision (https://www.bundesbank.de/en/tasks/banking-supervision); Bundesanstalt für Finanzdienstleistungsaufsicht, Aufsichtsrichtlinie—Richtlinie zur Durchführung und Qualitätssicherung der laufenden Überwachung der Kredit-und Finanzdienstleistungsinstitute durch die Deutsche Bundesbank (Aufsichtsrichtlinie), May 21, 2013, revised on December 19, 2016 (https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Aufsichtsrecht/Richtlinie/rl_130521_aufsichtsrichtlinie.html); Federal Financial Supervisory Authority, Act on the Strengthening of German Financial Supervision, January 18, 2013 (https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2013/fa_bj_2013_01_finstabg_en.html); Federal Agency for Financial Market Stabilisation, FMSA (https://www.fmsa.de/en/); Portigon AG: Unternehmensinformationen (https://www.portigon.de/portigon-ag/unternehmensinformationen.html); Deutsche Bundesbank, Tasks, Financial and monetary system, Financial and monetary sability, Macroprudential surveillance by the G-FSC (https://www.bundesbank.de/en/tasks/financial-and-monetary-system/financial-and-monetary-stability/macroprudential-surveillance-g-fsc-/macroprudential-surveillance-by-the-g-fsc-625732); European Commission, Banking & insurance, Banking union, Single supervisory mechanism (https://finance.ec.europa.eu/banking/banking-union/single-supervisory-mechanism_en); Federal Financial Supervisory Authority, Law & Regulation, Administrative Acts, General Administrative Act ordering a capital buffer for systemic risks under section 10e of the KWG, published on March 30 2022 (https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Aufsichtsrecht/Verfuegung/vf_220331_allgvfg_systemrisikopuffer_en.html); European Systemic Risk Board, National Policy, Countercyclical capital buffer, updated on March 28, 2024 (https://www.esrb.europa.eu/national_policy/ccb/html/index.en.html).

Bank Recovery and Resolution. Between January 1, 2015, and December 31, 2017, the FMSA (see "—Supervision") acted as the German national resolution authority for banks. The FMSA was thus responsible for the recovery and resolution of all banks in Germany under the European Bank Recovery and Resolution Directive ("BRRD"), which were not directly supervised by the ECB within the framework of the SSM (see "—European Financial System—European System of Financial Supervision and European Banking Union"). The BRRD was adopted in May 2014 to provide authorities with comprehensive and effective arrangements to deal with failing banks at the national level and with cooperation arrangements to tackle cross-border banking failures. The BRRD includes rules to set up national resolution funds, which must be established by each EU Member State, and it requires banks to prepare recovery plans to overcome financial distress. Since the establishment of the SRF at the European level in 2016, the contributions raised by the national resolution authorities of participating Member States have in great part been transferred to the SRF pursuant to the intergovernmental agreement on the transfer and mutualisation of contributions to the SRF.

On January 1, 2018, FMSA's duties deriving from its role as the national resolution authority were integrated into the BaFin as a new and independently operating division. At the same time, FMSA's responsibilities of administering and managing the Financial Market Stabilization Fund ("*Sondervermögen Finanzmarktstabilisierungsfonds*," or "FMS") were incorporated into the Federal Republic of Germany – Finance Agency (*Bundesrepublik Deutschland – Finanzagentur GmbH*). The FMS was originally created during the financial crisis on October 17, 2008. Until the Single Resolution Mechanism ("SRM") became fully operational on January 1, 2016, and functionally replaced the FMS, the latter was responsible for stabilizing German banks by extending guarantees covering the banks' securities and by granting loans. The stabilization measures provided by the FMS amounted to EUR 14.6 billion in capital injections, while loss compensation payments made to FMS Wertmanagement totaled EUR 9.3 billion.

(https://data.consilium.europa.eu/doc/document/ST%208457%202014%20INIT/EN/pdf); Gesetz zur Neuordnung der Aufgaben der Bundesanstalt für Finanzmarktstabilisierung (FMSA-Neuordnungsgesetz—FMSANeuOG) (https://www.bundesfinanzministerium.de/Content/DE/Gesetzestexte/Gesetze_Gesetzesvorhaben/Abteilungen/Abteilung_VII/18_Legislaturperiode/2016-12-28-FMSA-Neuordnungsgesetz/3-Verkuendetes-Gesetz.pdf?__blob=publicationFile&v=3); Bundesrepublik Deutschland – Finanzagentur GmbH, FMS, Financial Market Stabilisation Fund (https://www.deutsche-finanzagentur.de/en/fms/financial-market-stabilisation-fund).

Wind-up Institutions. In the wake of the global financial crisis, two wind-up institutions (*Abwicklungsanstalten*) for troubled German banks were established. The first wind-up institution, Erste Abwicklungsanstalt, was established in December 2009 to liquidate a portfolio of EUR 77.5 billion assumed from WestLB. It assumed a second portfolio consisting of an asset portfolio worth EUR 72.3 billion and a trading portfolio with a market value of approximately EUR 52.1 billion following the restructuring of WestLB. As of December 31, 2023, the combined portfolios had been reduced to approximately EUR 10.3 billion.

The second wind-up institution, FMS Wertmanagement, assumed a portfolio of EUR 175.7 billion from Hypo Real Estate Group in October 2010 to support restructuring efforts. In December 2014, FMS Wertmanagement acquired DEPFA Bank plc ("DEPFA"), which, as of December 31, 2013, had consolidated total assets amounting to EUR 49.1 billion from Hypo Real Estate Holding AG. In November 2021, FMS Wertmanagement closed the sale of DEPFA to BAWAG P.S.K. AG. As of December 31, 2023, FMS Wertmanagement's portfolio had a nominal value of EUR 44.4 billion.

Sources: Erste Abwicklungsanstalt, I Annual Report 2023 (https://aa1.de/wp-content/uploads/2023/12/GB-2023_en.pdf); FMS Wertmanagement AöR, Investor Präsentation Nov. 2021, updated June 2023 (https://www.fms-wm.de/de/downloadcenter/investoren/praesentationen); FMS Wertmanagement AöR, About us (https://www.fms-wm.de/en/about-us); FMS Wertmanagement AöR, Portfolio (https://www.fms-wm.de/en/portfolio).

European Financial System

European System of Financial Supervision and European Banking Union. The European system of financial supervisors became operational on January 1, 2011. At the macro-financial level, the ESRB was established, which provides macro-prudential oversight of the financial system. The ESRB's role is to monitor and assess potential risks to the stability of the financial system. If necessary, it will issue risk warnings and recommendations for remedial action and will monitor their implementation. The ESRB is currently chaired by the President of the ECB.

At the micro-financial level, three supervisory authorities were established:

- the European Banking Authority;
- the European Insurance and Occupational Pensions Authority; and
- the European Securities and Markets Authority.

The three European Supervisory Authorities ("ESAs") cooperate with the supervisory authorities of the EU Member States. National authorities are responsible for the day-to-day supervision of individual financial institutions, whereas the ESAs are responsible for ensuring that a single set of harmonized rules and consistent supervisory practices are applied by supervisory authorities of the EU Member States. The ESAs have, for example, the power to settle disputes among national financial supervisors by imposing legally binding mediation and to impose temporary bans on risky financial products or activities.

operational starting January 1, 2016 with the purpose of ensuring the orderly resolution of failing banks. The SRM consists of the Single Resolution Board ("SRB") and the national resolution authorities of participating Member States. The SRB has broad powers in cases of bank resolution and manages the SRF. The SRB is responsible for the planning and resolution phases of cross-border banks and those directly supervised by the ECB, while national resolution authorities are responsible for all other banks under the BRRD. However, the SRB will always be responsible if the resolution of a bank requires access to the SRF. The SRF was built up over a period of eight years since 2016 and reached its target level of at least 1% of the amount of covered deposits of all credit institutions authorized in all the participating EU Member States at the end of 2023. As of December 31, 2023, the financial means available in the SRF amounted to EUR 78 billion, which are fully mutualized between participating EU Member States. The SRB continues to assess on an annual basis whether the available financial means have diminished below the target level of at least 1% in the relevant contribution period. In such event, further contributions to the SRF may be required. Banks have been making annual contributions to the SRF calculated on the basis of their liabilities, excluding own funds and covered deposits, and adjusted for risk. Companies defined in article 2 paragraph 5 of the EU Capital Requirements Directive IV (CRD IV), including KfW, are not required to contribute to the fund. As part of its pending reform, the ESM would be given the function of a backstop for the SRF. The backstop would be provided through public funds to offer immediate support and confidence to the market and would almost double the size of the SRF. The funds would have to be repaid by all banks of the Banking Union in the following years.

In November 2015, and as amended in October 2017, the European Commission proposed a European Deposit Insurance Scheme ("EDIS") as an additional element of the Banking Union. In June 2022 the Eurogroup in inclusive format agreed that work on the Banking Union should focus on strengthening the common framework for bank crisis management and national deposit guarantee schemes (CMDI framework). In April 2023, the European Commission proposed a corresponding legislative package, which is being discussed by the Council and Parliament. At a later stage, a review of the state of the Banking Union is planned to take place to identify further measures that could strengthen and complete the Banking Union.

In response to the global economic and financial crisis, regulatory authorities and central banks launched a comprehensive regulatory reform program. As a result, in December 2010, the Basel Committee on Banking Supervision launched a first package, typically referred to as Basel III, of new standards on bank capital adequacy and liquidity to enhance the banking regulatory framework. In order to implement Basel III into EU law, previous EU capital requirement directives were replaced by the Capital Requirements Regulation (CRR), a regulation establishing prudential requirements, and the Capital Requirements Directive IV (CRD IV), a directive governing access to deposit-taking activities, both of which entered into force on January 1, 2014 and have since been gradually implemented in the EU Member States. Further measures were implemented by changes to CRR and CRD adopted by the European legislators in 2019 as described below. A second reform package was endorsed by the Basel Committee on Banking Supervision in December 2017 to finalize the post-crisis reforms. It aims to reduce excessive variability in the calculation of risk-weighted assets. In October 2021, the European Commission presented legislative proposals for further amendments to the CRR and CRD, and to finalize the implementation of the Basel III regulatory reforms in the EU. In December 2023, the preparatory bodies of the Council and Parliament endorsed the amendments (as described below), which are expected to be formally adopted in 2024.

capital requirements to reduce incentives for excessive risk taking, by including a binding leverage ratio, a binding net stable funding ratio, and setting risk sensitive rules for trading in securities and derivatives. As mentioned above, in December 2023, the final elements for the implementation of Basel III in the EU were agreed by the Council and Parliament. The amended CRR rules (CRR III) are expected to enter into force on January 1, 2025. The provisions in the renewed CRD (CRD VI) have to be transposed by EU Member States into national law. One of the main elements of the banking package is the introduction of the output floor, which works as a lower limit on the capital requirements that banks calculate when using their internal models and aims to reduce the excessive variability of banks' capital requirements, as calculated with internal models. The legislative package also implements the Basel standard in relation to credit risks, market risks and operational risks, while taking into account specific features of the EU banking sector. Furthermore, the amendment strengthens the provisions related to environmental, social and governance risks as well as the rules applicable to the suitability of bank managers and key function holders (ie., the fit and proper assessment).

Sources: European Commission, Regulation, Supervision, European system of financial supervision (https://finance.ec.europa.eu/regulation-and-supervision/european-system-financial-supervision_en); European Central Bank, About, European System of Financial Supervision (https://www.bankingsupervision.europa.eu/about/esfs/html/index.en.html); European Commission, Banking & insurance, Banking Union (https://finance.ec.europa.eu/banking/banking-union_en); European Council, Council of the European Union, Policies, Banking Union (https://www.consilium.europa.eu/en/policies/banking-union/); European Central Bank, ECB assumes responsibility for euro area banking supervision, press release of November 4, 2014 (https://www.ecb.europa.eu/press/pr/date/2014/html/pr141104.en.html); European Central Bank, About, Single Supervisory Mechanism (https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html); European Central Bank - Banking Supervision, List of supervised entities (https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.listofsupervisedentities202402.en.pdf?637ec58a30eb59cd2c203d9910d25be0); Single Resolution Board, About, The SRB in the Banking Union, Single Resolution Mechanism (https://www.srb.europa.eu/en/content/single-resolution-mechanism-srm); European Commission, Single Resolution Mechanism to come into effect for the Banking Union, press release of December 31, 2015 (https://ec.europa.eu/commission/presscorner/detail/en/IP_15_6397); Single Resolution Board, Resolution, What is a bank resolution?, Banks under the SRB's remit (https://www.srb.europa.eu/en/content/banks-under-srbs-remit); Single Resolution Board, The Single Resolution Fund (https://www.srb.europa.eu/en/single-resolution-fund); Single Resolution Board, News and Media, Single Resolution Fund: no expected contribution in 2024 as target level reached, press release of February 15, 2024 (https://www.srb.europa.eu/en/content/single-resolution-fund-no-expected-contribution-2024-target-level-reached); Bundesministerium der Justiz, Gesetz zur Errichtung eines Restrukturierungsfonds für Kreditinstitute (https://www.gesetze-im-internet.de/rstruktfg/); European Stability Mechanism, About us, ESM Reform (https://www.esm.europa.eu/about-esm/esm-reform); European Commission, Communication from the Commission: Completing the banking union, first published on October 11, 2017 (https://ec.europa.eu/finance/docs/law/171011-communication-banking-union_en.pdf); European Commission, Banking Union: Commission proposes reform of bank crisis management and deposit insurance framework, press release of April 18, 2023 (https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2250); European Banking Authority, Activities, Implementing Basel III in Europe, The Basel framework: the global regulatory standards for banks (https://www.eba.europa.eu/activities/basel-framework-global-regulatory-standards-banks); Bank for International Settlements, Committees & associations, Basel Committee on Banking Supervision, Basel III: Finalising Post-Crisis Reforms (https://www.bis.org/bcbs/publ/d424.htm); European Commission, Banking Package 2021: new EU rules to strengthen banks' resilience and better prepare for the future, press release of October 27, 2021 (https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_21_5401/IP_21_5401_EN.pdf); European Commission, Latest updates on the banking package, supplementary information of December 14, 2023 (https://finance.ec.europa.eu/news/latest-updates-banking-package-2023-12-14_en); European Council, Council of the European Union, Banking Union: Council adopts measures to reduce risk in the banking system, press release of May 14, 2019 (https://www.consilium.europa.eu/en/press/press-releases/2019/05/14/banking-union-council-adopts-measures-to-reduce-risk-in-the-banking-system/).

Securities Market

The Federal Republic's securities market is among Europe's largest. Trading in listed securities is not legally or otherwise confined to the stock exchanges. It is estimated, however, that most transactions in equity securities are executed through stock exchanges. By contrast, debt securities, although typically listed, are predominantly traded over-the-counter.

most important stock exchange in the Federal Republic.

Sources: European Union, Directive 2014/65/EU of May 15, 2014 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0065); European Securities and Markets Authority, MiFID/UCITS/AIFMD/EUSEF/EUVECA/ECSPR entities (https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_upreg); Deutsche Börse Group, Our company, Frankfurt Stock Exchange (under public law), The Frankfurt Stock Exchange (https://www.deutsche-boerse.com/dbg-en/our-company/frankfurt-stock-exchange).

Bundesrat, which deliberates on the proposal twice. The final vote on the proposal is taken by the Bundestag in its third session.

In addition to the federal, Länder and municipal budgets, there are separate budgets for the social security funds and various special funds (*Sondervermögen*) of the federal administration and the Länder, as well as other extra-budgetary entities at all levels of government that are created for specific public purposes. General government, as defined in the national accounts, comprises all these different levels of government activity.

Total consolidated general government revenue, as presented in the national accounts, amounted to EUR 1,901.8 billion in 2023, with tax revenue of EUR 953.7 billion and net social contributions of EUR 709.6 billion.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Table 3.4.3.2.

In 2023, VAT and the taxes on income and wealth, as presented in the national accounts, amounted to EUR 287.2 billion and EUR 529.7 billion, respectively. These joint taxes are distributed among the Federal Government, the Länder governments and municipal authorities, according to predetermined formulae. In addition to joint taxes, the Federal Government, the Länder governments and the municipal authorities each levy special taxes, for example, on tobacco and beer.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Table 3.4.3.16.

Consolidated general government expenditure in 2023, as presented in the national accounts, amounted to a total of EUR 1,989.2 billion. The most significant consolidated general government expenditures were monetary social benefits (EUR 661.4 billion), social benefits in kind (EUR 359.8 billion) and employee compensation (EUR 327.4 billion). Other significant consolidated general government expenditures included intermediate consumption (EUR 256.5 billion), gross capital formation (EUR 108.0 billion), subsidies (EUR 66.3 billion) and interest on public debt (EUR 36.1 billion).

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Table 3.4.3.2.

GENERAL GOVERNMENT ACCOUNTS (1)

	2023	2022	2021	2020	2019
			(EUR in billions)		
Federal Government, Länder governments and municipalities					
Revenue	1,229.8	1,198.3	1,119.3	1,004.7	1,049.6
of which: Current taxes (2)	*953.7*	*946.6*	*879.2*	*773.0*	*827.7*
Expenditure	1,327.2	1,303.5	1,251.6	1,117.6	1,005.7
Balance	**-97.4**	**-105.2**	**-132.4**	**-112.9**	**43.9**
Social security funds					
Revenue	826.3	812.0	781.8	717.9	690.8
Expenditure	816.3	803.7	779.2	752.8	681.7
Balance	**10.0**	**8.3**	**2.6**	**-34.8**	**9.1**
General government					
Revenue	1,901.8	1,821.2	1,712.9	1,569.9	1,616.5
Expenditure	1,989.2	1,918.1	1,842.6	1,717.6	1,563.4
Balance	**-87.4**	**-96.9**	**-129.7**	**-147.7**	**53.0**

(1) Definition according to the national accounts.

(2) Excluding taxes of domestic sectors paid to EU.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Tables 3.4.3.2, 3.4.3.3 and 3.4.3.7.

(1) Definition according to the national accounts.

(2) Excluding taxes of domestic sectors paid to EU.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2023 (March 2024), Table 3.4.3.4.

GENERAL GOVERNMENT EXPENDITURE: BREAKDOWN BY FUNCTIONS (1)

	2023	2022	2021	2020	2019
			(EUR in billions)		
General public services	271.6	241.8	221.0	207.9	201.3
Defense	41.3	39.9	39.3	38.2	36.9
Public order and safety	67.8	64.4	61.2	58.2	56.3
Economic affairs	196.4	205.7	193.5	141.3	112.0
Environmental protection	27.9	22.5	26.4	24.1	20.6
Housing and community amenities	19.3	18.4	25.9	22.7	14.6
Health	313.6	331.4	315.4	288.7	253.0
Recreation, culture and religion	43.4	40.7	38.4	37.6	36.2
Education	187.2	176.2	166.9	159.6	151.9
Social protection	820.7	777.2	754.5	739.4	680.6
Total expenditure	**1,989.2**	**1,918.1**	**1,842.6**	**1,717.6**	**1,563.4**

(1) Definition according to the national accounts.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2023 (March 2024), Table 3.4.3.11.

Germany's General Government Deficit/Surplus and General Government Gross Debt

For purposes of the EU Member States' reports to the European Commission under the EDP, the general government or "Maastricht" deficit/surplus refers to the difference between consolidated public sector revenue and consolidated public sector expenditure and is the balancing item "net borrowing/net lending" of the general government (central government, state government, local government and social security funds) as defined in ESA 2010. After eight annual surpluses in a row, the German general government budget balance turned negative in 2020 due to the impact of the COVID-19 pandemic. Following a general government deficit of 4.3% in 2020, 3.6% in 2021 and 2.5% in 2022, the German general government deficit amounted to EUR 87.4 billion or 2.1% of nominal GDP in 2023, which, for the second year in a row, is below the EU's 3% reference value for the general government deficit. The German general government gross debt-to-GDP ratio decreased from 66.1% in 2022 to 63.6% in 2023, which is above the EU's respective reference value of 60%.

Functioning of the European Union (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02016E/TXT-20200301&from=EN); Deutsche Bundesbank, General government debt as defined in the Maastricht Treaty as a % of GDP - Germany - overall (https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/745582/745582?listId=www_v27_web011_21a&treeAnchor=FINANZEN&statisticType=BBK_ITS&tsId=BBK01.BJ9959&dateSelect=2023); European Council, Council of the European Union, Statement of EU ministers of finance on the Stability and Growth Pact in light of the COVID-19 crisis, press release of March 23, 2020 (https://www.consilium.europa.eu/en/press/press-releases/2020/03/23/statement-of-eu-ministers-of-finance-on-the-stability-and-growth-pact-in-light-of-the-covid-19-crisis/); European Commission, Fiscal policy guidance for 2024: Promoting debt sustainability and sustainable and inclusive growth, press release of March 8, 2023 (https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1410).

As regards national fiscal rules, the German constitutional balanced budget rule known as the "debt brake" (*Schuldenbremse*) provides for a structural budget deficit of no more than 0.35% of GDP at the federal level and structurally balanced Länder budgets. The Bundestag suspended the debt brake for the years 2020 and 2021 in order to enable the financing of the governmental measures taken in connection with the COVID-19 pandemic as well as for the year 2022 due to Russia's invasion of Ukraine. As a consequence of a ruling of the Federal Constitutional Court in November 2023, which clarified certain aspects of the application of the debt brake, the debt brake was also suspended for the year 2023 in the Supplementary Budget Act 2023 (*Nachtragshaushaltsgesetz 2023*). From 2024 onwards, the debt brake will apply again, as is reflected in the 2024 federal budget plan (*Bundeshaushalt – Sollbericht 2024*). In response to Russia's invasion of Ukraine, the Federal Government established a Special Fund for the Federal Armed Forces (*Sondervermögen Bundeswehr*) with its own credit authorization of up to EUR 100 billion on a one-off basis. This one-off credit authorization is exempted from the debt brake. The Special Fund is being used to supplement the defense section of the Federal Budget to achieve the guideline of the North Atlantic Treaty Organization (NATO) of spending at least 2% of GDP each year on defense.

Sources: Bundesministerium der Finanzen, Fiskalregeln (https://www.bundesfinanzministerium.de/Web/DE/Themen/Oeffentliche_Finanzen/Stabilitaetspolitik/Fiskalregeln/fiskalregeln.html); Bundesministerium der Finanzen, Kompendium zur Schuldenregel des Bundes (Schuldenbremse), February 25, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finanzen/Schuldenbremse/kompendium-zur-schuldenbremse-des-bundes.pdf?__blob=publicationFile&v=9); Bundestag, Bundestag billigt mit breiter Mehrheit Nachtragshaushalt für 2020 (https://www.bundestag.de/dokumente/textarchiv/2020/kw13-de-corona-schuldenbremse-688956); Bundestag, Finanzministerium-Etat beschlossen – Schuldenbremse bleibt ausgesetzt (https://www.bundestag.de/dokumente/textarchiv/2020/kw50-de-finanzministerium-bundesrechnungshof-810030); The Federal Constitutional Court, Second Supplementary Budget Act 2021 is void, press release of November 15, 2023 (https://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2023/bvg23-101.html); Bundesministerium der Finanzen, Bundesverfassungsgerichtsurteil: Bundesregierung zieht Konsequenzen und beschließt Nachtragshaushalt 2023, press release of November 27, 2023 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2023/11/2023-11-27-entwurf-nachtragshaushalt-2023-beschlossen.html); Bundesministerium der Finanzen, Sollbericht 2024: Ausgaben und Einnahmen des Bundeshaushalts, BMF-Monatsbericht Februar 2024 (https://www.bundesfinanzministerium.de/Monatsberichte/Ausgabe/2024/02/Inhalte/Kapitel-3-Analysen/3-1-sollbericht-2024.html); Bundesministerium der Finanzen, Sondervermögen Bundeswehr: Investitionen in unsere Freiheit, press release of March 16, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/03/2022-03-16-sondervermoegen-bundeswehr.html?cms_pk_kwd=16.03.2022_Sonderverm%C3%B6gen+Bundeswehr+Investitionen+in+unsere+Freiheit&cms_pk_campaign=Newsletter-16.03.2022); Deutscher Bundestag, Dokumente, Textarchiv, 2022, Grundgesetzänderung für das Sondervermögen beschlossen (https://www.bundestag.de/dokumente/textarchiv/2022/kw22-de-grundgesetzaenderung-897760); Bundesrat, Bundesrat kompakt – Das wichtigste zur Sitzung, Ausgewählte Tagesordnungspunkte der 1022. Sitzung am 10.06.2022, Bundeswehrsondervermögen – Mindestlohn – Rente – Pflegebonus, TOP 24A Bundeswehr (https://www.bundesrat.de/DE/plenum/bundesrat-kompakt/22/1022/1022-node.html).

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2023 (February 2024), Table 1.10; Deutsche Bundesbank, Time series BBK01.BJ9959: General government debt as defined in the Maastricht Treaty as a % of GDP - Germany - overall (https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/745582/745582?listId=www_v27_web011_21a&tsId=BBK01.BJ9959&dateSelect=2020).

Fiscal Outlook

On April 24, 2024, the Federal Government published the German Stability Program 2024, in accordance with the rules of the Stability and Growth Pact in force at that time. The German Stability Program 2024 contains budgetary projections for the years 2024 to 2028 at all government levels (Federation, Länder, local authorities and social security funds). The projections are based on (i) the Federal Government's annual projection of macroeconomic trends of February 21, 2024, (ii) the results of the Working Party on Tax Revenue Estimates of October 26, 2023, (iii) the federal budget for 2024 adopted by the German Parliament on February 2, 2024, and (d) the fiscal plan until 2027.

The following table presents the Federal Government's projection for key fiscal indicators in the years 2024 to 2028 compared to the results for these key fiscal indicators in 2023, as set out in the German Stability Program 2024.

GENERAL GOVERNMENT BUDGETARY PROSPECTS (1)

	2028	2027	2026	2025	2024	2023
Revenue	48½	48	48	47½	47	46.1
Total taxes	24¾	24½	24½	24	23¾	23.4
Social contributions	18¾	18¼	18¼	18	17¾	17.2
Property income	½	½	½	½	½	0.7
Other	4½	4¾	4¾	4¾	5	4.8
Expenditure (2)	49½	49½	49¼	48¾	48¾	48.6
Compensation of employees and intermediate consumption	14	14	14¼	14¼	14½	14.2
Social payments	26½	26¼	26	25½	25¼	24.8
Interest expenditure	1¼	1¼	1	1	1	0.9
Subsidies	1	1	1	1	1	1.6
Gross fixed capital formation	2¾	3	3	3	2¾	2.7
Capital transfers	1¾	1¾	1¾	2	2¼	2.3
Other	2	2¼	2¼	2	2	2.2
General government deficit (-) / surplus (+)	**-1**	**-1½**	**-1¼**	**-1**	**-1¾**	**-2.5**
Federal Government	-½	-½	-¾	-¾	-1¼	-2.3
Länder governments	0	-¼	-¼	-¼	-¼	-0.2
Municipalities	-¼	-¼	-¼	-¼	-¼	-0.3
Social security funds	-¼	-½	-¼	0	0	0.2
General government gross debt	**62**	**63**	**63¼**	**63¼**	**64**	**63.6**

(1) Forecast figures are rounded to one-quarter of a percent of GDP.

(2) Adjusted by the net amount of payments in connection with swaps.

Source: Bundesministerium der Finanzen, Deutsches Stabilitätsprogramm 2024 Tables 13 and 17 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/stabilitaetsprogramm-2024.pdf?__blob=publicationFile&v=8).

Income generated by corporations is subject to corporate income tax (*Körperschaftsteuer*) at a flat rate of 15%.

Capital income received by domestic taxpayers (all types of income from capital as well as private shareholders' net gains from sales of shares in corporations) is subject to a final uniform tax rate of 25% (*Abgeltungsteuer*), taking into consideration an allowance (*Sparerpauschbetrag*) of EUR 1,000 (EUR 2,000 for married couples).

In addition to the various types of income tax, a solidarity surcharge of 5.5% is imposed on the applicable income tax liability. From January 1, 2021, onwards, the additional tax burden resulting from the solidarity surcharge has been abolished for approximately 90% of income taxpayers for the benefit of low and middle incomes.

Sources: Bundesministerium der Justiz, Einkommensteuergesetz (https://www.gesetze-im-internet.de/estg/index.html); Bundesministerium der Justiz, Körperschaftsteuergesetz (https://www.gesetze-im-internet.de/kstg_1977/index.html); Bundesministerium der Justiz, Solidaritätszuschlaggesetz 1995, § 4 Zuschlagssatz (https://www.gesetze-im-internet.de/solzg_1995/__4.html); Bundesministerium der Finanzen, Monatsbericht Januar 2024, Analysen und Berichte, Die wichtigsten steuerlichen Änderungen 2024 (https://www.bundesfinanzministerium.de/Monatsberichte/2024/01/Inhalte/Kapitel-3-Analysen/3-1-wichtigste-steuerliche-aenderungen-2024.html).

VAT and Consumption Taxes

VAT serves as a significant source of revenue. VAT is a general consumption tax that is imposed on the value of most goods and services. The standard rate applicable to most goods and services is 19%. Certain items that are classified as necessities, such as food (except food and beverages in restaurants) and books, are subject to a reduced rate of 7%.

Against the backdrop of Russia's invasion of Ukraine and rising energy prices, the VAT rate for the supply of gas via the natural gas grid and district heating was temporarily reduced from 19% to 7% from October 1, 2022 until March 31, 2024. Similarly, initially in connection with the COVID-19 pandemic, the VAT rate for restaurant and catering services was temporarily reduced from 19% to 7% from July 1, 2020 until December 31, 2023.

In addition to the VAT, there are specific consumption taxes. The most significant specific consumption taxes relate to energy and tobacco.

Sources: Bundesministerium der Justiz, Umsatzsteuergesetz (https://www.gesetze-im-internet.de/ustg_1980/index.html); Bundesministerium der Justiz, Umsatzsteuergesetz, § 12 Steuersätze (https://www.gesetze-im-internet.de/ustg_1980/__12.html); Die Bundesregierung, Im Bundesrat beschlossen – Umsatzsteuer auf Gas wird reduziert, published on October 26, 2022 (https://www.bundesregierung.de/breg-de/aktuelles/steuersenkung-gas-2125486); Bundesministerium der Justiz, Energiesteuergesetz (https://www.gesetze-im-internet.de/energiestg/); Bundesministerium der Justiz, Tabaksteuergesetz (https://www.gesetze-im-internet.de/tabstg_2009/index.html); Bundesministerium der Finanzen, BMF Schreiben vom 21.12.2023, Auslaufen der ermäßigten Besteuerung von Restaurant- und Verpflegungsdienstleistungen gemäß § 12 Absatz 2 Nummer 15 Umsatzsteuergesetz; Einführung einer Nichtbeanstandungsregelung für die Silvesternacht (https://www.bundesfinanzministerium.de/Content/DE/Downloads/BMF_Schreiben/Steuerarten/Umsatzsteuer/2023-12-21-auslaufen-der-ermaessigten-besteuerung-von-restaurant-und-verpflegungsdienstleistungen-einfuehrung-einer-nichtbeanstandungsregelung-fuer-die-silvesternacht.html).

Environmental Tax and Emissions Trading

The environmental tax regime aims to encourage energy conservation and to mitigate climate change by providing incentives for a reduction of carbon emissions. Furthermore, it aims to allocate the burden of taxes and contributions more equally among labor, capital and natural resources. Key points of the environmental tax regime are an electricity tax and a fossil fuel energy tax. The electricity tax rate is EUR 20.50 per megawatt-hour. The rates of the fossil fuel energy tax are assessed in accordance with certain environmental criteria.

release of October 28, 2022 (https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2022/10/20221028-robert-habeck-we-are-taking-a-more-cautious-approach-to-carbon-pricing-reducing-the-burden-on-households-and-companies.html); Die Bundesregierung, Der Klima und Transformationsfonds 2024 – Entlastung schaffen, Zukunftsinvestitionen sichern, Transformation gestalten, December 22, 2023 (https://www.bundesregierung.de/breg-de/aktuelles/der-klima-und-transformationsfonds-2024-2250738).

Trade Tax

Trade tax (*Gewerbesteuer*) is levied at the municipal level and is imposed on businesses and their objective earning power. The trade tax rate varies and depends on the municipality that levies the tax. Basis of assessment are the profits of a business enterprise as determined under income tax law or corporation tax law, increased or decreased by certain adjustments. The result is multiplied by the basic federal rate (*Gewerbesteuermesszahl*) to achieve the base amount for the trade tax (*Steuermessbetrag*), which is then multiplied by the municipal multiplier (*Hebesatz*). Beyond a required minimum level of 200% for the municipal multiplier, municipalities have discretion to fix the municipal tax collection rate. Based on a weighted average municipal multiplier of 403.32% in 2021 the average trade tax rate in 2022 amounted to 14.12%.

Sources: Bundesministerium der Justiz und für Verbraucherschutz, Gewerbesteuergesetz (https://www.gesetze-im-internet.de/gewstg/index.html); Bundesministerium der Finanzen, Die wichtigsten Steuern im internationalen Vergleich 2022, Overview 4, page 14 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/die-wichtigsten-steuern-im-internationalen-vergleich-2022.pdf?__blob=publicationFile&v=6).

The following table provides an overview of the annual tax revenues of the general government divided by categories for each of the years indicated, as presented in the national accounts.

TAXES (1)

	2023	2022	2021	2020	2019
			(EUR in billions)		
Current taxes	953.7	946.6	879.2	773.0	827.7
Taxes on production and imports	424.0	417.8	393.2	345.8	369.8
of which: VAT	*287.3*	*285.7*	*259.4*	*221.6*	*244.1*
Current taxes on income and wealth	529.8	528.8	486.0	427.3	457.9
of which: Wage tax	*274.6*	*273.8*	*256.4*	*254.3*	*260.8*
Assessed income tax	*70.5*	*78.6*	*68.7*	*56.8*	*61.7*
Non-assessed taxes on earnings	*47.4*	*41.2*	*39.4*	*29.8*	*30.5*
Corporate tax	*48.3*	*49.2*	*44.6*	*25.8*	*34.1*
Trade tax (Gewerbesteuer)	*73.4*	*70.4*	*61.4*	*45.4*	*55.6*
Capital taxes	9.3	9.2	9.8	8.7	7.0
Tax revenue of general government	**963.0**	**955.9**	**889.0**	**781.7**	**834.7**
Taxes of domestic sectors to EU	6.2	7.5	5.1	4.7	5.1
Taxes	**969.2**	**963.3**	**894.1**	**786.4**	**839.8**

(1) Definition according to the national accounts.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2023 (March 2024), Table 3.4.3.16.

Significant majority participations:		
Deutsche Bahn AG	2,150	100.0
KfW Kreditanstalt für Wiederaufbau	3,750	80.0
Hypo Real Estate Holding GmbH (1)	909	100.0
Significant minority participations exceeding 25%:		
Flughafen München GmbH	307	26.0

(1) Participations held by a special fund.

Source: Bundesministerium der Finanzen, Beteiligungsbericht des Bundes 2023 (https://www.bundesfinanzministerium.de/Web/DE/Themen/Bundesvermoegen/Privatisierungs_und_Beteiligungspolitik/Beteiligungspolitik/Beteiligungsberichte/beteiligungsberichte.html).

In December 2022, following approval by the European Commission under EU state aid rules, the Federal Government acquired approximately 99% of the share capital of energy company Uniper SE ("Uniper") with the aim of securing the energy supply in Germany. Unless otherwise approved by the European Commission, the Federal Government is obliged to reduce its stake in Uniper to a maximum of 25% plus one share by 2028 at the latest. Uniper provides critical energy infrastructure in Germany and plays a key role in the supply of electricity and natural gas. As a result of Russia's invasion of Ukraine and the subsequent halt in the supply of Russian natural gas to Germany, Uniper faced existential difficulties. Due to Uniper's central role for the energy supply in Germany, the Federal Government decided on initial support measures in July 2022, which were adapted based on further developments in September 2022. In this context, Uniper had already received substantial support from KfW in the form of credit lines. Funds provided by KfW were since substituted by equity and repaid in part. Another company that was transferred to state ownership as a measure to safeguard energy security in Germany is SEFE. The European Commission confirmed these capital measures under state aid rules in December 2022. Specifically, the European Commission authorized the Federal Government to inject EUR 6.3 billion of additional equity into the company by substituting an existing KfW loan subject to certain competition-related conditions.

Sources: Bundesministerium der Finanzen, Bundesministerium für Wirtschaft und Klimaschutz, Einstieg des Bundes bei Energieversorger Uniper SE vollzogen, joint press release of December 22, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/12/2022-12-22-einstieg-bund-bei-uniper-vollzogen.html); Federal Ministry for Economic Affairs and Climate Action, European Commission approves equity capital for reorientation of SEFE, press release of December 20, 2022 (https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2022/12/20221220-european-commission-approves-equity-capital-for-reorientation-of-sefe.html).

Direct Debt of the Federal Government

As of December 31, 2023, the principal amount of the Federal Government's direct debt totaled EUR 1,644.1 billion. For further information on the principal amount of the outstanding direct debt, see "Tables and Supplementary Information—I. Direct Debt of the Federal Government—Summary of the Principal Amount of the Outstanding Direct Debt of the Federal Government."

The Federal Government raises funds primarily through the issuance of bonds and notes. Euro-denominated bonds and notes issued by the Federal Republic are evidenced by book entry and no certificates are issued.

For information on the Federal Government's liability as of December 31, 2023 for capital subscriptions to various international financial organizations, see the table entitled "—Tables and Supplementary Information—III. Liabilities to International Financial Organizations."

Federal Bonds *(Bundesanleihen)*	1,179,750
Federal Notes *(Bundesobligationen)*	255,000
Federal Treasury Notes *(Bundesschatzanweisungen)*	136,000
Treasury Discount Paper *(Unverzinsliche Schatzanweisungen)*	149,000
Inflation-linked Securities *(Inflationsindexierte Bundeswertpapiere)*	66,250
Green Federal Bonds *(Grüne Bundesanleihen)*	40,250
Green Five-year Federal Notes *(Grüne Bundesobligationen)*	15,500
Borrowers' note loans *(Schuldscheindarlehen)*	4,297
Old debt (1)	4,474
Repurchased debt	-206,407
Total	**1,644,114**

(1) Mainly equalization and covering claims of the Deutsche Bundesbank, other banks and insurance companies in connection with the currency reform of 1948.

Source: Bundesministerium der Finanzen, Monatsbericht Januar 2024, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2023", page 74, and table "Entwicklung von Umlaufvolumen, Eigenbestände und Anlagen des Wirtschaftsstabilisierungsfonds (WSF) im Dezember 2023", page 75 (https://www.bundesfinanzministerium.de/Monatsberichte/2024/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen.html).

DEBT TABLES

1. FEDERAL BONDS (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
6.25% Bonds of the Federal Republic of 1994	6.25	1994	2024	12,750
6.5% Bonds of the Federal Republic of 1997	6.50	1997	2027	13,750
5.625% Bonds of the Federal Republic of 1998	5.625	1998	2028	17,000
4.75% Bonds of the Federal Republic of 1998	4.75	1998	2028	13,750
6.25% Bonds of the Federal Republic of 2000	6.25	2000	2030	11,750
5.5% Bonds of the Federal Republic of 2000	5.50	2000	2031	21,500
4.75% Bonds of the Federal Republic of 2003	4.75	2003	2034	24,500
4% Bonds of the Federal Republic of 2005	4.00	2005	2037	28,250
4.25% Bonds of the Federal Republic of 2007	4.25	2007	2039	19,250
4.75% Bonds of the Federal Republic of 2008	4.75	2008	2040	21,500
3.25% Bonds of the Federal Republic of 2010	3.25	2010	2042	19,500
2.5% Bonds of the Federal Republic of 2012	2.50	2012	2044	30,500
1.75% Bonds of the Federal Republic of 2014	1.75	2014	2024	22,500
2.5% Bonds of the Federal Republic of 2014	2.50	2014	2046	31,500
1.5% Bonds of the Federal Republic of 2014	1.50	2014	2024	22,500
1% Bonds of the Federal Republic of 2014	1.00	2014	2024	22,500
0.5% Bonds of the Federal Republic of 2015	0.50	2015	2025	30,500
1% Bonds of the Federal Republic of 2015	1.00	2015	2025	30,500
0.5% Bonds of the Federal Republic of 2016	0.50	2016	2026	33,500
0% Bonds of the Federal Republic of 2016	0.00	2016	2026	32,500
0.25% Bonds of the Federal Republic of 2017	0.25	2017	2027	30,500
0.5% Bonds of the Federal Republic of 2017	0.50	2017	2027	32,500
1.25% Bonds of the Federal Republic of 2017	1.25	2017	2048	37,500

0.00% Bonds of the Federal Republic of 2020	0.00	2020	2035	23,750
0.00% Bonds of the Federal Republic of 2020	0.00	2020	2027	22,000
0.00% Bonds of the Federal Republic of 2020	0.00	2020	2030	33,500
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2028	27,000
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2031	28,000
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2031	32,000
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2036	25,750
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2052	29,500
0.00% Bonds of the Federal Republic of 2022	0.00	2022	2032	31,000
1.70% Bonds of the Federal Republic of 2022	1.70	2022	2032	28,000
1.00% Bonds of the Federal Republic of 2022	1.00	2022	2038	21,500
2.10% Bonds of the Federal Republic of 2022	2.10	2022	2029	26,000
1.80% Bonds of the Federal Republic of 2022	1.80	2022	2053	26,000
2.30% Bonds of the Federal Republic of 2023	2.30	2023	2033	38,250
2.60% Bonds of the Federal Republic of 2023	2.60	2023	2033	30,500
2.40% Bonds of the Federal Republic of 2023	2.40	2023	2030	13,000
Total Federal Bonds				**1,179,750**

(1) Federal Bonds (*Bundesanleihen*) are evidenced by book entry, and no certificates are issued. Maturities are 7 to 30 years. No redemption prior to maturity; including principal strips.

2. GREEN FEDERAL BONDS (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
0.00% Green Bonds of the Federal Republic of 2020	0.00	2020	2030	9,500
0.00% Green Bonds of the Federal Republic of 2021	0.00	2021	2031	9,000
0.00% Green Bonds of the Federal Republic of 2021	0.00	2021	2050	10,000
2.30% Green Bonds of the Federal Republic of 2023	2.30	2023	2033	6,250
1.80% Green Bonds of the Federal Republic of 2023	1.80	2023	2053	5,500
Total Green Federal Bonds				**40,250**

(1) Federal Bonds (*Bundesanleihen*) are evidenced by book entry, and no certificates are issued. Maturities are 7 to 30 years. No redemption prior to maturity; including principal strips.

3. INFLATION-LINKED SECURITIES (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
0.50% Inflation-linked Bonds of the Federal Republic of 2014	0.50	2014	2030	22,150
0.10% Inflation-linked Bonds of the Federal Republic of 2015	0.10	2015	2026	19,200
0.10% Inflation-linked Bonds of the Federal Republic of 2015	0.10	2015	2046	14,250
0.10% Inflation-linked Bonds of the Federal Republic of 2021	0.10	2021	2033	10,650
Total Inflation-linked Securities				**66,250**

(1) Inflation-linked Securities (*Inflationsindexierte Bundeswertpapiere*) are evidenced by book entry, and no certificates are issued. Maturities are 5 to 30 years. No redemption prior to maturity.

0.00% Bonds of 2021-Series 183	0.00	2021	2026	28,000
0.00% Bonds of 2021-Series 184	0.00	2021	2026	24,000
0.00% Bonds of 2022-Series 185	0.00	2022	2027	22,000
1.30% Bonds of 2022-Series 186	1.30	2022	2027	30,000
2.20% Bonds of 2023-Series 187	2.20	2023	2028	25,000
2.40% Bonds of 2023-Series 188	2.40	2023	2028	29,500
Total Federal Notes				**255,000**

(1) Federal Notes (*Bundesobligationen*) are evidenced by book entry, and no certificates are issued. Maturities are approximately five years. No redemption prior to maturity.

5. Green Federal Notes (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
0.00% Green Bonds of 2020	0.00	2020	2025	7,500
1.30% Green Bonds of 2022	1.30	2022	2027	8,000
Total Federal Notes				**15,500**

(1) Federal Notes (*Bundesobligationen*) are evidenced by book entry, and no certificates are issued. Maturities are approximately five years. No redemption prior to maturity.

6. Federal Treasury Notes (1)

Title	Interest Rate (% per annum)	Year of Issue	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
0.00% Notes of 2022	0.00	2022	2024	19,500
0.20% Notes of 2022 (II)	0.20	2022	2024	17,000
0.40% Notes of 2022 (III)	0.40	2022	2024	17,000
2.20% Notes of 2022 (IV)	2.20	2022	2024	16,000
2.50% Notes of 2023	2.50	2023	2025	17,500
2.80% Notes of 2023 (II)	2.80	2023	2025	17,500
3.10% Notes of 2023 (III)	3.10	2023	2025	17,000
3.10% Notes of 2023 (IV)	3.10	2023	2025	14,500
Total Federal Treasury Notes				**136,000**

(1) Federal Treasury Notes (*Bundesschatzanweisungen*) are evidenced by book-entry, and no certificates are issued. Maturities are two years. No redemption prior to maturity.

permitted prior to maturity.

(2) Reflects annual interest rate paid to the holder by way of the initial issue discount. No redemption is permitted prior to maturity.

8. Borrowers' Note Loans (1)

	Interest Rate (% per annum)	Year of Issue	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
Borrower's note loans *(Schuldscheindarlehen)*	3.46 to 5.05	2003 to 2007	2024 to 2037	4,297

(1) Borrowers' note loans (*Schuldscheindarlehen*) are an instrument of the German capital market where the lending entity, generally an institutional investor, receives a certificate evidencing its loan to the borrower and the term of such loans. The certificate generally authorizes at least three assignments. No redemption is permitted prior to maturity.

Source for Debt Table 1 to 8: Federal Republic of Germany – Finance Agency, "Einzelaufstellung aller Bundeswertpapiere seit 1995" (https://www.deutsche-finanzagentur.de/downloadcenter).

9. Other Liabilities

Title	Interest Rate (% per annum)	Year of incurrence	Maturity	Aggregate principal amount outstanding as of December 31, 2023 (EUR in millions)
Old debt (1)	0.00 to 3.00	Various	Various	4,474

(1) Includes mainly equalization and covering claims of the Deutsche Bundesbank, other banks and insurance companies in connection with the currency reform of 1948 as well as liabilities of the Federal Government to repay amounts received from the Investitionshilfeabgabe, a special duty levied on income, the proceeds of which were to be used to promote investments.

Source: Bundesministerium der Finanzen, Monatsbericht Januar 2024, Table "Entwicklung der Kreditaufnahme des Bundes (Haushalt und Sondervermögen ohne Darlehensfinanzierung) im Dezember 2023", page 74 (https://www.bundesfinanzministerium.de/Monatsberichte/2024/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen-pdf.pdf?__blob=publicationFile&v=4).

Loans to domestic corporations and for projects in areas of agriculture, fishing and housing construction	341,605	267,997
Contributions to international financing institutions	75,512	75,493
Co-financing of bilateral projects of German financial co-operation	31,531	28,959
Successor agencies to *Treuhandanstalt*	1,009	1,009
Interest compensation guarantees	15,000	15,000
Total guarantees pursuant to the 2020 German Budget Act	**623,483**	**551,640**
Guarantee for a loan to Greece according to the German Financial Stability Act	22,400	22,400
Loan guarantees under the Act on Guarantees pertaining to the European Financial Stability Facility	90,317	89,412
Warranties in connection with the SURE-Warranty Act as of July 10, 2020	6,384	6,384
Total guarantees	**742,584**	**670,586**

(1) Does not include guarantees under the KfW Law with respect to money borrowed, bonds issued and derivative transactions entered into by KfW. For information relating to KfW's borrowings, see "KfW—Business—Financial Markets—Funding."

(2) Includes export finance loans extended by KfW IPEX-Bank guaranteed by the Federal Republic through HERMES, the official German export credit insurer. For information relating to loans extended by KfW IPEX-Bank benefiting from HERMES coverage, see "KfW—Business—Export and Project Finance (KfW IPEX-Bank)—Business."

Source: Bundesministerium der Finanzen, Finanzbericht 2024, Overview 8.1.3, page 323 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/finanzbericht-2024.html).

III. Liabilities to International Financial Organizations

The Federal Republic is obligated to contribute to the capital subscriptions and, in some cases, to additional financing, according to the requirements of each respective membership. Such contributions were in many cases stated initially in 1944 with one U.S. dollar being an equivalent to 0.888671 grams of gold, and later – with the creation of the Special Drawing Right ("SDR") – being an equivalent to the SDR at the same value. The value of the SDR, the possible inclusion of new currencies in the basket, the initial weight of each of these currencies in the basket, and the financial instruments used in determining the interest rate on the SDR are reviewed every five years. With effect from August 1, 2022, the SDR basket consists of five currencies with the following initial weights: U.S. dollar (43%), Euro (29%), Chinese yuan (12%), Japanese yen (8%) and Pound sterling (7%).

International Finance Corporation (IFC) (3)	1,205.93	1,205.93
European Investment Bank (EIB) (4)	51,628.2	4,604.9
African Development Bank (AfDB) (3)	8150.1	402.9
African Development Fund (AfDF) (3)	5,453.5	5,000.7
Asian Development Bank (AsDB) (3)	6,161.0	308.1
Asian Development Fund (AsDF) (3)	2,002.0	1,892.0
Inter-American Development Bank (IDB) (3)	3,368.7	242.3
Inter-American Investment Corporation (IIC) (3)	24.4	24.4
Fund for Special Operations (FSO) (3)	—	—
International Fund for Agricultural Development (IFAD) (3)	794,537	76,972
Caribbean Development Bank (CDB) (3)	106.6	23.6
Special Development Fund of the Caribbean Development Bank (SDF) (3)	124.2	120.7
European Bank for Reconstruction and Development (EBRD) (4)(5)	3,204.6	589.2
Council of Europe Development Bank (CEB) (4)(6)	1,797.1	112.3
Asian Infrastructure Investment Bank (AIIB) (3)	4,484.2	896.8

(1) Subscriptions are in part committed in USD, SDR or EUR. SDR or EUR commitments are converted to USD at year-end exchange rates, except that certain SDR commitments are converted at the fixed conversion rate of SDR 1 = USD 1.39959.

(2) Quota in SDR: 26,634.4 Mio. SDR. Year-end value 2021 1 SDR = USD 1.399590. Source: computation provided by the Ministry of Finance based on data provided by the IMF; the subscription (quota) is fully paid in by the Deutsche Bundesbank. The foreign currency part of the quota (25% of the subscription) and the Deutsche Bundesbank's further contributions to the IMF's financing are part of the foreign currency reserves of the Deutsche Bundesbank. The government does not provide any guarantees or provisions for risks of IMF loans.

(3) Source: computation provided by the Ministry of Finance and the Ministry for Economic Cooperation and Development.

(4) Source: computation provided by the Ministry of Finance based on euro exchange rate of the European Central Bank of EUR 1 per USD 1.105 in effect on December 29, 2023.

(5) Capital increase pending completion. The Federal Republic committed to the subscription of new shares in an amount of EUR 343.6 million/USD 379.678 million.

(6) Capital increase pending completion. The Federal Republic committed to the subscription of new shares in an amount of EUR 710.6 million/USD 785.2 million.

Combined Management Report

General economic environment 11
Development of KfW Group 13
Development of the KfW Group earnings position 17
Development of net assets of KfW Group 21
Development of the KfW Group financial position 23

Risk report **25**
Overview of key indicators 25
Current developments 27
Basic principles and objectives of risk management 28
Organisation of risk management and monitoring 28
- Risk management approach of KfW Group (overview) 30
- Internal capital adequacy assessment process 31

Types of risk 35
- Credit risk 35
- Equity investment risk 43
- Market price risk 43
- Operational risk 45
- Reputational risk 47
- Project risk 47
- Liquidity risk 47
- Internal liquidity adequacy assessment process (“ILAAP”) 47
- Concentration risk 49
- Regulatory risk 49
- Intra-group risk 49
- Model risk 49

Additional internal control procedures 49

Forecast and opportunity report **52**
General economic environment and development trends 52
New business projections 54
Funding projections 57
Earnings projections 58
Overall conclusion 58

Section 298 (2) of the German Commercial Code (*Handelsgesetzbuch – "HGB"*). The combined management report is included in the KfW Group financial report and is submitted to the German Company Register for publication.

The KfW annual financial statements prepared in accordance with the German Commercial Code and the group financial report are also available online at www.kfw.de.

Information on KfW as the parent company can be found under a separate section, "Notes to the KfW annual financial statements prepared in accordance with the German Commercial Code".

The KfW consolidated financial statements were prepared in accordance with the provisions of Section 315e HGB in conjunction with the International Financial Reporting Standards (IFRS) as applicable within the European Union. With the exception of the HGB information in the section "Notes to the KfW annual financial statements prepared in accordance with the German Commercial Code", all financial figures in this combined management report, including the comparative figures for the previous year, are reported in accordance with IFRS.

KfW's business model

KfW is a promotional bank of the Federal Republic of Germany in the legal form of a public law institution. The Federal Government owns 80% of KfW's share capital and the German federal states own the remaining 20%. KfW is subject to the Law Concerning KfW *(KfW-Gesetz – "KfW Law")*, which defines its functions and sets out the requirements for KfW's operating activities. This set of functions is defined in Article 2 of the KfW Law and represents the implementation of Understanding II, which was reached with the European Commission. KfW's functions include the carrying out of its promotional business, related transactions and mandated transactions. Because of its special business model, comparing KfW with commercial banks is only possible to a very limited extent.

KfW's primary and core statutory objective is its promotional business, in accordance with Article 2 (1) of the KfW Law. It consists of promotional measures, particularly in the form of financing for SMEs, the liberal professions and business start-ups, venture capital, housing, environmental protection, infrastructure, technical progress and innovation, internationally agreed promotional programmes and development cooperation. The promotional business also involves financing regional and local authorities and special-purpose associations under public law *(öffentlich-rechtliche Zweckverbände)*, measures with purely social objectives and for the promotion of education. Moreover, project financing is part of KfW's promotional business, as far as it is co-financed by European financing institutions in the interest of the European community, as well as export financing outside the European Union ("EU")/European Economic Area ("EEA") or in countries with official status as candidates for EU accession, provided that such funding is carried out on a syndicated basis or that there is insufficient financing available in the relevant countries.

Where these operations are directly related to the fulfilment of its promotional tasks, KfW may also conduct additional transactions in accordance with Article 2 (3) of the KfW Law (related transactions). These include KfW's refinancing and treasury management measures, as well as the refinancing of KfW IPEX-Bank GmbH ("KfW IPEX-Bank") in line with market conditions. KfW may only engage in other transactions if these are expressly mandated by the German Federal Government on a case-by-case basis in accordance with Article 2 (4) of the KfW Law (mandated transactions). Pursuant to Article 2 (3) sentence 3 of the KfW Law, KfW is expressly prohibited from engaging in financial commission business and deposit business with the general public; therefore, KfW refinances its lending business via the capital markets, primarily by issuing bonds.

stability. It is therefore primarily active in the areas where market mechanisms alone would lead to socially or economically disadvantageous results. KfW's offering is designed to avoid distorting the market. Generating a profit is merely a secondary objective to ensuring risk-bearing capacity and carrying out statutorily mandated tasks. KfW's business model as a promotional bank without a primary profit-making objective and without a trading book is a key factor in its fundamentally conservative risk culture and balance sheet structure.

In accordance with the retention requirement (Article 10 (1) of the KfW Law), there is no distribution of net profit to KfW shareholders. The annual net profit resulting after depreciation, amortisation and provisions is to be allocated to a statutory reserve. These funds are available to strengthen the binding regulatory capital ratios and can be re-deployed for promotional purposes subject to these ratios being met. This means that the funds remain in the promotional cycle.

In carrying out its transactions, KfW is subject to the requirement of competitive neutrality in cooperating with commercial banks. The remit, as defined in the KfW Law in implementation of Understanding II reached with the European Commission, ensures that KfW does not enter into significant competition with commercial banks. An on-lending principle is generally applied in the core domestic promotional business areas (Article 3 (1) of the KfW Law). Derogations therefrom may be made with approval of the Board of Supervisory Directors. The on-lending principle means that credit institutions or other financing institutions are involved in granting financing, enabling final borrowers to receive "KfW" loans in the legal form of loans from their own primary bank, which in turn refinances such operations via KfW. Therefore, KfW does not need to operate a branch network to sell its products. The on-lending principle applies exclusively in the promotional areas pursuant to Article 2 (1) no. 1 a) to f) of the KfW Law, with the particular exception of financing for municipalities, for purely social purposes and for education.

Based on what is referred to as institutional liability (Anstaltslast), the Federal Republic of Germany is obliged to safeguard or maintain KfW's economic basis, thereby ensuring KfW's ability to function. Moreover, KfW's primary obligations are secured by a direct guarantee from the Federal Government in accordance with Article 1a of the KfW Law. Consequently, KfW's rating currently benefits from the Federal Republic of Germany's excellent country rating. The resulting funding conditions support KfW's operating activities in setting promotional incentives.

The federal guarantee and its ownership structure mean that KfW is designated as a public sector entity pursuant to Article 4 (1) no. 8 CRR. This enables the utilisation of the exemption under Article 116 (4) CRR, by which creditors of exposures to KfW can apply a risk weight of 0% to an instrument covered by the federal guarantee.

KfW is subject to legal supervision by the Federal Government, which is exercised by the Federal Ministry of Finance in consultation with the Federal Ministry for Economic Affairs and Climate Action. As a public law institution, KfW is subject to regular audits by the Federal Audit Office. With regard to compliance with the provisions of the German Banking Act *(Kreditwesengesetz – "KWG")* applicable in accordance with the KfW Regulation, KfW is subject to supervision by the German Federal Financial Supervisory Authority *(Bundesanstalt für Finanzdienstleistungsaufsicht – "BaFin")* and the Bundesbank. However, KfW is neither a credit institution, nor a financial services institution within the meaning of the KWG, nor a credit institution within the meaning of CRD V.

KfW promotes the transformation of the economy and society with the aim of improving economic, environmental and social living conditions around the world, with an emphasis on Germany. The focus of the group's promotional activities is on the promotional areas anchored in KfW's strategic objectives. A variety of financing products and services

Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*)	– Start-up financing – Financing of general corporate investments and investments in innovation, energy and environmental protection – Education financing – Financing for housing construction, conversion and refurbishment
Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*)	– Financing of municipal and social infrastructure – Customised corporate financing with equity and debt capital – Customised financing of banks and promotional institutions of the federal states (“LFI”) – Mandated transactions for energy suppliers (debt capital)
KfW Capital	– Investments in German and European venture capital and venture debt funds
Export and project finance	– Financing of German and European export activities – Financing of projects and investments which are of special interest for Germany and Europe
KfW Development Bank	– Promotion of developing countries and emerging economies on behalf of the Federal Government with budget funds and complementary market funds raised by KfW
DEG	– Financing provided by DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH in developing countries and emerging economies (private enterprise financing)
Financial markets	– Securities and money market investments – Holding arrangements for the Federal Republic of Germany – Transactions mandated by the Federal Government, loan granted to Greece – Funding
Head office	– Central interest rate and currency management – Strategic equity investments

In addition to KfW (that is, the business sectors Mittelstandsbank & Private Kunden *(SME Bank* & *Private Clients)*, Individualfinanzierung & Öffentliche Kunden *(Customised Finance* & *Public Clients)*, KfW Development Bank, Financial markets and Head office), the group includes six consolidated subsidiaries. The main operational subsidiaries are KfW IPEX-Bank (responsible for the business sector Export and project finance), DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG) and KfW Capital GmbH & Co. KG (KfW Capital).

KfW Capital, represented by KfW Capital Verwaltungs GmbH, is responsible for equity financing as part of the domestic promotional business. KfW Capital invests in venture capital and venture debt funds, which in turn invest in innovative technology-orientated companies in the start-up and growth phases, with activities focused in Germany and in Europe, thereby strengthening these companies' capital base. In addition to its own market business taken at its own risk, KfW Capital manages Federal Government funds on a fiduciary basis. KfW Capital also functions as KfW's agent for KfW's equity investments in funds, which it enters into on a fiduciary basis for the Federal Government.

Composition of KfW Group Total assets (IFRS, before consolidation)

	Total assets as of 31 Dec. 2023	Total assets as of 31 Dec. 2022
	EUR in millions	EUR in millions
KfW, Frankfurt am Main, Germany	555,731	550,505
Subsidiaries		
KfW IPEX-Bank GmbH, Frankfurt am Main, Germany	32,797	27,643
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany	8,290	7,817
KfW IPEX-Beteiligungsholding GmbH, Frankfurt am Main, Germany	3,194	3,212
KfW Capital GmbH & Co. KG, Frankfurt am Main, Germany	1,024	908
Interkonnektor GmbH, Frankfurt am Main, Germany	284	316
KfW IPEX-Bank Asia Ltd., Singapore (IPEX Asia)	15	13
Investments accounted for using the equity method	**Total assets as of 30 Sep. 2023**	**Total assets as of 30 Sep. 2022**
Microfinance Enhancement Facility S.A., Luxembourg (18.5%), Luxembourg	570	695
Green for Growth Fund, Southeast Europe S.A., Luxembourg (13.3%), Luxembourg	808	732
coparion GmbH & Co. KG, Cologne (16.4%), Germany	362	359
	31 Dec. 2022	**31 Dec. 2021**
DC Nordseekabel GmbH & Co. KG, Bayreuth (50.0%), Germany	856	854

The development of the group's operating income is determined by KfW.

KfW's **primary objective**, or purpose, is sustainable promotion, which means KfW aims to transform the economy and society to improve economic, environmental and social living conditions around the world. This primary objective is supported by the two promotional principles of subsidiarity and sustainability.

Subsidiarity means that KfW focuses on compensating for market weaknesses. Putting this principle into practice, KfW Group strives to maintain high-quality promotional activities and to mobilise private capital, to ensure that the goal of transforming the economy and society is achieved.

With regard to the principle of sustainability, KfW aims to achieve a ranking among the top three within a "best of the best" group of KfW peers, comprising national and international promotional and development banks with the best ESG ratings from the agencies relevant to KfW (Sustainalytics, ISS ESG, MSCI). In addition, the contributions of KfW's financing activities to the UN's Sustainable Development Goals ("SDGs") and to 1.5 °C compatibility are monitored as part of fulfilling international climate goals.

Within the framework of these promotional principles, KfW finances projects under the motto "promoting transformation – boosting resilience" in support of the dual transformation – the key challenge of this decade. This means further expanding the promotional areas of climate change and the environment (environmental share of financing >38%), and digitalisation and innovation (digitalisation and innovation share of financing >10%), which are of key relevance according to KfWplus. Promotional activities linked to globalisation and social change, moreover, continue to be ongoing tasks for KfW. In domestic promotion, KfW still aims to achieve an SME ratio of >40% in its financings.

The primary objective, or purpose, is complemented by **secondary objectives** in the areas of digitalisation, agility and innovation, operating model and governance, and customer and employee centricity, which help to maintain and support a top-performing KfW.

Internal management system

KfW Group has an integrated strategy and planning process. Conceived as a group-wide strategy process, group business sector planning is KfW Group's central planning and management tool. Group business sector planning consists of three consecutive sub-processes performed every year: defining objectives, implementation and quality assurance, and finalisation. The overall strategy and planning process includes the collaboration of staff responsible for planning in all areas.

Objectives: The KfWplus transformation agenda and the strategic objectives derived from it, both of which are set by the Executive Board, form the basis for strategic planning. These strategic objectives serve as a roadmap for KfW Group, laying out the direction in which KfW would like to develop over the next five years. They define KfW Group's medium-term targeted positioning and set top-level objectives for the entire bank. The strategic objectives are reviewed annually for relevance, completeness and aspiration level and are adjusted where necessary – for example, due to changed parameters or newly determined focus areas. Efforts are made, however, to maintain a high degree of consistency to ensure that there are no fundamental changes made to the strategic road map in the course of the annual review. A business strategy scenario analysis is conducted in parallel. A scenario analysis is a "what if" analysis of a specific, plausible scenario, looking at the interaction of exogenous influencing factors and translating the results of the analysis. Such scenarios assist in the process of identifying potential risks and opportunities for promotional affect the lending and equity finance business of KfW Group, they can also potentially give rise to consequential risks, such as reputational risk. The central departments (e.g. information technology, human resources and central services) play important roles in achieving the strategic objectives. By involving these departments, their own strategies are aligned with the strategic objectives.

The first regular capital budget in the base case is prepared on a multi-year horizon on this basis. In this way, any capital bottlenecks resulting from strategic considerations or changed parameters can be identified at an early stage and mitigated by resolving and implementing appropriate measures. The Executive Board defines top-down objectives for all business sectors (with regard to promotion, risk and finances) and departments (staffing in the form of full time equivalents ["FTEs"] and costs) for the entire planning period based on the assessment and prioritisation of all new and ongoing bank backlog projects through the annual business review ("ABR").

Implementation and quality assurance: The business sectors plan their new business, risks and earnings, and each department its budgets, and staffing in the form of FTEs, based on the top-down objectives defined by the Executive Board, taking into account any changes in external or internal factors and in close collaboration with Financial and Risk Controlling. These plans are checked for consistency with the objectives of the group and the business sectors/departments. The interest rate forecast plays a key role in shaping KfW Group's earnings position. Hence, both a high and a low interest rate scenario are examined in addition to the anticipated base case. The plans are also assessed for future risk-bearing capacity in a second round of regular capital budgeting in a base and stress case over a multi-year horizon.

Finalisation: The Executive Board approves the resulting budget or has plans fine-tuned in a revision round, if necessary. The key conclusions from the planning process are incorporated into the business and risk strategies. The management has overall responsibility for formulating and adopting both strategies. The business strategy comprises the group's strategic objectives for its main business activities as well as important internal and external factors, which are included in the strategy process. It also contains the business sectors' contribution to the strategic objectives and the measures for achieving each objective. Moreover, the business strategy combines the budget at the group and business sector levels. The Executive Board sets out KfW Group's risk policies in its risk strategy, which is consistent with the business strategy. The risk strategy is based on the overarching aim of ensuring risk-bearing capacity and liquidity for the long term. Group business sector planning is used to review and redetermine risk appetite. The main risk management approaches are also incorporated into the risk strategy as a basis for operational risk management. The group business sector planning process ends when the Executive Board has adopted a final budget for the entire planning period, including the future capital requirement and the business and risk strategies. The budget is then presented to the supervisory body (Board of Supervisory Directors) for approval, along with the business and risk strategy for discussion. After the Board of Supervisory Directors has decided on the business and risk strategy, it is communicated to the staff in an appropriate manner. In contrast, the result from the valuation of derivatives, which KfW concludes solely for hedging purposes, is not included in the planning, as, in light of the complex causal relationships which affect the recording of derivatives at fair value in connection with KfW's funding activities, it is not controllable and plannable. The temporary effects on results from the valuation of relevant closed items included in the actual figures are reported separately in internal reporting and in the management report as alternative key financial figures.

providing a well-founded guide to achieving planned objectives. The achievement of objectives is regularly monitored by the Board of Supervisory Directors based on reports submitted under the KfW Bylaws. The commentary in these reports outlines analyses of causes and any potential plans for action. Detailed reports are prepared on a monthly or quarterly basis as part of financial controlling. These comprehensive detailed analyses at group and business sector level comprise earnings and cost developments and are reported to specific departments. Additionally, analyses of significant relevance to overall group performance are also presented directly to the Executive Board. Early warning systems have been established and mitigation measures defined for all material risk types in line with the risk management requirements set out in the risk strategy. All controlling and monitoring approaches are integrated into regular risk reporting to the Executive Board. The Board of Supervisory Directors receives a risk report on a quarterly basis.

Alternative key financial figures used

The combined management report contains financial figures that are neither defined in the HGB nor the IFRS accounting standards. In its strategic objectives, KfW uses key indicators prescribed by accounting standards and supervisory regulations as well as key figures that are geared towards promotion as the core business activity. It also uses key figures in which the temporary effects on results determined and reported in the consolidated financial statements in accordance with IFRS, and which KfW does not consider representative, are adjusted.

KfW has defined the following alternative key financial figures:

Promotional business volume

Promotional business volume refers to the commitments of each business sector during the reporting period. In addition to the lending commitments shown in the statement of financial position, promotional business volume comprises loans from Federal Government funds for promotion of developing countries and emerging economies – which are accounted for as trust activities – financial guarantees, equity financing and securities purchases (in the green bonds asset class). Promotional business volume also includes grants committed as part of development aid and in domestic promotional programmes. Allocation to the promotional business volume for the current financial year is generally based on the commitment date of each loan, financial guarantee and grant, and the transaction date of the equity finance and securities transactions. On the other hand, allocation of general funding and global loans to the promotional institutions of the federal states *(Landesförderinstitute – "LFI")* and BAföG government loans is based on the individual drawdown volume and date, instead of the total volume of the contract at the time of commitment. In the lending business, financing amounts denominated in foreign currency are converted into euros at the exchange rate on the commitment date, whereas in the securities and equity finance business, the conversion generally occurs at the exchange rate on the transaction date.

See the "Development of KfW Group" economic report or segment reports for a breakdown of promotional business volume by individual segment.

Promotional expense

Promotional expense is understood to mean certain expenses arising in the two business sectors Mittelstandsbank & Privatkunden *(SME Bank* & *Private Clients)* and Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients)* to achieve KfW's promotional objectives.

expense), expenses for innovative digital promotional approaches (commission and administrative expense), and promotional grants awarded until the end of 2022 as a supplement to the lending business (other operating expense). In addition, KfW awarded promotional grants in the context of ERP promotion (other operating expense) for the first time in 2023.

In the internal presentation of earnings, Promotional expense included in Interest, Commission and Administrative expense and Other operating expense is reported separately due to its special relevance as a management variable.

Cost/income ratio (before promotional expense)
The cost/income ratio ("CIR") (before promotional expense) is calculated as administrative expense (excluding promotional expense) in relation to net interest and commission income before promotional expense.

The CIR reflects costs in relation to income and is thus a measure of efficiency. To enable a comparison of the CIR with other (non-promotional) institutions, an adjustment for the components of KfW's promotional business results is made to the numerator (administrative expense) and denominator (net interest and commission income).

In addition to CIR, KfW also reports an adjusted CIR, which takes into account KfW's specific business model. Under domestic promotional programmes with expense-based remuneration, as well as for the implementation of Financial Cooperation, KfW receives a compensation in the amount of costs incurred, which means that for these products CIR is almost at 100%. In order to ensure comparability of KfW's CIR with that of other financial institutions, the adjusted CIR does not take into account income and expenses related to these products.

Consolidated profit before IFRS effects
Consolidated profit before IFRS effects from hedging is another key financial figure based on Consolidated profit in accordance with IFRS. Derivative financial instruments are entered into for hedging purposes. Under IFRS, the requirements for the recognition and valuation of derivatives and hedges nevertheless give rise to temporary net gains or losses that are offset over the entire term. In KfW's opinion, due to economically effective hedging relationships, such temporary effects on results are not representative.

Consequently, the following reconciliations are performed by eliminating temporary contributions to profit and loss as follows:

– Valuation results from micro and macro hedge accounting.
– Net gains or losses from the use of the fair value option to avoid an accounting mismatch in the case of funding including related hedging derivatives.
– Net gains or losses from the fair value accounting of hedges with high economic effectiveness, but not qualifying for hedge accounting.
– Net gains or losses from foreign currency translation of foreign currency positions, in accordance with recognition and valuation requirements for derivatives and hedging relationships.
– Net gains or losses from changes to deferred taxes on credit rating-related effects of other derivatives from subsidiaries.

Global real domestic product ("GDP") increased by 3.1% in 2023 compared with 2022 according to estimates by the International Monetary Fund ("IMF"). The growth rate of global real GDP in 2023 was therefore lower than in 2022; the growth rate was also lower in industrialised countries, while the growth rate for developing countries and emerging economies remained unchanged year on year. According to IMF calculations, global consumer price inflation fell from an annual average of 8.7% in the previous year to 6.8% in 2023, while annual average core inflation declined to a lesser extent, from 6.4% to 6.3%. According to the IMF, global real GDP grew by 3.4% in the second quarter of 2023 compared to the same quarter of the previous year. However, negative factors came to bear as the year continued. These include the fact that the recovery of the service sector since the COVID-19 pandemic is well advanced, meaning that its development is less supportive of economic growth. Moreover, the manufacturing industry and international goods trading are exposed to a number of factors with a negative influence, including the shift in consumption patterns back from goods to services, and more restrictive lending terms.

Gross domestic product at constant prices

	2023 estimate	2022	2013–2022 average
Year-on-year change in %			
Global economy[1)]	3.1	3.5	3.1
Industrialised countries[1)]	1.6	2.6	1.8
Developing countries and emerging economies[1)]	4.1	4.1	4.0

[1)] The IMF aggregates the annual growth rates of gross domestic product ("GDP") at constant prices of each country on the basis of the shares of country-specific GDP at purchasing power parities in the corresponding global aggregate to the growth rate of global real GDP, for industrialised countries as well as developing countries and emerging economies. The average is calculated as the geometric mean of annual growth rates.

Euro area economic growth lost momentum following its upturn in the post-pandemic years. Price-adjusted GDP rose by just 0.5% in 2023 compared to 2022, after growing by 3.4% in 2022 and 5.9% in 2021 (this represented the highest rate since 1999) (see table below on gross domestic product at constant prices, year-on-year change). The restrictive monetary policy since July 2022 has had an impact in the euro area. Harmonised consumer price inflation fell from 8.4% in 2022 to 5.4% in 2023. There was no pick-up in private demand. Foreign demand was also weak due to the decline in global trade. In addition to high energy prices, the lack of demand also weighed on industry. The rise in financing costs hampered economic activity, with production in the euro area construction industry, in particular, declining. The real estate market also experienced a slowdown due to higher interest rates. Tourism, on the other hand, developed positively. Tourists travelling from outside the eurozone supported weak domestic consumer spending. Despite the low growth, the European labour market proved robust with a relatively low rate of unemployment. Investment in some Member States increased moderately year on year. The fiscal support packages during the pandemic and the energy crisis had an increasingly limited impact on growth. In the year under review, the economy was overshadowed by the geopolitical uncertainty surrounding the conflicts in Ukraine and the Middle East.

Gross domestic product at constant prices, year-on-year change

	2023	2022	2013–2022 average	1999–2022 maximum
	in %	in %	in %	in %
Euro area	0.5	3.4	1.4	5.9[1)]
Germany	–0.3	1.8	1.2	4.2[2)]

1) 2021 2) 2010

Against the backdrop of the global economic developments described above, higher interest rates and a continuing loss of purchasing power for private households as a result of consumer price inflation, which at 5.9% in 2023 was again almost as high as in 2022 (+6.9%), GDP in Germany contracted by 0.3% in 2023 compared with 2022, having previously grown by 1.8% in 2022 and by 1.2% on an annual average over the ten years from 2013 to 2022 (see table above on gross domestic product at constant prices, year-on-year change). Household final consumption expenditure (–0.8%), government final consumption expenditure (–1.7%), gross capital formation in new buildings (–2.1%), and gross capital formation in other assets (–0.6%) provided negative momentum for the rate of change in GDP in 2023, while gross capital formation in machinery and equipment increased (+3.0%). Overall, domestic use declined by 0.9% in 2023. Net exports supported the rate of change in GDP in 2023 with 0.6 percentage points, with the decline in exports (–1.8%) falling short of that of imports (–3.0%). From a production perspective, gross value added in the economic sectors provided both positive and negative impetus for the rate of change in GDP in 2023. The manufacturing industry, excluding construction, suffered the largest decline in gross value added (–2.0%), whereas the agriculture, forestry and fishing sector recorded the highest increase (+4.9%). Gross value added in the retail, transport and hospitality sector fell by 1.0%. The number of persons in employment located in Germany increased by 0.7% in 2023, compared with 2022, to 45.9 million.

Persistently high inflation rates continued to determine monetary policy in the euro and dollar areas in 2023. The fall in energy prices, together with the monetary tightening that began in 2022, caused the rise in headline inflation to slow. However, towards the end of 2023, inflation rates in both the euro area at 2.9% (rate of change in the Harmonised Index of Consumer Prices) and the USA at 2.6% (rate of change in the Personal Consumption Expenditures Price Index) were still above the “2% target” of the central banks.

Against this backdrop, key interest rates continued to rise in both currency areas over the course of 2023. The US Federal Reserve raised the target range for the federal funds rate by a total of 100 basis points (“bp”) to a range from 5.25% to 5.5% between January and July 2023 and maintained this level until the end of the year. The Federal Reserve also continued to shrink its balance sheet in 2023 by trimming its holdings on the asset side, a measure which it began in 2022. The European Central Bank (“ECB”) raised the deposit rate in several steps, most recently in September 2023, by 200 bp to 4%. The ECB had already discontinued its asset purchase programmes, the pandemic emergency purchase programme (“PEPP”) and the regular asset purchase programme (“APP”) in 2022. From March compared with 2022. However, as financial markets presumed that the central banks in both currency areas had completed their cycle of interest rate hikes, key market interest rates trended sideways or fell towards the end of 2023. For instance, the 3-month EURIBOR averaged 3.43% in 2023 (2022: 0.35%); the 5-year EUR swap rate averaged 3.12% (2022: 1.73%); and the yield of the 10-year German government bond stood at 2.46% (2022: 1.20%). In the US, the 3-month SOFR reference rate (CME) was 5.17% on average for the year in 2023, compared with 2.18% in the previous year. The 5-year USD swap rate averaged 3.83% in 2023 (2022: 2.79%), and the yield on 10-year US Treasuries was 3.96% (2022: 2.95%). The yield curves in both currency areas were clearly inverted, as measured by the difference between the yields of 10- and 2-year government bonds. In 2023, the average curve slope for German government bonds was –44 bp (2022: +43 bp), while the US government bond slope was –64 bp (2022: –4 bp).

The stock markets in the United States and the eurozone recovered significantly despite the interest rate hikes during the course of 2023. The major leading indices increased compared to the end of 2022. At 16,752 points, Germany's leading DAX index registered 20% higher at the end of 2023 than at the end of 2022. The key US index S&P 500 stood at 4,770 points at the end of 2023, 24% higher than at the end of 2022.

Development of KfW Group

The group recorded a normalisation of promotional volume in 2023, following its historically strongest promotional year 2022, which was marked by multiple crises.

With a consolidated profit of EUR 1.6 billion, the **earnings position** in 2023 was very satisfactory – well above both the previous year (EUR 1.4 billion) and expectations (EUR 1.0 billion), despite geopolitical and macroeconomic uncertainties. At EUR 1.8 billion, the operating result before valuation (before promotional expense) significantly exceeded both the previous year and the target figure (both EUR 1.5 billion). This positive development is also reflected in the cost-income ratio (before promotional expense), which declined to 46.3% (2022: 49.6%) as a result of increased income from interest and commissions and an only slight increase in administrative expenses. The valuation result contributed to consolidated profit with EUR 0.3 billion (2022: EUR 0.1 billion). The IFRS effects from hedging relationships amounted to EUR 212 million (2022: EUR 182 million), resulting in a consolidated profit before IFRS effects of EUR 1,347 million (2022: EUR 1,183 million) from the reconciliation.

Consolidated total assets rose by EUR 6.1 billion to EUR 560.7 billion in financial year 2023. This development was mainly due to the EUR 10.8 billion increase in liquidity holdings and the market-price-induced increase of EUR 11.1 billion in value adjustments from macro hedge accounting. These increases were offset by the decline in Net loans and advances by EUR 15.4 billion to EUR 448.2 billion, EUR 14.1 billion of which was due to the lower utilisation of loans issued as part of the Federal Government-mandated transactions to secure the energy supply. The volume of own issues reported under Certificated liabilities amounted to EUR 452.2 billion (31 Dec. 2022: EUR 424.9 billion). The EUR 1.5 billion increase in equity to EUR 38.1 billion was mainly attributable to the consolidated profit of EUR 1.6 billion. This was offset by the revaluation reserves, which decreased by EUR 0.1 billion as a result of the decline in the discount rate for pension provisions.

supply dropped from EUR 54.2 billion to EUR 11.6 billion. There was also a decline in new commitments under the Federal Funding for Efficient Buildings programme to EUR 16.1 billion (2022: EUR 37.4 billion) as part of the shift from broad-based promotion to focused top-level promotion with more demanding promotional terms. With commitments totalling EUR 2.1 billion in 2023 (2022: EUR 1.3 billion), the subsidiary KfW Capital once again generated significant growth in its business volume (+69%).

International business commitments increased again in financial year 2023 to a promotional business volume of EUR 35.1 billion (2022: EUR 30.7 billion). The business sector Export and project finance recorded its largest promotional volume thus far with a 33% rise in new commitments to EUR 24.2 billion (2022: EUR 18.1 billion). Commitments in the business sector KfW Development Bank decreased to EUR 9.0 billion (2022: EUR 10.9 billion), while DEG, under globally challenging conditions, posted a positive development in new business with commitments of EUR 1.9 billion (2022: EUR 1.6 billion).

KfW raised a record volume of EUR 90.2 billion in the capital markets to fund its business activities in 2023 (2022: EUR 89.4 billion). In addition, funds from the Economic Stabilisation Fund (“WSF”) in a nominal amount of EUR 5.0 billion were utilised to finance the transactions mandated to secure Germany’s energy supply in 2023 (2022: EUR 22.4 billion) and a further EUR 2.0 billion in nominal terms were used for coronavirus aid measures (2022: EUR 12.0 billion).

Promotional business volume of KfW Group

	2023 EUR in billions	2022 EUR in billions
Domestic business	**77.1**	**136.1**
Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*)	39.1	64.8
Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*)	35.9	70.0
KfW Capital	2.1	1.3
Financial markets	**0.5**	**0.4**
International business	**35.1**	**30.7**
Export and project finance	24.2	18.1
KfW Development Bank	9.0	10.9
DEG	1.9	1.6
Volume of new commitments[1)]	**111.3**	**166.9**

[1)] Adjusted for export and project financing refinanced through KfW programme loans

Despite the uncertainties in the geopolitical and macroeconomic environment, risk provisions for lending business resulted in an overall net income of EUR 165 million in 2023 (2022: net charges of EUR 122 million). The risk provision result was therefore significantly better than the projected standard risk costs (EUR –468 million). This development benefited from the very good risk situation in KfW's lending book, which was reflected in particular in the net reversals of provisions for latent risks (stage 1 and 2) for loans totalling EUR 172 million (2022: net expense of EUR 202 million). At the same time, the low net expense for non-performing loans (stage 3) in the amount of EUR 72 million (2022: net reversals of EUR 16 million) was largely offset by recoveries on loans written off totalling EUR 66 million (2022: EUR 62 million).

D. Equity investment result marked by diverging developments

The valuation of the equity investment portfolio resulted in a charge totalling EUR 101 million to the group in financial year 2023 (2022: income of EUR 89 million). KfW Capital's equity investment portfolio recorded charges totalling EUR 92 million as a result of the significant deterioration in venture capital market conditions since 2022 caused by the war in Ukraine, high inflation and rising interest rates. This development was offset by significantly higher net gains from fair value measurement in the preceding years, meaning that the cumulative valuation results in KfW Capital's still new portfolio remain positive. The valuation of DEG's equity investment portfolio yielded a net loss of EUR 80 million, in which the net gain from securities totalling EUR 13 million was more than offset by negative effects from foreign currency translation. This development was offset by the positive performance of the equity investment portfolios of the business sectors KfW Development Bank (EUR 69 million) and Export and project finance (EUR 11 million).

E. Significant increase in promotional expense in the higher interest rate environment

KfW's domestic promotional expense, which has a negative impact on its earnings position, also increased significantly in financial year 2023 to EUR 371 million (2022: EUR 305 million), reaching the level projected. The reason for the increase was the further rise in interest rates and the resulting greater demand for loans at reduced rates, which led to an increase in interest rate reductions by EUR 15 million to EUR 282 million. In addition, the obligation to issue grants under KfW's ERP promotional programmes in the years ahead, applicable for the first time in financial year 2023, led to promotional expense of EUR 62 million.

Operating result after valuation (before promotional expense)	2,109	1,668
Promotional expense	371	305
Consolidated profit	1,559	1,365
Cost-income ratio (before promotional expense)[1]	46.3%	49.6%

Key economic figures	2023 EUR in millions	2022 EUR in millions
Consolidated profit before IFRS effects	1,347	1,183

Key figures of the statement of financial position	31 Dec. 2023 EUR in billions	31 Dec. 2022 EUR in billions
Total assets	560.7	554.6
Volume of lending	599.1	607.0
Volume of business	724.4	709.6
Equity	38.1	36.6
Equity ratio	6.8%	6.6%

[1] Administrative expense (before promotional expense) in relation to adjusted income. Adjusted income is calculated as the sum of net interest income and net commission income (in each case before promotional expense).

Comparison with the previous year's forecast

	2022 forecast for 2023	2023 actual
New business		
Promotional business volume	EUR 79.6 billion	EUR 111.3 billion
Funding	EUR 80–85 billion	EUR 90.2 billion
Result		
Consolidated profit	EUR 0.95 billion	EUR 1.6 billion
Net interest income (before promotional expense)	EUR 2.5–2.6 billion	EUR 2.7 billion
Net commission income (before promotional expense)	EUR 0.6 billion	EUR 0.6 billion
Administrative expense (before promotional expense)	EUR 1.6 billion	EUR 1.5 billion
Risk provisions for lending business	EUR –0.5 billion	EUR +0.2 billion
Valuation result	EUR +0.2 billion	EUR –0.1 billion
Promotional expense	EUR 0.4 billion	EUR 0.4 billion

The main differences between the forecasts from the Financial Report 2022 and the actual business development in 2023 are presented in the Economic report.

	EUR in millions	EUR in millions	EUR in millions	
Net interest income (before promotional expense)	2,738	–282	2,456	Net interest income
Net commission income (before promotional expense)	606	–13	593	Net commission income
Administrative expense (before promotional expense)	1,547	14	1,561	Administrative expense
Operating result before valuation (before promotional expense)	**1,797**	**–309**	**1,488**	**Operating result before valuation**
Risk provisions for lending business	165	4	169	Net gains/losses from risk provisions
Net gains/losses from hedge accounting	291	0	291	Net gains/losses from hedge accounting
Other financial instruments at fair value through profit or loss	–177	0	–177	Net gains/losses from other financial instruments at fair value through profit or loss
Securities and investments	4	–4	0	Net gains/losses from disposal of financial assets at amortised cost
Net gains/losses from investments accounted for using the equity method	29	0	29	Net gains/losses from investments accounted for using the equity method
Operating result after valuation (before promotional expense)	**2,109**	**–309**	**1,800**	**Operating result after valuation**
Net other operating income (before promotional expense)	–14	–62	–76	Net other operating income or loss
Profit/loss from operating activities (before promotional expense)	**2,095**	**–371**	**1,724**	**Profit/loss from operating activities**
Promotional expense	371	–371	0	-
Taxes on income	165	0	165	Taxes on income
Consolidated profit	**1,559**	**0**	**1,559**	**Consolidated profit**
Temporary net gains/losses from hedge accounting	212		212	Temporary net gains/losses from hedge accounting
Consolidated profit before IFRS effects	**1,347**	**0**	**1,347**	**Consolidated profit before IFRS effects**

(before promotional expense)	629	–12	617	Net commission income
Administrative expense (before promotional expense)	1,509	16	1,525	Administrative expense
Operating result before valuation (before promotional expense)	**1,536**	**–295**	**1,241**	**Operating result before valuation**
Risk provisions for lending business	–122	–2	–124	Net gains/losses from risk provisions
Net gains/losses from hedge accounting	150	0	150	Net gains/losses from hedge accounting
Other financial instruments at fair value through profit or loss	64	0	64	Net gains/losses from other financial instruments at fair value through profit or loss
Securities and investments	–3	2	–1	Net gains/losses from disposal of financial assets at amortised cost
Net gains/losses from investments accounted for using the equity method	43	0	43	Net gains/losses from investments accounted for using the equity method
Operating result after valuation (before promotional expense)	**1,668**	**–295**	**1,373**	**Operating result after valuation**
Net other operating income (before promotional expense)	1	–10	–8	Net other operating income or loss
Profit/loss from operating activities (before promotional expense)	**1,669**	**–305**	**1,365**	**Profit/loss from operating activities**
Promotional expense	305	–305	0	-
Taxes on income	–1	0	–1	Taxes on income
Consolidated profit	**1,365**	**0**	**1,365**	**Consolidated profit**
Temporary net gains/losses from hedge accounting	182		182	Temporary net gains/losses from hedge accounting
Consolidated profit before IFRS effects	**1,183**	**0**	**1,183**	**Consolidated profit before IFRS effects**

At EUR 1,797 million, the **Operating result before valuation (before promotional expense)** was clearly above the prior-year level and the target (both EUR 1,536 million).

At EUR 2,738 million, **Net interest income (before promotional expense)** exceeded both the prior-year level (EUR 2,416 million) and the target (EUR 2,535 million). The main factor driving the year-on-year increase was the significant rise in income from investments of own funds due to the higher interest rates, with this figure also exceeding the target. Interest margin income, including commitment fees as a key component of KfW's interest income, recorded a slight increase and exceeded expectations considerably. Moreover, KfW's funding conditions on the capital and money markets remained very good and made a positive contribution to Net interest income due to the bank's top-notch credit rating.

Administrative expense (before promotional expense) increased from EUR 1,509 million to EUR 1,547 million, but was lower than planning assumptions (EUR 1,565 million). Personnel expense amounted to EUR 873 million, which is slightly lower than the previous year’s figure of EUR 887 million. The slight decrease was due to lower expenses from additions to pension provisions compared to the previous year. This was offset in particular by the rise in wages and salaries as a result of the greater number of employees, although the increase was lower than expected. The rise in non-personnel expense (before promotional expense) from EUR 622 million to EUR 674 million resulted in particular from higher costs for the use of external service providers.

The cost-income ratio before promotional expense decreased to 46.3% (2022: 49.6%), due to the greater increase of operating income compared to that of administrative expense. Adjusted for income and expenses from products for which cost-based remuneration has been agreed with the Federal Government, the cost-income ratio for 2023 amounted to 33.8% (2022: 37.1%).

Despite the high level of uncertainty in the geopolitical and macroeconomic environment, the result from **risk provisions for lending business** in 2023 was a total income of EUR 165 million and therefore significantly better than the projected standard risk costs (EUR –468 million). One of the reasons for this development was the very good risk situation in KfW’s lending book, whereas in the previous year the economic impact of the Russia-Ukraine war and the resulting crises had negatively affected risk provisions for the lending business and had led to an expense of EUR 122 million.

The positive development in the KfW lending book reflects the improvements in the segment monitor. Despite the inclusion of a second, more conservative macroeconomic scenario, which takes into account the persistently tense economic situation, risk provisions for performing loans (stage 1 + 2) were fully reversed. This resulted in net income of EUR 172 million (2022: net expense of EUR 202 million).

Net additions of EUR 72 million (2022: net reversals of EUR 16 million) were recorded in risk provisions for non-performing loans (stage 3) including direct write-offs in 2023. Net additions primarily arose in the business sectors Export and project finance in the amount of EUR 68 million (2022: net reversals of EUR 107 million) and Mittelstandsbank & Private Kunden (SME Bank & Private Clients) in the amount of EUR 64 million (2022: EUR 44 million). Of the latter amount, EUR 42 million was attributable to education financing (2022: EUR 54 million). This was offset by net reversals at DEG in the amount of EUR 56 million (2022: net additions of EUR 55 million) and at KfW Development Bank in the amount of EUR 10 million (2022: EUR 8 million).

At EUR 66 million, income from recoveries of loans previously written off was slightly above that of the previous year (EUR 62 million). Of this amount, EUR 34 million was attributable to the business sector Mittelstandsbank & Private Kunden *(SME Bank* & *Private Clients)* and EUR 30 million to DEG.

Risk provisions for lending business decreased to EUR 1.9 billion in financial year 2023 (2022: EUR 2.2 billion), which relates to the provision for acute risks in stage 3, which remained unchanged at EUR 1.4 billion. Provisions for individual risks in stage 2 that cannot be allocated decreased from EUR 0.5 billion to EUR 0.4 billion, and in stage 1 from EUR 0.4 billion to EUR 0.2 billion.

The **net gains/losses from hedge accounting and other financial instruments at fair value through profit or loss** amounted to EUR 114 million (2022: EUR 214 million) and, in financial year 2023, were driven by positive purely IFRS-related effects from the measurement of derivatives used for hedging purposes and negative valuation effects from the equity investment portfolio.

income of EUR 11 million).

Hedge accounting and borrowings recognised at fair value, including derivatives used for hedging purposes, resulted in net income of EUR 203 million (2022: EUR 202 million). The mark-to-market derivatives are part of economically hedged positions. However, if the other part of the hedging relationship cannot be carried at fair value or different valuation methods and parameters have to be applied, this inevitably results in temporary fluctuations in income that are fully offset over the term of the transactions.

The measurement of securities at fair value through profit or loss yielded an almost balanced result, as in the previous year (EUR 0 million).

In the case of securities not carried at fair value, developments in the financial markets resulted in a net difference of EUR –87 million between the carrying amount and the fair value (2022: EUR –57 million). This development is partly attributable to decreases in the value of the covered bonds. However, there were essentially no defaults or significant deteriorations in credit quality.

There were net gains of EUR 33 million (2022: EUR 41 million) from **securities and investments** as well as from **investments accounted for using the equity method**. Investments accounted for using the equity method contributed EUR 29 million to the result. This was primarily due to value increases in the business sectors Export and project finance and KfW Development Bank.

Net other operating income (before promotional expense) was EUR –14 million, which was down on the previous year's figure (2022: EUR 1 million).

At EUR 371 million in 2023, KfW's domestic **promotional expense**, which has a negative impact on KfW Group's earnings position, was above the prior-year level (EUR 305 million) and almost in line with projections (EUR 376 million).

Interest rate reductions are the key component of KfW's promotional expense. KfW grants these for certain domestic promotional loans during the first fixed-interest-rate period, which has a negative effect on its earnings position, in addition to passing on its funding conditions which are influenced by its triple-A rating. At EUR 282 million, the volume of interest rate reductions increased once again in financial year 2023 (2022: EUR 267 million), but was still below the projected figure (EUR 337 million). The increase in interest rate reductions was primarily a result of the sustained higher interest rates, which led to an additional increase in demand for promotional loans at reduced rates. The promotional grants provided in addition to the lending business and recognised as promotional expense in Net other operating income rose to EUR 62 million in financial year 2023 (2022: EUR 10 million). The reason for the increase was the obligation to award grants under KfW's ERP promotional programmes with promotional expenses of EUR 62 million. This was offset by the discontinuation of promotional expenses under the Climate action campaign (2022: EUR 10 million) after the programme expired in financial year 2022. Moreover, promotional expenses reported in net commission income and administrative expense amounted to EUR 27 million (2022: EUR 28 million). Among other things, this spending was aimed at the sale of KfW's promotional products.

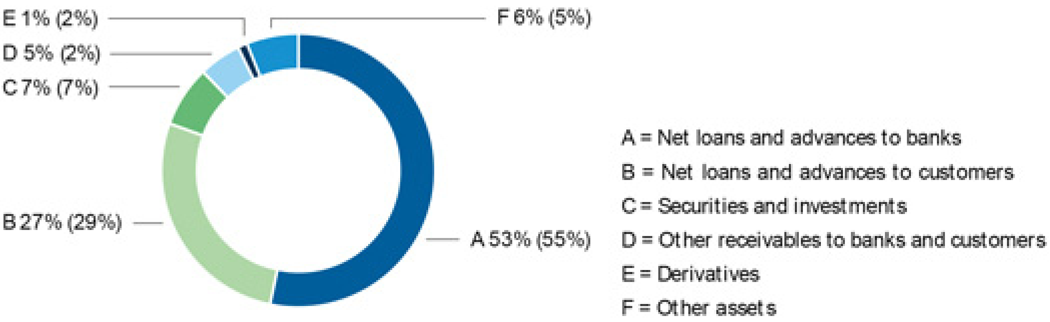
The group reported a tax expense of EUR 165 million for financial year 2023 (2022: income of EUR 1 million), of which EUR 117 million (2022: EUR 46 million) related to current taxes on income and EUR 47 million to deferred tax expense (2022: income of EUR 47 million). The increase in current taxes on income is primarily due to the positive earnings performance in 2023 of the taxable companies included in the consolidated financial statements.

comprehensive income is largely due to the strong development of the operating result before valuation and the positive risk provision result, which were only partially offset by the negative valuation result from the equity investment portfolio. Accordingly, the result far exceeds the sustainable earnings potential of EUR 1.0 billion overall.

Development of net assets of KfW Group

Lending to banks and customers accounted for 80% of the group's assets as of 31 December 2023 (2022: 84%).

Assets of KfW Group as of 31 December 2023 (31 Dec. 2022)



Compared to the previous year, the **volume of lending** decreased by EUR 7.8 billion to EUR 599.1 billion (2022: EUR 607.0 billion).

Volume of lending of KfW Group

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Loans and advances	450,020	465,655
Risk provisions for lending business	–1,852	–2,102
Net loans and advances	**448,168**	**463,554**
Contingent liabilities from financial guarantees	3,486	3,543
Irrevocable loan commitments	136,118	129,183
Loans and advances held in trust	11,281	10,681
Total	**599,054**	**606,961**

EUR 11.5 billion.

Other loans and advances to banks and customers posted an increase of EUR 16.2 billion to EUR 28.9 billion. EUR 9.0 billion of the increase resulted from higher deposits, mainly at banks (EUR 9.1 billion), and EUR 6.1 billion from reverse repo transactions in which KfW acts in the capacity of lender.

The total amount of **securities and investments**, at EUR 40.6 billion, was 6% above the previous year's level.

Securities and investments of KfW Group

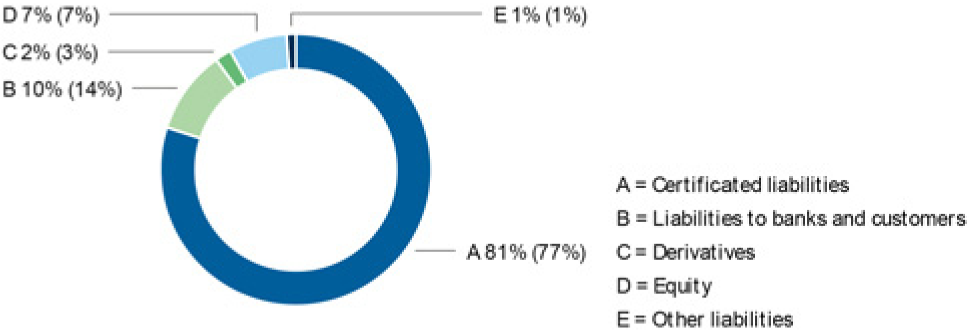
	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Bonds and other fixed-income securities	36,057	33,721
Shares and other non-fixed income securities	0	0
Equity investments	4,418	4,342
Shares in non-consolidated subsidiaries	90	80
Total	**40,565**	**38,143**

The securities portfolio increased by EUR 2.3 billion to EUR 36.1 billion in financial year 2023 (31 Dec. 2022: EUR 33.7 billion). The portfolio of Equity investments and Shares in non-consolidated subsidiaries increased by EUR 0.1 billion to EUR 4.5 billion in 2023. This was due in part to portfolio growth at KfW Capital and in the business sector KfW Development Bank.

Value adjustments from macro hedge accounting rose by EUR 11.1 billion, based on fair value, from EUR –25.9 billion to EUR –14.8 billion. **Derivatives** with positive fair values, which are primarily used to hedge refinancing transactions, declined from EUR 11.5 billion in 2022 to EUR 7.8 billion. This was primarily due to value adjustments of derivatives used in micro hedge accounting, which decreased from EUR 6.7 billion to EUR 4.0 billion.

KfW reduced its **balances with central banks** by EUR 4.4 billion to EUR 47.4 billion. The liquidity held continues to ensure reactions to market events at short notice. There were only minor changes in the **other asset line items** in the statement of financial position.

Financial position of KfW Group as of 31 December 2023 (31 Dec. 2022)



Compared to the previous year, **borrowings** increased by EUR 7.1 billion to EUR 507.4 billion (2022: EUR 500.3 billion).

Borrowings of KfW Group

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Short-term funds	40,773	43,810
Bonds and notes	414,553	385,810
Other funding	52,025	70,678
Total	**507,352**	**500,298**

amount of EUR [illegible] billion (31 Dec. 2022: EUR [illegible] billion) were almost completely repaid.

The carrying amounts of derivatives with negative fair values, which were primarily used to hedge own issues, decreased by EUR 2.5 billion, from EUR 14.5 billion as of 31 December 2023, primarily due to changes in market parameters, and amounted to EUR 12.0 billion at year-end 2023.

There were only minor changes in the **other liability line items** of the statement of financial position.

At EUR 38.1 billion as of 31 December 2023, **equity** was EUR 1.5 billion above the level of EUR 36.6 billion as of 31 December 2022. The increase resulted in particular from consolidated profit (EUR 1.6 billion). The reversal of the fund for general banking risks, in accordance with Section 340g of the German Commercial Code *(Handels- gesetzbuch – "HGB"),* in an amount of EUR 0.2 billion, resulted in a reclassification within equity in the consolidated financial statements to retained earnings. The decline in the discount rate for pension obligations from 3.89% to 3.41% generated an increase of EUR 0.1 billion in the revaluation reserves. The equity ratio increased year on year from 6.6% as of 31 December 2022 to 6.8% as of 31 December 2023, primarily due to the increase in equity.

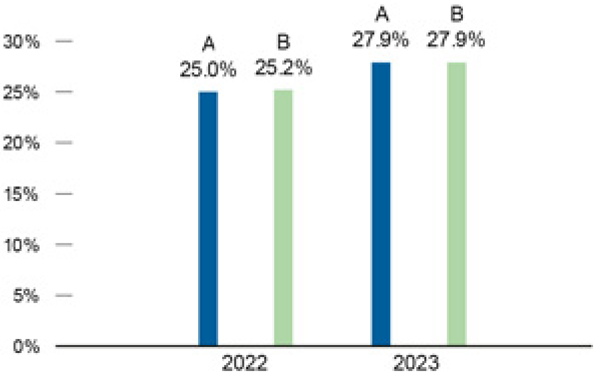
Equity of KfW Group

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Paid-in subscribed capital	3,300	3,300
Capital reserve	8,447	8,447
Reserve from the ERP Special Fund	1,191	1,191
Retained earnings	25,150	23,391
Fund for general banking risks	0	200
Revaluation reserves	–15	50
Total	**38,073**	**36,579**

The consolidated profit was allocated to retained earnings.

Risks are reported at group level in accordance with KfW Group's internal risk management. The key risk indicators are presented below:

Regulatory capital ratios:

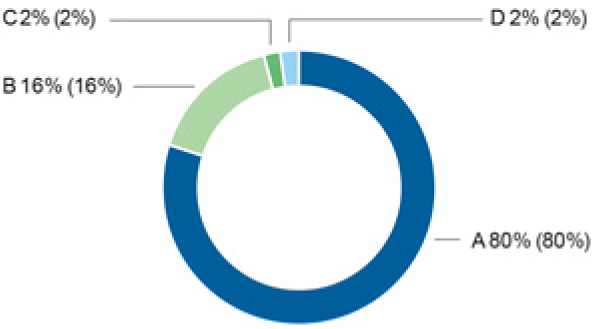


The considerable increase in the total capital ratio, which rose by around 2.8 percentage points to 27.9%, is due in part to the reduction in the total risk exposure amount, driven by methodology and rating improvement in the on-lending business, and in part to the increase in regulatory capital, which rose by EUR 1.6 billion year on year.

A = Tier 1 capital ratio
B = Total capital ratio

Credit risk:

2023 (2022), Net exposure breakdown[1)]



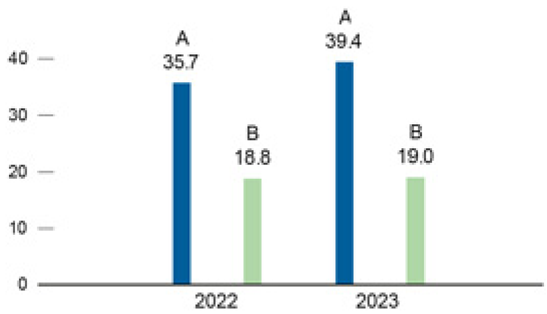
The credit quality structure of the portfolio was stable year on year.

A = Investment grade
B = Non-investment grade
C = Watch list
D = Default

1) Compared to the previous year excluding equity investment risk

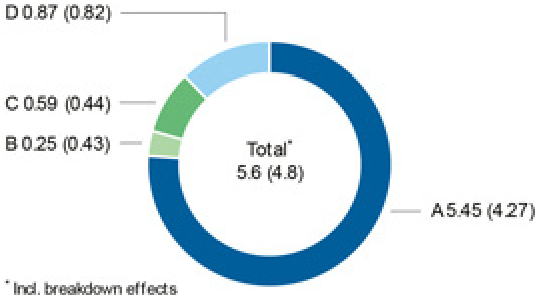
Economic risk-bearing capacity

(EUR in billions)



The increase in available financial resources ("AFR") is primarily due to the positive annual result and to positive net present value effects. Economic risk-bearing capacity was maintained at a confidence level of 99.9% in 2023.

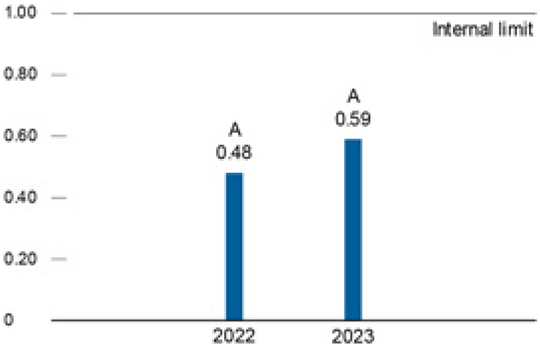
A = Available financial resources
B = Total economic capital requirement



The overall capital requirement for market price risks increased year on year, largely driven by interest risk, currency risk and credit spread risk. The primary factors behind this increase are volatile markets, an expansion of the strategic interest rate risk position and further development of the value-at-risk ("VaR") model.

A = Interest risk
B = Interest volatility risk
C = Currency risk
D = Credit spread risk

Liquidity risk:



The liquidity risk indicator remained considerably below the internal limit throughout the year. The increase compared to the prior year was mainly due to higher liquidity outflows than expected as a result of new lending business.

A = Liquidity risk indicator (worst case)

Operational risk:

ECAP (EUR in millions)

The economic capital requirement for operational risks was virtually unchanged year on year.

A = ECAP

structured identification and assessment of ESG risk drivers in credit risk ("ESG risk profile"), which took place at the beginning of 2023. Other central issues in 2023 included increased integration of ESG risks into the lending process, further development of ESG stress testing methods and reporting, and consideration of ESG risks in the relevant overall bank and risk management processes.

From a country risk perspective, Russia's war of aggression against Ukraine remains a key factor affecting the global economic situation. The economic effects of the COVID-19 pandemic are still being felt, as well. The global economic recovery was sluggish in 2023, partly because tighter monetary policies resulting from inflation were a drag on the economy. The risks persist despite the main issues of high inflation, supply chain disruptions and energy shortages having eased. Although historically high inflation has fallen sharply, primarily due to falling commodity prices, in many countries inflation has not yet reached the desired 2% p.a. Particularly core inflation rates remain high. Central banks continue to face the challenge of finding a balance between combating inflation and dampening economic growth. The high levels of debt in many, including industrialised, countries remain a further challenge and continue to constrict fiscal leeway, thus reducing countries' ability to react to further crises and shocks. Greater geoeconomic fragmentation is a growing risk in this regard, particularly with its negative impact on global trade.

The effects of the pandemic and the Russian war of aggression against Ukraine have also had an impact on banking risk, particularly by causing high inflation rates and an ensuing significant rise in interest rates. The first half of 2023 was characterised by the uncertainties following the crises at Silicon Valley Bank and Crédit Suisse. Swift action by US financial regulators, the rapid takeover of Silicon Valley Bank and the merger of Crédit Suisse with UBS eased pressure on the international banking markets. However, the markets remained sensitive and required greater vigilance in credit risk management and risk mitigation measures. Bank risk management also focused on the international commercial and residential property markets in 2023. The effects of inflation, rising interest rates and material supply bottlenecks in the property sector are only slowly becoming apparent in bank balance sheets. Increasing loan loss provisions are now visible. While specific real estate situations, such as in Australia and the USA, have largely country-specific effects, and are curbed by countermeasures implemented by national supervisory authorities, the problems in China are spilling over into international markets. The European banking markets have proved very robust thus far and are likely quite well equipped to face loan defaults due to their loan collateral and comfortable equity levels. The situation on the international banking markets remains challenging due to the economic and geopolitical situation.

The corporate portfolio is also impacted by the effects of the growing geopolitical conflicts. However, risk exposures to corporates with a direct or indirect link to Russia, Belarus and Ukraine are largely hedged and only account for a small proportion of the credit risks in this portfolio as a whole. The proportion of companies affected by the conflict in the Middle East in KfW's portfolio is also low and the related business is generally well collateralised.

through the relevant bodies.

Organisation of risk management and monitoring

Risk management bodies and responsibilities

As part of its overall responsibility, KfW's Executive Board determines the group's risk policies. The Board of Supervisory Directors is informed at least quarterly of KfW Group's risk situation. The Risk and Credit Committee set up by the Board of Supervisory Directors is primarily responsible for advising the Board of Supervisory Directors about the group's current and future overall risk tolerance and strategy and supports it in monitoring the implementation of the latter. The Committee decides on loan approvals (including loans to members of management), operational level equity investments, funding and swap transactions, where committee authorisation is required by the KfW Bylaws. The Audit Committee monitors, above all, the accounting process and the effectiveness of the risk management system and internal control and offers recommendations to the Board of Supervisory Directors concerning its approval of KfW's annual and consolidated financial statements.

Additionally, the subsidiaries and organisational entities of KfW Group exercise their own control functions within the group-wide risk management system. Group-wide regulations, projects and working groups are in place to implement a uniform approach, such as in the rollout of rating instruments to subsidiaries or in the management and valuation of collateral. The responsibility for developing and structuring risk management and risk control activities is located outside the front-office departments and lies in particular with the Risk Controlling and Credit Risk Management areas.

Group risk management is carried out by various interconnected decision-making bodies. At the top of the system is the Executive Board, which takes the key decisions on risk policy. There are three risk committees below Executive Board level (Credit Risk Committee, Market Price Risk Committee and Operational Risk Committee) that prepare decisions for the Executive Board, take their own decisions within their remits, and also involve representatives from KfW subsidiaries in decision-making processes[1]. Internal Auditing has a fundamental right to attend risk management committee meetings. Working groups such as the Rating Systems Working Group, Collateral Working Group, Country Rating Working Group, Corporate Sector Risk Working Group, Market Price Risk Working Group, Hedge Committee and OpRisk Working Group support the committees. Committee resolutions are adopted by simple majority with middle and back-office departments (Marktfolge) or Risk Controlling entitled to veto decisions. Escalation to Executive Board level is possible in all committees.

[1] ESG risks factor into the different risk types. There is no separate ESG committee set up to manage them. ESG risks are managed through the committees responsible for the specific risk types, as required.

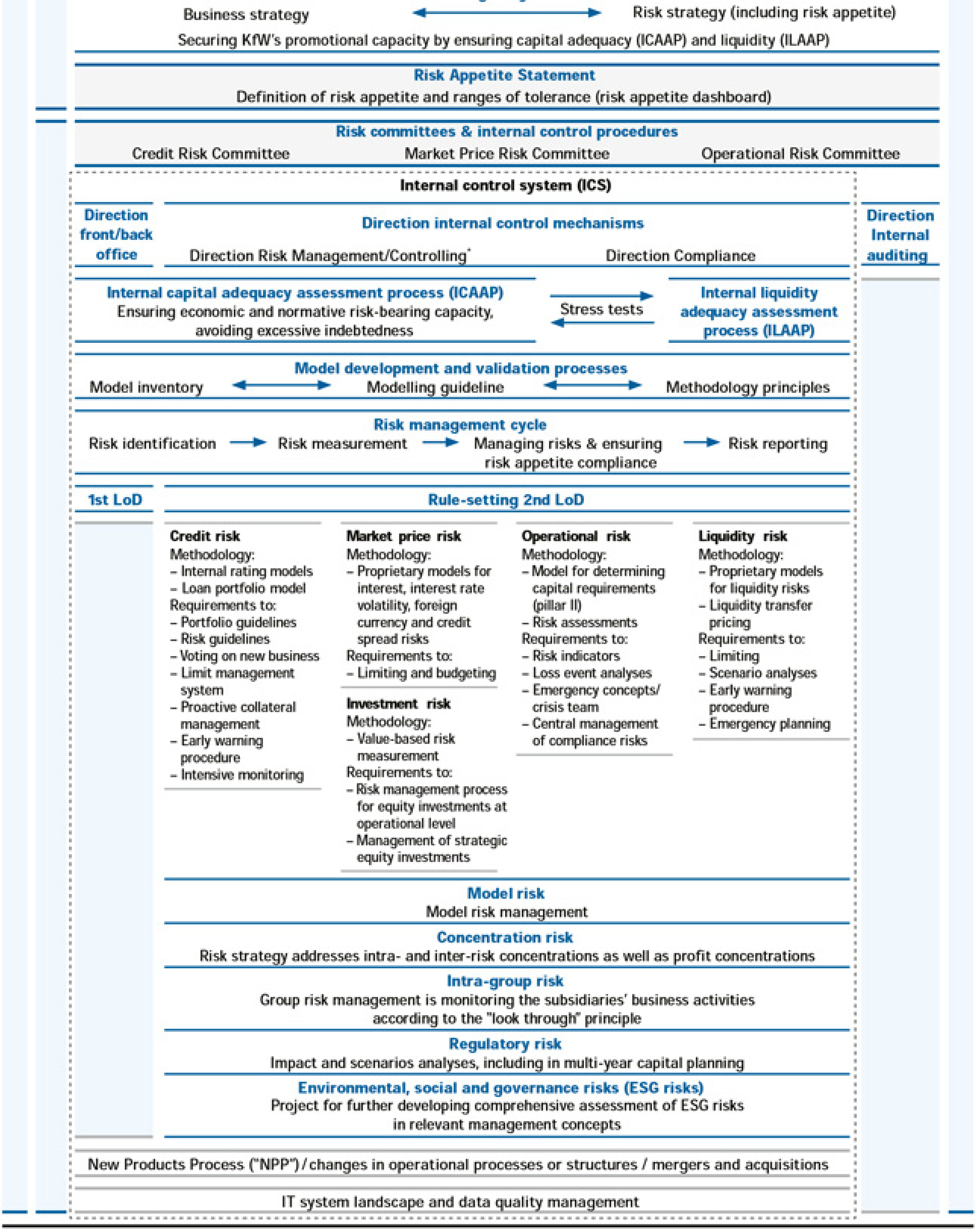
investment risks – as well as on credit risk methods and policies, and the submissions addressed in the working groups for rating systems and collateral. Reports are also made on the development of regulatory requirements, their impact and the progress of implementation projects in KfW Group. To this end, the voting membership of the Credit Risk Committee has been expanded to include the Director of Risk Controlling, the DEG CRO and the managing director of KfW Capital responsible for risk issues. The Credit Risk Committee is supported by various working groups. The Country Rating Working Group serves as the central unit for assessing country risk. The Collateral Working Group supports the committee in connection with methodological and procedural issues and decisions relating to collateral acceptance and valuation, in particular the (further) development of methods used, acknowledgement of validation results and adjustments to the collateral management processes. The Rating Systems Working Group is responsible for credit risk measurement instruments and rating procedures. The Corporate Sector Risk Working Group is a group-wide expert panel which analyses sector and product-related credit risks in the corporate segment. The decisions made, reports submitted, and other key topics addressed in the working groups are communicated to the Credit Risk Committee via the working group minutes.

Market Price Risk Committee

The Market Price Risk Committee meets monthly or on an ad hoc basis, as required, and is chaired by the Chief Risk Officer. In addition to the Chief Risk Officer, the members of the Executive Board responsible for capital markets business and finance are also represented. The members of the committee also include the directors of Risk Controlling, Financial Markets, Accounting, Transaction Management and the CROs of KfW IPEX-Bank and DEG. The Market Price Risk Committee discusses KfW Group's market price and liquidity risk position and assesses the market price risk strategy on a monthly basis. The committee also decides on questions relating to the principles and methods applied for the management of market price and liquidity risks, on funding, transfer pricing and on valuation for commercial transactions. The Market Price Risk Committee is supported by the Hedge Committee and the Market Price Risk Working Group. The Hedge Committee deals primarily with the earnings effects of IFRS hedge accounting and the further development thereof. The Market Price Risk Working Group deals with methodology issues relating to market price and liquidity risks as well as measurement issues. These include matters relating to model development, validation and financial reporting measurement, in particular, taking note of validation reports and recommendations resulting from validation.

Operational Risk Committee

The Operational Risk Committee meets once every quarter and provides support to the Executive Board in cross-functional management, in taking the necessary decisions and acknowledgements in respect of operational and reputational risk, and in protecting group security, including business continuity management ("BCM"). The Chief Risk Officer is responsible for chairing the Operational Risk Committee meetings. In principle, all areas of the bank are represented in the committee – in selected cases based on a representation concept. Moreover, the managing director level of KfW IPEX-Bank, DEG and KfW Capital is represented on the committee. The committee discusses the risk status on the basis of the findings obtained through different methods and instruments and evaluates any group-wide need for action, with the aim of adequate risk management. The results of the validation of the OpRisk model are acknowledged. In the area of BCM, the committee is informed about the results of the annual business impact analysis and the failure scenarios identified and to be addressed by contingency plans. There is also quarterly reporting on the status of BCM using a risk indicator. The committee meeting documents, together with the minutes and the resolutions and recommendations contained therein, are submitted to the Executive Board. The committee formed the Group Security Board ("GSB") to take up matters related to group security and BCM and the OpRisk Working Group as a working group for exchange with the decentralised department coordinators for operational risk and business continuity management ("BOB").



* In addition to Risk Controlling, further departments in some cases also exercise control functions due to organisational reasons.

provides an overview of KfW Group's material and immaterial risk types. The 2023 inventory found that KfW Group faces the following material risks: credit, market price, liquidity, operational, equity investment, concentration, regulatory, intra-group and model risks. It also led to the decision that project risk and reputational risk will no longer be classified as material with regard to their potential impact in future. Reputational risk, however, will continue to be closely monitored and managed as a prominent risk type[2)].

Risk concentrations associated with material risks either within a risk type or across various risk types are taken into account and classified as material in the risk inventory. In addition, the risk inventory process involves looking at the impact of ESG risks on the overall risk profile.

The Executive Board is informed about KfW Group's risk situation on a monthly basis. A risk report is issued quarterly to KfW Group's supervisory bodies. The respective bodies are informed on an ad hoc basis as required.

The models used for group-wide risk measurement and management, as well as for financial reporting measurement, are regularly validated and refined where necessary. These primarily include the models for measuring and managing credit, equity investment, market price, liquidity and operational risks, as well as the models for financial reporting measurement.

The risk management approach is set out in the group's procedural rules. The procedural rules stipulate the framework for the application of uniform policies and procedures to identify, measure, control and monitor risk. The rules and regulations laid out in the procedural rules are binding for the entire group and are accessible to employees through their publication on the intranet. KfW group-wide regulations are supplemented by rules specific to each business sector. See the following sections for details on other elements of KfW Group's risk management approach.

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

The objective of the internal capital adequacy assessment process ("ICAAP") is to maintain sufficient capital at all times to cover the risks assumed. Capital adequacy is assessed from both a normative and an economic perspective. The two perspectives are closely interwoven and ultimately flow into a holistic and consistent risk management system that ensures achievement of the common objective of continued business operations through the bidirectional flow of information. The overarching ICAAP architecture also includes the performance of stress tests to assess the group's capital position under adverse conditions. The aforementioned ICAAP components are presented in the following sections.

The normative perspective of ICAAP ensures in particular continuous compliance with the regulatory capital requirements of Pillar I in accordance with the Capital Requirements Regulation ("CRR") and the German Banking Act *(Kreditwesen-gesetz – "KWG")* both on an ongoing basis, and in a longer-term view (normative capital planning). In addition to a base scenario, adverse scenarios (downturn and stress scenarios) are considered. In these adverse scenarios, deviations from the base scenario are calculated and projected for the planning period. This takes into account the simultaneous materialisation of losses from the material risk types identified as part of the risk inventory, which may result in lower regulatory capital. This includes, in particular, risks that do not have to be explicitly backed with capital under Pillar 1. Furthermore, an increase in the total risk exposure amount (RWA) is assumed along with a significant mild or severe recession scenario.

2) The results of the risk inventory are implemented in KfW's risk management concepts with the 2024 risk strategy.

(overall risk profile). The amount of economic capital required, and thus the security level of the risk-bearing capacity, is largely determined by the solvency level (99.90%) selected for risk measurement. There is no regular forecast of economic risk-bearing capacity although an indicative forecast of economic risk-bearing capacity may be produced, if necessary, if future developments which may have a material impact on risk-bearing capacity are identified via a list of questions.

Both ICAAP perspectives include regularly performed stress tests in the form of simulations of adverse economic conditions (downturn and stress scenarios). A traffic light system established in this context with thresholds for the key indicators relating to normative and economic risk-bearing capacity indicates a need for action as part of operational and strategic management in the event of critical developments.

The ICAAP is subject to an annual review of its adequacy. The results of this review are taken into account in the assessment of risk-bearing capacity. In the 2023 review, the ICAAP was assessed as “generally adequate”.

As of 31 December 2023, risk-bearing capacity is stated in terms of both the normative and the economic perspective:

Normative risk-bearing capacity
Key regulatory figures

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Total risk exposure in accordance with Art. 92 CRR	131,388	139,643
– Credit risk	*123,401*	*131,642*
– Market price risk	*2,224*	*2,369*
– Operational risk	*5,764*	*5,632*
Regulatory capital	36,697	35,126
– (Common equity) tier 1 capital	*36,646*	*34,891*
– Additional tier 1 capital	*0*	*0*
– Tier 2 capital	*50*	*235*
CET1 ratio	27.9%	25.0%
Tier 1 capital ratio	27.9%	25.0%
Total capital ratio	27.9%	25.2%

KfW calculates the total risk exposure for significant parts based on an advanced IRBA. The considerable increase in the total capital ratio, which rose by around 2.8 percentage points to 27.9%, is due in equal parts to the reduction in total risk exposure and the increase in regulatory capital compared to the previous year. At 27.9%, the total capital ratio at year-end 2023 remained above the overall capital requirement.

Total SREP capital requirements (TSCR)	**12.25%**	**12.25%**
Capital conservation buffer	*2.50%*	*2.50%*
Countercyclical capital buffer	*0.55%*	*0.17%*
Other systemic buffer	*1.00%*	*1.00%*
Systemic risk buffer	*0.02%*	*0.00%*
Overall capital requirement (OCR)	**16.31%**	**15.92%**

Economic risk-bearing capacity

To assess its economic risk-bearing capacity, KfW Group compares its economic capital requirement for potential losses from material quantifiable risks to capital with its available financial resources calculated at present value. The basis of available financial resources is KfW Group's equity adjusted for present value differences, previously unrecognised accrued profits, the risk provisions for non-value-adjusted business, future cash flows from margins and costs for administration and expected portfolio business defaults, as well as some capital deduction items for a prudent economic valuation. KfW Group bases its calculation of the economic capital requirement on a one-year time frame.

Credit risk is the risk of a negative impact on net assets, earnings position and liquidity if business partners fail to meet their payment obligations to KfW Group at all, in due time or in full (default) or if their credit ratings deteriorate (migration). Credit risk includes settlement risk in connection with derivative transactions and counterparty risk including credit valuation adjustment risk ("CVA" risk) in relation to derivative exposures. CVA risk is reported as part of the combined "counterparty risk (including CVA risk)" sub-risk type. The economic capital requirement for credit risk is quantified by the Risk Controlling department, largely with the help of statistical models. A value-based measurement of credit and equity investment risks is carried out using a loan portfolio model and credit value-at-risk as a risk measure. The economic capital requirement for CVA risk is based on the CVA charge of Pillar I, which is adjusted for economically relevant aspects (including consideration of other risk-relevant items and the use of internal ratings). For settlement risks, a buffer determined on the basis of different quantification approaches, which is reviewed annually, is applied in calculating economic risk-bearing capacity.

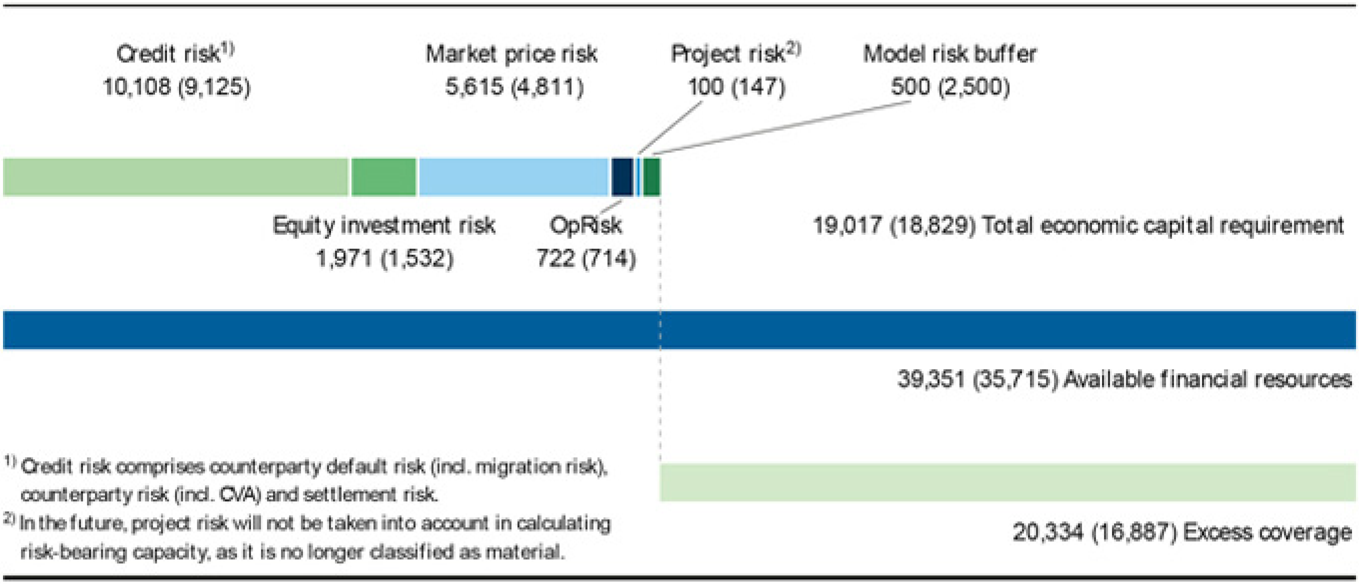
The economic capital requirement for **market price risk** is calculated on the basis of the value-at-risk concept. Pillar II's economic analysis takes account of interest risk (consisting of the jointly analysed sub-risk types: interest risk, as well as tenor and cross-currency basis spread risks) of the banking book, foreign currency risk, credit spread risk for securities and interest rate volatility risk. The possible loss of present value or price is determined for each type of market price risk using a value-at-risk based on historical simulation. Ultimately, the economic capital requirement is determined by total VaR, which takes into account breakdown effects between the various subtypes of market price risk.

The economic capital requirement for **operational risk** is calculated using an internal statistical model, which was derived from regulatory requirements for advanced measurement approaches. It takes a risk-sensitive approach to internal and external event data and risk scenarios. The capital requirement is calculated at group level, taking into account diversification effects, and then allocated to the business sectors. Moreover, the measurement of the quality of operational risk management within the group can generate premiums that are then applied to the capital requirement.

Project risks are also taken into account in the risk-bearing capacity concept. Both quantified individual risks from building blocks (agile implementation units used to bundle activities to further develop IT) and general assumptions about potential losses in the project portfolio are included in risk measurement.

the capital requirement for market price risk is largely due to volatile markets, expansion of the strategic interest rate risk position, and further development of the internal VaR model, with the latter offset by a significant reduction in the model risk buffer.

Economic risk-bearing capacity as of 31 December 2023
EUR in millions



In brackets: figures as of 31 December 2022

Each risk identification model represents a simplification of a complex reality and builds on the assumption that risk parameters observed in the past can be considered representative of the future. Not all possible inputs and their complex interactions can be identified and modelled for the risk development of a portfolio. This is addressed by including safety margins in the design of the model, and a supplementary model risk buffer in the calculation of economic risk-bearing capacity. This is one reason why KfW Group carries out stress tests with both the credit risk models and the market price risk models. The group continuously develops its risk models and processes in line with current banking regulations.

Stress and scenario calculations
To ensure the early indicator function and proactive focus in the ICAAP, the group monitors different scenarios and their effects on economic and normative risk-bearing capacity on a quarterly basis: a baseline scenario (solely with respect to normative risk-bearing capacity, which represents the capital ratios for future reporting dates, taking into account economic forecasts), a downturn scenario (slight deterioration in economic conditions compared to expectations) and a stress scenario (severe recession). The results of these scenarios demonstrate the group's resilience and ability to act in the event that one of them occurs.

The baseline scenario for normative risk-bearing capacity includes projected business performance, expected consolidated comprehensive income, and other effects influencing risk-bearing capacity, such as foreseeable changes in the capital structure and methodological developments in risk measurement. It also takes into account the negative effects on the earnings position and risk situation resulting from the expected economic development.

war in the Middle East, were thus factored into KfW's regular stress calculations in 2023. In this context, higher energy, commodity and food prices in particular are significantly impacting the economic environment. In the scenarios, negative economic assumptions primarily lead to rating downgrades and thus to higher risk provisioning and higher capital requirements for the portfolio segments affected. In addition to the regular stress calculations, selected potential threats to KfW were analysed in scenario stress tests in 2023, taking into account the current environmental, geopolitical and macroeconomic situation. This testing focused on a scenario on the impact of acute drought events and social unrest in several regions of the world, a scenario based on the information on the adverse scenario of the EBA/ECB 2023 stress test, a scenario on China's confrontation with Taiwan with negative economic consequences for the parties to the conflict and the main global economic areas, and a scenario on (further) escalation of the Middle East conflict.

Moreover, the expansion of stress testing methods for ESG risks was driven forward in 2023. In this context, a scenario was also conducted on the long-term effects of two CO_2 price scenarios on KfW's credit risk situation. This scenario is to be methodically developed going forward and updated as required.

Besides the regularly simulated economic scenarios, further stress tests, in particular risk type-specific stress tests (including in accordance with Article 177 of the CRR) and various sensitivity analyses, are also regularly carried out taking concentration risks into account, to analyse the resilience of KfW's economic and normative risk-bearing capacity. In addition, the concentration and inverse stress tests show how KfW's risk-bearing capacity could be pushed to its limits.

The results of the various stress and scenario calculations were presented to the decision makers at KfW in a separate digital stress test report.

The group met the economic risk-bearing capacity requirements, including the confidence level of 99.90% in the scenarios analysed, as of all quarterly calculation dates in 2023. The regulatory capital ratios and the leverage ratio exceeded the threshold values defined for risk appetite at all times.

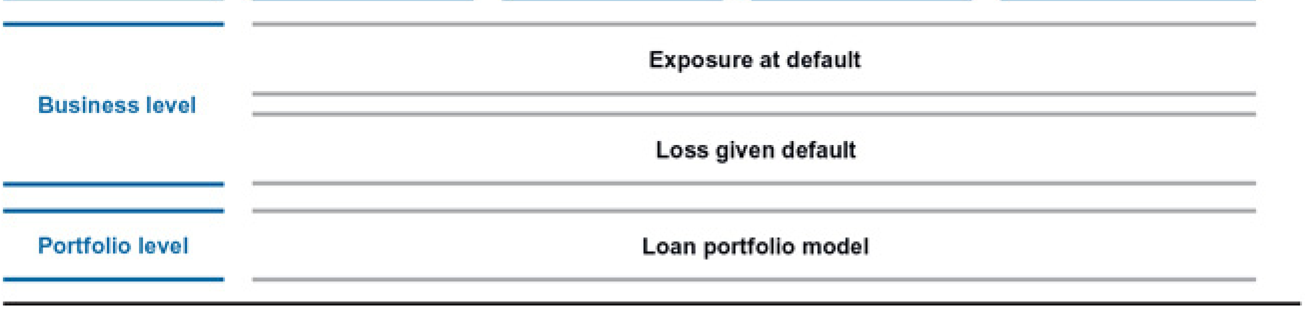
KfW's stress testing programme was subject to an annual adequacy assessment in 2023, the aim being to further enhance the stress tests and scenario calculations as a component of overall bank management in order to meet internal and regulatory requirements. The programme was assessed as "generally adequate" overall.

Types of risk

CREDIT RISK

KfW Group is subject to credit risk in the context of its promotional mandate. Credit risk includes, in particular, counterparty default risk (including migration risk), as well as counterparty risk (including credit valuation adjustment ("CVA") risk) and settlement risk.

The majority of final borrower default risks are borne by the on-lending institutions in the domestic promotional lending business. Due to the business model, this results in a large proportion of bank risks in the portfolio. Other main risks result from promotional activities in the area of start-up finance for SMEs and equity investments. Particularly in these segments of domestic promotion, KfW Group bears the risk stemming from final borrowers. In addition, KfW Group faces risks in the business sectors Export and project finance as well as Promotion of developing countries and emerging economies.



Counterparty default risk[3] is measured by estimating the probability of default ("PD"), the exposure at default ("EAD") and the loss given default ("LGD"). The product of the three aforementioned variables is the loss that can be expected, statistically, on average over many years.

KfW Group uses internal rating procedures to determine the probability of default for banks, countries, corporates, small and medium-sized enterprises (SMEs) and start-ups. These procedures are based on scorecards[4] and generally follow a uniform model architecture consisting of a machine rating, a checklist, a group logic and a manual override. Simulation and cash flow-based rating procedures are used for significant parts of special financing and structured products, some of which were licensed from an external provider. For structured products, tranche ratings are determined on the basis of the default pattern of the asset pool and the waterfall structure of the transactions. The existing small-ticket retail positions (e.g. in the area of education financing) are valued using an automated procedure specially set up for this purpose. The rating procedures aim to predict the probability of default on a one-year basis. As a rule, the middle and back-office departments are responsible for preparing ratings for risk-bearing business. Ratings for these exposures are updated regularly, at least once per year. There are exceptions for loans below a threshold of EUR 10 million from the KfW special programmes in the context of the pandemic and the Russian war on Ukraine. There were several further developments in PD rating procedures in the reporting year.

Mapping the probability of default on a uniform master scale for the entire KfW Group enables a comparison of ratings from different rating procedures and business sectors. The master scale generally consists of 20 distinct classes which are divided into four groups: investment grade, non-investment grade, watch list and default. The range of default probabilities and the average default probability are defined for each class of the master scale. There are operating procedures specifying the responsibilities, competencies and control mechanisms associated with each rating procedure. External ratings are mapped to KfW Group's master scale to ensure the comparability of internal ratings with ratings of external rating agencies. The rating procedures are validated and further developed at regular intervals.

Exposure at default ("EAD") and valuation of collateral influence the severity of loss. Collateral has a risk-mitigating effect in calculating loss given default ("LGD"). In valuing acceptable collateral, the expected net revenue from collateral realisation in the case of loss is determined. Haircuts to cover the credit risk of final borrowers are a major factor in the valuation of assignments made by financing partners in the on-lending business. For tangible collateral, further haircuts are applied for expected changes in value, as well as devaluation resulting from depreciation. Depending on the availability of data, the various valuation procedures for individual types of collateral are based on internal and external historical data and on expert estimates. In the case of personal collateral, the collateralised portion is treated as a direct transaction with the collateral provider, i.e. the probability of default and the extent of the collateral

[3] Also includes counterparty risk.
[4] A scorecard is a mathematical and statistical model and/or an expert knowledge-based model. The individual risk factors considered relevant for credit rating are converted into a score depending on their prevalence or value and weighted for aggregation.

KfW Group has limit management systems, risk guidelines and various portfolio guidelines to limit risks from new business. This set of risk management instruments forms the basis for the second vote on lending transactions, serves as an orientation guide for loan approvals and has the function of ensuring the appropriate quality and risk structure of KfW Group's portfolio while taking into account the special nature of KfW Group's promotional business. At KfW, Group Risk Management has the second vote on a single exposure level. KfW IPEX-Bank, KfW Capital and DEG each have their own second vote independent of the front office. The relevant business decision-making processes are structured with a view to risk. Lending transactions require a second vote depending on the type, scope of the risk content and complexity of the transaction. The qualification levels for approval of new business depend on rating, collateralisation or net exposure and total commitments to the group of connected customers. Approval of the responsible supervisory body is also required for individual transactions of pre-defined volumes.

The portfolio guidelines distinguish between different types of counterparties and product variants and define the conditions under which business transactions may be conducted. In addition, risk guidelines for countries, sectors and products are defined in order to react to existing or potential negative developments with specific requirements for lending. The limit management systems ultimately track both credit rating-dependent individual counterparty risk (counterparty limits) and risk concentrations (concentration limits). Counterparty limits serve to fine-tune the counterparty-specific management of credit default risk. Concentration limits serve to restrict risk concentrations in the loan portfolio and thus to prevent major individual losses. Due to KfW's business model, there is a significant concentration in credit risks, as well as in the financial sector.

Existing higher-risk exposures are divided into a watch list and a list for non-performing loans. The watch list serves to identify potential problem loans early. This involves regularly reviewing and documenting the economic situation, the particular borrower's market environment and the collateral provided, and formulating and deciding proposals for remedial action as needed – particularly proposals for risk-limiting measures. Process responsibility for non-performing loans, and also to a large extent for watch-list exposures[6)], lies with restructuring units, ensuring involvement of specialists, intensive support and professional management of problematic loans. The objective of this system is to achieve recovery of a loan through restructuring, reorganisation and workout arrangements. If the business partner is deemed incapable or unworthy of restructuring, the priority becomes optimum realisation of the asset and the related collateral. The Restructuring division is responsible for non-performing loans and for providing intensive support to banks and higher volume loans with a risk amount greater than EUR 1 million in the KfW portfolio. The portfolio credit management department is responsible for supporting retail business. Rules with differing details apply for the special programmes for coronavirus aid, which are fully backed by a federal guarantee. KfW IPEX-Bank's non-performing loans and exposures under intensive support, including KfW and DEG's trust activities, are managed directly by each subsidiary. Internal interface regulations are in place in the relevant business sectors to ensure control of responsibilities and allocation. Restructuring also cooperates with the front-office departments and the central Legal Affairs department.

[5)] See section on "Economic risk-bearing capacity" for measurement of the economic capital requirement for credit risks.
[6)] The assumption of responsibility for watch-list cases at KfW IPEX-Bank is decided on a case-by-case basis by Risk Management in consultation with the unit responsible for restructuring.

		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	Rating 1–4	237,861	0	0	48,554	3	0
	Rating 5–8	61,980	0	0	33,045	0	0
Non-investment grade	Rating 9–15	17,039	209	0	49,411	1,039	0
Watch list	Rating 16–18	4,536	1,889	0	3,360	4,210	0
Default	Rating 19–20	0	0	1,128	0	0	4,707
Total		**321,416**	**2,098**	**1,128**	**134,370**	**5,252**	**4,707**

		Securities and investments			Off-balance sheet transactions		
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	Rating 1–4	28,587	0	0	69,254	0	0
	Rating 5–8	7,234	64	0	47,366	0	0
Non-investment grade	Rating 9–15	133	0	0	20,106	1,110	0
Watch list	Rating 16–18	47	0	0	501	737[1)]	0
Default	Rating 19–20	0	0	0	0	0	455
Total		**36,001**	**64**	**0**	**137,227**	**1,847**	**455**

[1)] The year-on-year decline is mainly due to rating improvements in the business sector Individualfinanzierung & Öffentliche Kunden *(Customised Finance* & *Public Clients).*

Non-investment grade	Rating 9–15	20,978	657	0	53,634	4,204	0
Watch list	Rating 16–18	10,911	2,179	0	5,888	4,587	0
Default	Rating 19–20	0	0	1,018	0	0	5,339
Total		**310,314**	**2,836**	**1,018**	**140,311**	**8,827**	**5,339**

		Securities and investments			**Off-balance sheet transactions**		
		Stage 1	**Stage 2**	**Stage 3**	**Stage 1**	**Stage 2**	**Stage 3**
		EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
Investment grade	Rating 1–4	21,246	0	0	55,154	14	0
	Rating 5–8	12,394	8	0	39,562	0	0
Non-investment grade	Rating 9–15	62	0	0	33,412	1,196	0
Watch list	Rating 16–18	24	0	0	1,566	1,568[1)]	0
Default	Rating 19–20	0	0	0	0	0	532
Total		**33,725**	**8**	**0**	**129,693**	**2,777**	**532**

1) The year-on-year decline is mainly due to rating improvements in the business sector Individualfinanzierung & Öffentliche Kunden *(Customised Finance* & *Public Clients).*

Securities and investments	36,057	0	0	0
Off-balance sheet transactions	139,438	404	0	26
Total	**642,613**	**4,932**	**96**	**3,803**

1) Net carrying amount, excluding collateral and other credit enhancements

Credit risks and related credit protection of financial instruments measured at amortised cost as of 31 December 2022

	Maximum risk of default[1]	Maximum risk of default stage 3	Risk mitigation from collateral stage 3	
			tangible	personal
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Loans and advances to banks	313,919	890	11	602
Loans and advances to customers	152,624	4,128	93	2,971
Securities and investments	33,721	0	0	0
Off-balance sheet transactions	132,887	484	0	28
Total	**633,151**	**5,502**	**104**	**3,601**

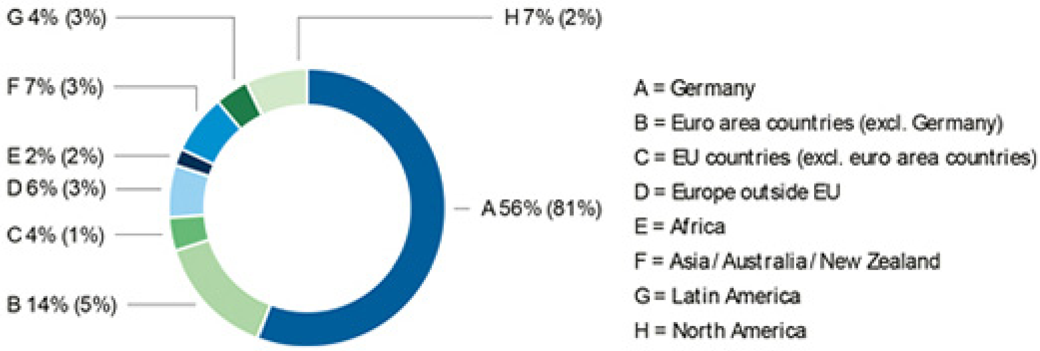
1) Net carrying amount, excluding collateral and other credit enhancements

A large part of the personal collateral of the financial instruments classified as stage 3 comprises federal guarantees and credit insurance. Tangible collateral for financial instruments classified as stage 3 primarily consists of aircraft and ship mortgages.

As a rule, the collateral for financial instruments measured at fair value relates almost entirely to the collateral for financial derivatives.

There were no material changes to the quality or collateralisation policies and no impairments due to collateral in 2023.

KfW Group did not take possession of any assets held as collateral nor did it realise any assets held as collateral in 2023.

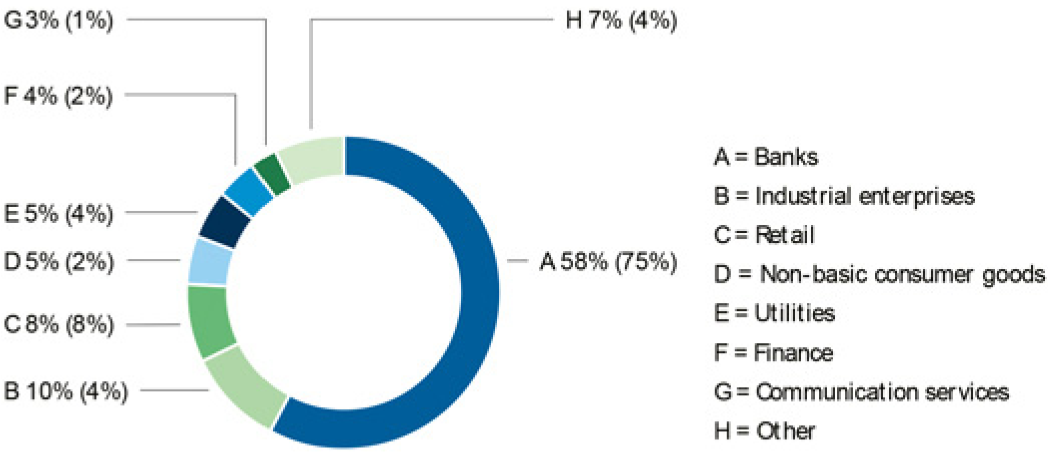


Regions

As of 31 December 2023, 70% of KfW Group's loan portfolio in terms of economic capital requirements was attributable to the euro area (including Germany) (31 Dec. 2022: 86%). The main reasons for the decline were methodological developments in the loan portfolio model for calculating risk indicators. For the domestic banking portfolio in particular, this resulted in a sharp reduction in the economic capital requirement. This was offset by an increase in the economic capital requirement for other counterparties in the foreign portfolio.

Economic capital requirement by sector

31 December 2023 (31 Dec. 2022)



Sectors

The sector clusters system was revised in the second quarter of the reporting year. For better comparability, the previous year is presented based on the new system. The significant share of the total capital requirement for credit risk attributable to banks is due to KfW Group's promotional mandate. By far the greatest portion of KfW Group's domestic promotional business consists of loans on-lent through commercial banks. The model adjustment stated in the previous paragraph also relates to sectors. Overall, the banks' share of the economic capital requirement declined to 58% (31 Dec. 2022: 75%).

[7] The loan portfolio includes loans as well as securities and investments in performing business. The non-performing portfolio is only included in the presentation of credit quality.

Credit quality
As credit quality is a major factor influencing economic capital requirements, analysing the credit quality structure involves examining the distribution of net exposure[8)] by credit quality category. The credit quality structure of the portfolio was stable year on year.

Securities-based securitisations in KfW Group's portfolio
Securitisations had a par value of around EUR 6.2 billion as of 31 December 2023. Accounting for the mark-to-market valuation of the securities reported at fair value and impairments, the portfolio had a book value (including pro rata interest) of around EUR 6.2 billion. The following tables present the composition of the securitisation portfolio by asset class, rating grade and geographical distribution.

Geographical breakdown of the underlying asset pool (based on par value)

	31 Dec. 2023	31 Dec. 2022
	%	%
Europe	100.0	99.9
World	0.0	0.0
North America	0.0	0.1
Africa	0.0	0.0
Asia	0.0	0.0

Exposure based on par values

	ABCP	Auto-ABS[1)]	RMBS	Other securitisa-tions	Total as of 31 Dec. 2023	Total as of 31 Dec. 2022
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	3,839	1,637	504	187	6,167	6,040
Non-investment grade	0	0	0	0	0	0
Watch list	0	0	0	0	0	0
Default	0	0	0	7	7	7
	3,839	**1,637**	**504**	**194**	**6,174**	**6,047**

1) Auto ABS are based on receivables from automotive financing agreements.

8) Net exposure is the economic loss that potentially occurs in the event of an economic or political default event.

made in connection with domestic and European investment financing and in the business sectors KfW Development Bank, DEG and Export and project finance, and fund investments of KfW Capital. KfW's group-wide basic rules for equity investments at an operational level are set out in guidelines. Specific rules tailored to certain segments of equity investments are also set out in portfolio guidelines, working instructions or risk guidelines. Risks are measured at the individual loan commitment level for operational equity investments using models specified for this purpose. Equity investment portfolio risks are monitored quarterly in the group risk report.

Strategic equity investments

Strategic equity investments support KfW's mandate of providing an efficient and sustainable promotional offering. In addition to reinforcing and expanding core competencies, the focus of this investment type is on complementing KfW's business sectors. Strategic equity investments normally have a long-term holding period. KfW also makes strategic equity investments in accordance with Article 2 (4) of the KfW Law (mandated transactions). The Federal Government mandates such equity investments to KfW because the Federal Republic of Germany has a state interest in them.

Dedicated organisational units are responsible for strategic equity investments based on an equity investment manual that describes legal bases, strategies, principles, procedures and responsibilities of equity investment management. Acquisitions and disposals of and changes to strategic equity investments are subject to defined processes as well as authorisation by the Executive Board and, in the cases covered under the KfW Bylaws, authorisation by the Board of Supervisory Directors. Moreover, acquiring a strategic equity investment in excess of 25%, creating or increasing such an equity investment or fully disposing of it requires authorisation by the Federal Ministry of Finance in accordance with Section 65 (3) of the Federal Budget Code *(Bundeshaushaltsordnung – "BHO").* Strategic equity investments and their individual risks are monitored and presented to the Executive Board as part of an annual equity investment report, as well as in ad hoc reports, if necessary. The individually defined strategies for the equity investments are updated annually. Moreover, the group is normally represented in the supervisory bodies of its strategic equity investments.

As of 31 December 2023, the group's equity investment portfolio consists of fund investments of KfW Capital with an economic capital requirement of EUR 668 million, equity investments of DEG including promotional business with an economic capital requirement of EUR 745 million, and other promotional business (economic capital requirement: EUR 558 million).

The EUR 439 million increase in capital requirement compared to the previous year is largely due to KfW Capital's significant business growth, in addition to methodological effects.

MARKET PRICE RISK

KfW Group primarily measures and manages market price risk on a present-value basis. The main drivers of market price risk are interest risk (consisting of the jointly analysed risk subtypes: interest risk, tenor and cross-currency basis spread risk), interest rate volatility risk, foreign currency risk and sector-specific spreads for positions with credit spread risk.

Market price risk within the group required a total of EUR 5.61 billion in economic capital as of 31 December 2023. This is EUR 0.80 billion more than as of 31 December 2022. Volatile markets, the expansion of the strategic interest rate risk position and the further development of the VaR model have the effect of increasing overall market price risk, particularly interest risk. Interest rate volatility risk was lower due to an adjustment in calculation methodology.

Foreign currency risk	[illegible]	[illegible]
Credit spread risk	870	816
Breakdown effect	–1,549	–1,138
Market price risk	**5,615**	**4,811**

1) Due to breakdown effects in interest risk, the **risk subtypes** do not add up to the total interest risk

Value-at-risk approach
The economic capital requirement is calculated using a VaR calculation across the various subtypes of market price risk using a uniform method. Historical simulation is used as the VaR model. The model consists of two components – a reactive short-term and a conservative long-term component. The reactive component is based on a historical simulation over a one-year market data history (250 scenarios) and thus in particular reflects current market events. The conservative component is based on a historical simulation over a five-year period selected from a long-term history, which includes stress periods and thus incorporates a long-term perspective.

The uniform holding period is twelve months, with time scaling based on the shorter holding period of the respective component (one day or five days). In addition, scaling to the target quantile (99.9%) is carried out on the basis of a 97.5% quantile determined using the respective historical simulation. The economic capital requirement ("ECAP") for market price risk and risk subtypes is calculated from the maximum of the two components.

VaR indicators are determined for each of the following subtypes of market price risk: interest risk, tenor and cross- currency basis spread risks, foreign currency risk, interest rate volatility risk and credit spread risk. The total VaR is also calculated, taking account of breakdown effects between the aforementioned risk subtypes. The total VaR, interest risk, interest rate volatility risk, credit spread risk and foreign currency risk are limited.

Interest risk
Yield curve grid points serve as the basis for historical simulation to quantify interest risks. These implicitly include interest risk as well as tenor and cross-currency basis spread risks. In contrast, interest rate volatility and credit spread risks are explicitly not included in interest risk, but are modelled separately and reported using separate key VaR indicators. The capital requirement for interest risk increased by EUR 1,185 million to EUR 5,453 million as of 31 December 2023.

Interest rate volatility risk
Implied volatilities are used as risk factors to determine the interest rate volatility risk. These are applied in modelling interest rate options (e.g. floors in the variable-rate lending business). The economic capital requirement for these risks is calculated in the same way as for other sub-types of risk, using historical simulation (see VaR approach section). Interest rate volatility risk arises primarily as a side effect of the original lending business and is limited by means of an ECAP sub-limit. The ECAP requirement for interest rate volatility risk is not allowed to exceed the present value of the corresponding interest rate options held by KfW. The capital requirement for interest rate volatility risk was EUR 251 million as of 31 December 2023.

Foreign currency risk
The economic capital requirement for foreign currency positions is also calculated using historical simulation. The capital requirement for foreign currency risk stood at EUR 590 million as of 31 December 2023.

In accordance with Article 4 (1) no. 52 of the CRR, the group defines operational risk as the negative impact on net assets, earnings position or liquidity that can result from inadequate or failed internal processes, people and systems or from external events. Operational risks are monitored by a central Risk Controlling unit and the methodology behind the models and procedures used for measurement and monitoring is adjusted on a regular basis. Moreover, the following operational risk subtypes are defined as material and are also monitored by specialised second line of defence functions: compliance risk, information security risk, business continuity risk and legal risk[9)].

The aim of management and control of operational risk is the proactive identification and averting of potential losses for the group, i.e. to make emergencies and crises manageable and to secure the group's structural ability to remain operational even in the event of loss of key resources.

Management of risks is decentralised and performed within the business sectors and subsidiaries by the respective directors or members of management, who are supported by the respective sector coordinators for Operational Risk and Business Continuity Management. Monitoring and communication of risks is performed on a cross-functional basis by Risk Controlling (central OpRisk Controlling) and Transaction Management (central Business Continuity Management). These staff develop the relevant methods and instruments for identifying and assessing risks and monitor their group-wide uniform application. The model for calculating the economic risk resulting from operational risks is also validated in the Risk Controlling department.

Events in the group are recorded in an OpRisk event database and updated when changes/developments occur. After each quarter, recorded loss events and any measures introduced as a result are reported to the relevant departments. The Executive Board, the Board of Supervisory Directors and the Operational Risk Committee are briefed monthly or quarterly as part of internal risk reporting. Ad hoc reports are also made if a loss exceeds a certain level.

In addition, potential operational risks are identified based on risk scenarios that are collected from across the group. Operational risks are evaluated on the basis of expert assessments in combination with internal and external loss events as well as internal data (transactions, ratings, etc.), which are backed by a distribution assumption for loss frequency and loss amount. The results of the annual risk assessment and the calculated risk scenarios are reported to the Operational Risk Committee and the Executive Board. As part of the risk assessment, the business areas check the implementation of additional risk-mitigating measures (e.g. checks as part of the internal control system, or "ICS").

Where adequate monitoring of operational risks using metrics is possible, risk indicators are used. Compliance with centrally prescribed risk-mitigating requirements (e.g. training course participation, deadlines, escalation procedures) is monitored by the overarching Controlling function using business area-specific OpRisk information dashboards to ensure escalation across all levels up to the Executive Board in the event of non-compliance.

The 2023 risk assessment was carried out from July to November 2023. The overall effect on the ECAP for the year was a reduction of EUR 13 million.

Business continuity risk
Business continuity risk refers to the negative impact on net assets, earnings position and liquidity due to the non-continuation of time-critical business processes in the event of a business interruption resulting from a previous failure to fulfil business continuity requirements (business continuity management or "BCM"). The aim of BCM is to make provisions for time-critical business processes in case of emergency.

[9)] Other risk subtypes are: service provider risk, personnel risk, personal and physical security risk, conduct risk, data protection risk and operational risk from adjustment processes.

and gas supply situation during the winter of 2022/2023, measures were developed for dealing with a potential large-scale and lengthy power outage (blackout).

Information security risk

Information security risk ("IS risk") refers to the uncertainty involved in achieving the respective protection targets (confidentiality, integrity and availability) of information assets and the resulting potential adverse effect on the group's net assets, earnings position and liquidity. An IS risk occurs precisely when a threat (e.g. a cyberattack) is accompanied by a vulnerability (e.g. planned protection measures that have not been implemented). Cyber risks are risks that occur when navigating an interconnected digital environment (cyberspace). Cyberspace refers to all information technology networks connected to the Internet (or comparable networks) involving a digital and/or electronic information asset of the bank. For the group, cyber risks are part of the systemic IS risks. Information security risks are associated with KfW's operating activities. The aim of risk management is to mitigate the impact of potential threats, reduce the probability of their occurrence and thus counteract risks through risk-mitigation measures. The information security management system ("ISMS") is based on the international standard ISO 27001. IS risks are controlled with the aid of ISMS risk indicators and performance benchmarks.

Compliance risk

Compliance risk refers to the risk of legal or regulatory sanctions or negative effects on net assets, earnings position and liquidity arising from non-compliance with external or internal requirements, voluntary commitments or legal regulations, which contribute to the sub-aspects of operational compliance (fraud and corruption risk, risk of other criminal activities, securities compliance and conflict of interest risk, money laundering/terrorist financing risk, embargo and sanctions risk, tax compliance risk) or which fall under the overall MaRisk compliance process (in accordance with MaRisk AT 4.4.2.).

Legal risk

Legal risk refers to negative effects on net assets, earnings position and liquidity arising from the infringement of or non-compliance with formal or substantive laws insofar as this leads to legal disputes or action to avoid legal disputes. Infringement or non-compliance may be due in particular to legal adjustments/changes with retroactive effect, misinterpretation or misapplication of formal or substantive laws or incorrect drafting of agreements.

KfW Group manages its risk appetite with regard to legal risks on a primarily qualitative basis, supplemented by individual quantitative elements, as is standard for the market. The core of qualitative management is process-integrated legal advice from in-house counsel, involving external law firms, if necessary. This is accomplished for the group on the basis of the policies of the relevant KfW subsidiaries (KfW IPEX-Bank, DEG and KfW Capital), which are based on the policies of KfW, through the centralisation of certain key legal issues at KfW and, in general, through the Legal Board established for this purpose.

A group-wide key risk indicator has been defined as a quantitative control element, which is essentially focused on monitoring risks arising from certain (impending) legal disputes.

Moreover, as part of risk identification, the central reputational risk control function coordinates qualitative reputational risk assessment and creates a risk profile outlining the group's greatest reputational risks relating to the bank's most important stakeholders. In addition, reputational risk events that have occurred are reported on an ongoing basis.

PROJECT RISK

Project risks were not classified as material in the 2023 risk inventory. Original project risk comprises, in particular, planning assumptions that turn out to be inaccurate. Project risk has implications for the achievement of project/building block objectives with regard to cost, time and scope (e.g. new technical requirements and time constraints arising from parallel projects/change activities in building blocks). Managing project risk is part of building block management both during building block planning and during the execution of change activities in building blocks.

LIQUIDITY RISK

Liquidity risk in the narrower sense (synonymous with insolvency risk) is the risk of a lack of liquidity on the part of an institution or market. The liquidity gap creates the risk that payment obligations cannot be met, cannot be met on time or cannot be met in full.

The primary objective of liquidity management is to ensure that KfW Group is capable of meeting its payment obligations at all times. KfW is available as a contractual partner for all commercial transactions of its subsidiaries, particularly for their funding. For this reason, the liquidity requirements of the subsidiaries are included both in KfW Group's funding plans and in the liquidity maintenance strategy.

Liquidity risk is measured on the basis of economic scenario analyses. Moreover, maximum liquidity gap limits (outflows on a monthly and yearly basis), available liquidity (liquidity potential) and the difference between the average residual maturity of inflows and outflows (maturity gap) are monitored. On the basis of the KfW Law, KfW's liquidity risks are limited by the utilisation threshold in accordance with Article 4 of the KfW Law. The utilisation threshold compares current and non-current liabilities and must not exceed 10%. Internal indicators relating to the liquidity situation are based on comparing liquidity requirements and liquidity potential as a ratio in stress scenarios of differing severity. No capital is currently allocated as part of calculating risk-bearing capacity.

INTERNAL LIQUIDITY ADEQUACY ASSESSMENT PROCESS

The internal liquidity adequacy assessment process ("ILAAP") principle describes the management and monitoring of KfW Group's liquidity risk position. The procedure established by the institution serves to identify, measure, manage and monitor liquidity. The aim of the ILAAP is to ensure liquidity and avoid liquidity bottlenecks. It also assesses internal governance and institution-wide controls.

Insolvency risks are mainly limited through economic liquidity risk ratios and limits for liquidity potential and liquidity gaps. The aim of the liquidity risk strategy is to preserve the ability to meet payment obligations at all times and when due, even in stress scenarios.

Internal measurement of liquidity risk is based on scenario calculations. This approach first analyses the expected inflow and total outflow of payments for the next twelve months based on business already concluded. This baseline cash flow is then supplemented by planned and estimated payments (e.g. borrowings from the capital market, expected liquidity-related loan defaults or planned new business). The result provides an overview of the liquidity required by KfW Group over the next twelve months. The liquidity required is calculated for different scenarios. In this respect, market-wide and institution-specific risk factors are stressed and an evaluation is made of the impact on KfW Group's liquidity.

KfW liquidity risk indicators

	31 Dec. 2023 Indicator	31 Dec. 2022 Indicator
Normal case	0.37	0.23
Stress case	0.37	0.28
Worst case (institution-specific)	0.36	0.32
Worst case	0.59	0.48

The internal liquidity risk indicators remained below the internal limit of 1 throughout the year.

KfW continued to support the energy sector through the extension of loans on behalf of the Federal Government in 2023. This funding requirement was addressed through a refinancing facility via the Economic Stabilisation Fund (Wirtschaftsstabilisierungsfonds – "WSF") and liquidity coverage potential provided by the German Finance Agency in the form of ECB-eligible German government securities.

Current funding environment

In a capital market environment characterised by rising interest and high inflation rates, KfW generated a total issue volume (net proceeds) of EUR 90.2 billion on the international capital markets in financial year 2023 (2022: EUR 89.4 billion). There were 186 individual transactions (2022: 206). KfW issued bonds in a total of ten different currencies, with around 83% of long-term borrowing taking place in the two main funding currencies – euros and US dollars. The share of bonds denominated in euros was 54% in 2023 (2022: 65%). At 29%, the share of bonds denominated in US dollars was comparatively high (2022: 19%). In addition, a total of EUR 6.9 billion in funds (net proceeds) was raised through the WSF in 2023 (2022: EUR 31.6 billion), of which EUR 4.9 billion was used to fund support measures for energy suppliers and EUR 2.0 billion was used to fund the coronavirus special programmes. The outstanding volume of funding raised via the WSF totalled EUR 36.3 billion as of 31 December 2023, of which around EUR 12.8 billion was for support measures for energy suppliers and EUR 23.5 billion was for funding the coronavirus special programmes.

KfW issues commercial paper ("CP") with maturities of up to one year on the money market via two CP programmes. The programme volume of the Multi-Currency Commercial Paper programme, also known as the Euro Commercial Paper ("ECP") programme designed for global investors amounted to EUR 90 billion. The nominal volume issued under this programme at EUR 72.4 billion was lower in 2023 than in the previous year (2022: EUR 116.5 billion); however, the average maturity of the issues was higher at 144 days (2022: 131 days). The volume outstanding as of the reporting date 31 December 2023 was EUR 29.6 billion. The programme volume of the U.S. Commercial Paper ("USCP") programme came to USD 30 billion in 2023. KfW Group uses this programme, which is designed specifically for the US market, to cover a large portion of its need for short-term funds in US dollars. The nominal volume issued under the USCP programme was also lower than in the previous year at USD 40.8 billion (2022: USD 64.2 billion). The average maturity of the issues declined again to 52 days (2022: 56 days). The outstanding volume amounted to USD 8.8 billion as of 31 December 2023.

Regulatory risks for KfW Group arise primarily from an increase in requirements regarding minimum capital ratios and from possible negative effects on the group's business model due to future changes in the regulatory environment. These include the costs resulting from the implementation and ongoing fulfilment of the additional requirements as well as the associated capital tie-up. As part of the capital adequacy process, regulatory risk is addressed by means of a regulatory scenario through conservative traffic light limits as a management and early warning instrument with regard to regulatory capital requirements. In addition, the capital adequacy of KfW Group is reviewed with the owners as part of its coordinated capital planning. Moreover, KfW actively keeps track of changes in its legal environment, which allows the group to identify new regulatory requirements and determine necessary action.

INTRA-GROUP RISK

Due to the risk relevance for the group and the objective of consistent group management, the risks of KfW IPEX-Bank, DEG and KfW Capital are fully taken into account as part of group risk management. For example, the business activities of these subsidiaries are applied to the group-wide limits on a look-through basis and included in the capital allocation and risk-bearing capacity calculation of the group. In addition, representatives of the subsidiaries are members of the group's risk committees. KfW also monitors the risk situation of its subsidiaries on a stand-alone basis. The management of each subsidiary reports regularly to the responsible members of the Executive Board on risk, as well as finance and strategy. KfW's Executive Board is also informed of the intra-group risk situation in a quarterly report.

MODEL RISK

At KfW, models are an essential component of risk, capital and business management. Using models means there are model risks, which can affect other types of risk such as credit or market price risk. Model risk was therefore once again identified as a significant overarching risk in the 2023 risk inventory, since direct and significant implications on net assets, earnings position and liquidity can arise from weaknesses or errors at both model and model interaction level. Identifying and managing model risks is aimed at ensuring adequate control of model risks and timely and risk-oriented elimination or compensation of (systematic) model weaknesses that have been identified, such as through independent validation, and at promoting an appropriate risk culture for dealing with models. Model risk is compensated by capital buffers in the economic risk-bearing capacity and individual adjustments at the model level, such as valuation reserves and manual adjustments, or by taking margin of conservatism ("MoC") premiums into account in model parameterisation. The annual model risk report gives the KfW Executive Board an overview of the models in focus, as well as a general assessment of model risks at KfW. The ongoing management of model risks is carried out both via active performance of the individual model roles and through discussions and decisions in the risk committee meetings that regularly take place.

Additional internal control procedures

Process-integrated internal control system (ICS)

The aim of KfW Group's ICS is to use suitable principles, measures and procedures to ensure the effectiveness and profitability of business activities, compliance with the legal requirements applicable to KfW Group, the accuracy and reliability of external and internal accounting, and the protection of assets.

There are group-wide ICS rules as well as binding group-wide minimum requirements of the ICS. KfW Group's ICS is based on the relevant legal (bank regulatory) requirements[10)], in particular those set forth in the KWG and MaRisk, and the market standard COSO model[11)].

10) See Section 25a (1) no. 1 KWG, MaRisk AT 4.3, and Sections 289 (5), 315 (2) no. 5, 324, and 264d HGB.
11) COSO = Committee of Sponsoring Organizations of the Treadway Commission

corporate objectives effectively and detecting or minimising risks. A KfW Group information and communication policy is aimed at comprehensively providing all stakeholders with the information they need in the required detail to make decisions. Appropriate monitoring and audit mechanisms are in place to determine the functionality and effectiveness of the ICS.

Procedural rules form the basis of the ICS. These constitute the framework for a proper business organisation within KfW Group, in the form of a binding policy.

Workflow organisational measures and controls are intended to ensure that monitoring is integrated into processes. Monitoring measures integrated into processes serve to avoid, reduce, detect and/or correct processing errors or financial loss. The effects of any planned changes to operational processes and structures on the procedure and intensity of monitoring are analysed in advance.

KfW Group has implemented accounting-related controls to minimise the risk of error in stand-alone and consolidated financial statements and ensure the correctness and reliability of internal and external financial reporting. The accounting-related controls are part of the ICS.

The system is supplemented by the Compliance department, which defines and monitors compliance with relevant measures, on the basis of relevant rules and norms. The Compliance function performs regular process-based and accompanying monitoring of the relevant areas of the internal control system. The results of additional second line of defence units (OpRisk in particular) are included in monitoring and the further development of the internal control system.

To ensure the adequacy and effectiveness of the ICS, KfW regularly scrutinises and continually refines its standards and conventions.

A report is rendered annually to KfW Group’s supervisory bodies. The adequacy and effectiveness of the ICS is also assessed by Internal Auditing on the basis of risk-based audits carried out independently of group procedures.

Compliance

The Executive Board bears the overall responsibility for compliance within the Group. The Executive Board delegates the associated tasks to the Compliance department. The officers appointed by the Executive Board for the relevant areas of responsibility are located in the Compliance department. They include, in particular, the group money launderi ng officer, the fraud officer (central unit in accordance with Section 25h KWG) and the company data protection officer.

The Compliance organisation is structured in accordance with the Three Lines of Defence model and as the second line of defence, it is aligned with the requirements for a MaRisk compliance function. In this context, group compliance has in particular included measures to adhere to data protection regulations and tax compliance, as well as measures to prevent insider trading (securities compliance), general conflicts of interest, money laundering, terrorist financing and other criminal activities, to comply with sanctions and embargo regulations, and to monitor legal requirements and the associated implementation measures. There are therefore binding rules and procedures that influence the day-to-day implementation of values and the corporate culture, which are updated regularly and on an ad hoc basis to reflect current law as well as market requirements. The aim is to manage and assess compliance risks as part of non-financial risks by means, among other things, of key indicators (e.g. for financial sanctions) in line with the central requirements for operational risk management. Since the entry into force of the material requirements of the other things, by means of a specially established task force headed by Compliance. In addition, to the extent necessary, internal audit and monitoring processes of the compliance organisation have been adapted to the changed risk situation. Compliance monitors legal and regulatory requirements on an ongoing basis and, as necessary, adapts them to the changed risk situation in coordination with the affected functions of the first line of defence.

Internal Auditing
Internal Auditing is an instrument of the Executive Board. As an entity that works independently of KfW Group procedures, it audits and assesses all of KfW Group’s processes and activities to identify the risks involved and reports directly to the Executive Board.

With a view to risk management processes, Internal Auditing performed an audit in the reporting year of the decentralised risk management processes and central aspects of risk management and risk control which were relevant group-wide. With regard to risk management, the focus areas of the audit included the application, operation and further development of the models used in risk management across all risk types, as well as KfW’s combined risk assessment within the ICAAP. Additionally, risk-type-specific audits were performed on the management of operational risk, market price risk and liquidity risk. Audits of key second line functions were also part of the 2023 audit plan. The risk management projects that Internal Auditing assessed as material were supported by Internal Auditing, maintaining the latter’s impartiality and avoiding any conflicts of interest.

Moreover, Internal Auditing continued to monitor the ongoing development of risk measurement procedures in 2023 by attending meetings of decision-making bodies (as a guest).

Internal Auditing also functions as KfW Group’s internal auditing department. It is involved in subsidiaries’ audit planning. In addition to the audit results obtained independently in group-wide audits, it also incorporates the audit results of third parties (group auditors, Federal Financial Supervisory Authority, the internal auditing departments of the other group companies) in its group-wide internal audit reporting, in the tracking of measures and as a source of information when preparing its own audits.

to International Monetary Fund ("IMF") estimates. The expected growth rate of real GDP in 2024 for industrialised countries is below the previous year's rate, while for developing countries and emerging economies, it is forecast almost at prior-year level (see table "Gross domestic product at constant prices"). The IMF's forecasts show that global consumer price inflation is expected to fall from an annual average of 6.8% in 2023 to an annual average of 5.8% in 2024. KfW agrees with the IMF's assessment that economic outlooks will be determined by the longer-term consequences of the COVID-19 pandemic and the war in Ukraine, on the one hand, and the effects of global monetary policy tightening to combat inflation and the withdrawal of fiscal policy support against the backdrop of high levels of debt, on the other.

Gross domestic product at constant prices

Year-on-year change	2023 estimate in %	2024 forecast in %	2013–2022 average in %
Global economy*	3.1	2.9	3.1
Industrialised countries*	1.6	1.1	1.8
Developing countries and emerging economies*	4.1	4.0	4.0

* Aggregation of annual GDP growth rates at each country's constant prices based on the shares of each country's GDP valued at purchasing power parity ("PPP") in the corresponding aggregate. Grouped into industrialised countries and emerging economies based on IMF classification. The average is calculated as the geometric mean of annual growth rates.

Development going forward is still fraught with major uncertainties, as the IMF points out. For example, there is a risk that growth in China will weaken more than expected due to the crisis in the real estate sector. Moreover, inflation, which remains largely above central banks' targets, could prove to be stubborn despite the decline in inflation rates. Higher inflation expectations and a shortage of labour could be contributing factors. Commodity prices, in particular, may be more volatile than at present due to weather events fuelled by El Niño as well as climate-related and geopolitical shocks. Increasing geoeconomic fragmentation and export restrictions could also contribute to higher volatility. If the conflict between Israel and Hamas escalates and spreads to other countries and players, this may result in rising crude oil and gas prices, increasing risk aversion in the financial markets, and disruptions to supply chains. Higher energy and food prices could also foster social unrest.

A potential reassessment of monetary policy outlooks by the financial markets may tighten financing conditions and increase interest risks. This could also result in greater debt stress in developing countries and emerging economies. There is also a risk that it will not be possible to rebuild fiscal buffers in time for the next shock or that necessary fiscal consolidations might stifle growth, if designed too restrictive.

There is also a possibility that the global economy grows faster than forecast if inflation declines more rapidly than expected, thereby boosting the purchasing power of private households and allowing monetary easing to take effect more quickly.

For the **euro area**, KfW expects price-adjusted GDP to grow by 0.8% in 2024. This means that the anticipated growth rate will increase slightly, by 0.3 percentage points year on year, but remain below the average of 2013–2022.

to achieve slightly above-average growth.

KfW expects price-adjusted GDP in **Germany** to increase by 0.6% year on year in 2024. Price-adjusted GDP in 2024 is therefore expected to be higher than in 2019, the year before the outbreak of the COVID-19 pandemic (see table "Gross domestic product at constant prices, year-on-year change"). In view of the above forecasts for the global economy and assuming that private households' purchasing power will increase as a result of a decline in headline inflation and a simultaneous rise in nominal wages, KfW assumes that among GDP expenditure components private consumer spending will grow in 2024. Corporate investments are also expected to grow, whereas housing construction will experience a price-adjusted decline. Of the GDP value-added components, KfW expects the price-adjusted gross value added of the construction sector to contract in 2024. The average annual number of persons in employment located in Germany will rise in 2024, with an increase in the skilled labour shortage being expected.

Gross domestic product at constant prices, year-on-year change

	2023	2024 forecast	2013–2022 average	2024 forecast
	in %	in %	in %	2019 index =
Euro area	0.5	0.8	1.4	104.2
Germany	–0.3	0.6	1.2	101.3
USA	2.5	1.0	2.3	109.2

In addition to geopolitical and geoeconomic risks in connection with Russia's invasion of Ukraine, the conflict in the Middle East, tensions between China and Taiwan, bottlenecks and abrupt price increases on the energy markets, an economic slump in China caused by the real estate crisis there and environmental and natural disasters could result in lower growth in German price-adjusted GDP than forecast by KfW for 2024, or even in a contraction.

There is a chance of higher growth in price-adjusted GDP than KfW's forecast for 2024 in the event of an unexpectedly rapid supply-side-driven decline in inflation and thus plummeting interest rates. This could give the economy new impetus, particularly via the investment channel. In such case, demand for credit would likely also increase.

In response to the ruling of the Federal Constitutional Court of 15 November 2023 on the Second Supplementary Budget Act 2021, the Federal Chancellor, the Federal Minister for Economic Affairs and the Federal Minister of Finance reached a political agreement on 13 December 2023 on additional consolidation measures that affect the Federal Government's core budget and the Climate and Transformation Fund, among other things, and that have been incorporated into the draft of the second Budget Financing Act 2024. Similar to Deutsche Bundesbank, KfW assumes that there will be no significant need to revise the growth forecast for price-adjusted GDP in 2024 as a result of these fiscal policy measures.

inverted due to the considerable key interest rate hikes. KfW expects the inverted yield curve to revert somewhat over the course of 2024 due to the expected key interest rate cuts, but also expects the curve to still remain in negative territory towards year-end.

As inflation is also slowly receding in the USA and its economy is likely to cool off, KfW expects the Federal Reserve to cut key interest rates over the course of 2024. As in the euro area, KfW expects the US yield curve (the spread between ten and two-year USD swap rates) to steepen on average in 2024 but to remain inverted for the whole of the year.

New business projections

Overview

In the central control variable for its net assets, KfW Group projects a new business volume of EUR 89.2 billion for 2024. This reflects a normalisation of new business development in the primary business and additional promotional business volume from heating promotion in the domestic promotional business, as well as strong commitment growth in the business sector Export and project finance and moderate commitment growth at DEG. The business sector KfW Development Bank expects the promotion to stay at the level projected for 2023 or to decrease slightly. These new business projections may change due to economic and political measures of the Federal Government (e.g. execution of mandated transactions). Amendments from the federal budget adopted for 2024 were not taken into account.

KfW is careful to avoid potential adverse effects on and risks to society and the environment in its promotional activities, and where possible attempts to reduce or offset such effects via suitable measures (inside-out perspective). Furthermore, KfW considers environmental changes, such as to the climate and biodiversity, social transformation and governance standards with an impact on the credit rating of KfW clients, as well as the effects of various climate scenarios on KfW’s business model and risk profile (outside-in perspective). We do not expect these considerations to have any impact on the new commitment volume projected for 2024.

Domestic business

New business development is increasingly returning to normal following the exceptional period from 2020 to 2022, which was driven by the **Mittelstandsbank & Private Kunden *(SME Bank & Private Clients)*** business sector’s special programmes in the context of the war in Ukraine and the COVID-19 pandemic. The business sector continues to expect further normalisation in its primary business for 2024. Additional new business volume of EUR 6.4 billion is estimated for the implementation of a grant and loan subsidy programme for transitioning to heating powered by renewable energy. Overall for 2024, new business volume of EUR 41.0 billion is expected in the primary business (including the implementation of heating promotion).

The business sector positions itself as a partner to the Federal Government and is divided into two segments by customer group. The SME Bank segment supports the German economy with a wide range of promotional programmes for commercial customers with various promotional priorities. The Private Clients segment supports education, energy efficiency in the construction and refurbishment of residential buildings, and also promotes the acquisition and construction of owner-occupied housing as well as accessible conversion/construction of homes. The necessary transformation towards renewable energy, the high level of investment required to achieve climate neutrality, the persistent uncertainty regarding the energy supply due to the ongoing war and the worsening consequences of climate change have a direct impact on relevant markets and customer groups in the business sector, while also constituting

The business sector is split into three business segments. With regard to customised financing for companies, the impact of the war in Ukraine and the rise in interest rates on the willingness and capacity of companies to take on debt for new investments is quite unfavourable in the short term. Despite the moderate economic recovery expected in Germany in 2024, potentially lower risk tolerance on the part of partner banks cannot be ruled out. This could result in greater demand for KfW's risk participation. In this context, the risk-bearing promotional products in the megatrends "climate change and environment" and "digitalisation and innovation" are achieving greater relevance and are therefore likely to meet with increased demand.

The demand for investment in municipal and social infrastructure remains strong given the central role municipalities play in meeting the challenges presented by the war in Ukraine and climate change. However, the budget situation of some municipalities, which may be strained at times, in conjunction with limited planning capacities and supply bottlenecks in the construction sector restricts their investment opportunities and loan needs. Additional federal and state grants can also be expected to fund measures to improve climate resilience, which also reduce the demand for loans. In contrast, energy suppliers are expected to make considerable investment efforts to bring about the energy and heating transition. The transformation of the energy supply systems entails considerable financing requirements, yielding the potential for a high demand for KfW loans.

Individual financing with financing partners in Germany and Europe, as well as funding of promotional institutions of the federal states ("LFI"), will continue to be characterised by a sound funding situation at partner banks. Demand for global loans to support leasing investments has improved after a temporary period of pandemic-induced restraint. At present, demand for export loan funding currently tends to be weaker for small and medium-sized projects.

The venture capital subsidiary **KfW Capital** invests in venture capital ("VC") and venture debt funds to improve the sustainable provision of venture and growth capital, thereby also strengthening Germany as an innovation hub for the long term. Strengthening the German VC market is necessary to tackle the deficit in the amount of VC investment in future technologies by international comparison. KfW Capital therefore continues to play an important role as a reliable partner to, and investor in, VC funds. The business sector provides more venture capital to the market through its own fund investments, which, at the same time, has a positive signalling effect on private investors. Particularly in the years when private investors were hesitant to raise funds, KfW Capital was able to successfully position itself as a reliable partner and financier of VC funds and thus of technology companies in Germany. The two programmes "ERP Venture Capital Fund Investments" and "ERP/Future Fund – Growth Facility" are the focus of KfW Capital's investment offering at its own risk. KfW Capital also acts as a financial portfolio manager for individual components of the Future Fund and as an investment broker and advisor in connection with the "German Growth Fund", also a Future Fund component.

"ERP Venture Capital Fund Investments" and "ERP/Future Fund – Growth Facility" will remain KfW Capital's two main own-risk programmes in 2024 as well. The business sector also plans to make direct investments in companies from 2024 in order to specifically target selected technology areas. Overall, new business volume of EUR 0.8 billion is anticipated in 2024. Narrowing the growth financing gap at individual company level gives KfW Capital an opportunity for direct involvement in attractive companies with high growth potential and to give a decisive boost to key future areas. KfW Capital is also continuing its activities as a financial portfolio manager under the Emerging Manager Facility ("EMF") and Growth Facility trust components, and as investment advisor in connection with the "German Growth Fund".

the issuance of two types of electronic securities: central register and crypto securities. KfW issued its first central register security via Clearstream's D7 post-trading platform in December 2022 and is now systematically developing this format for regular operations. The first tokenised bond is to be issued in 2024 which will not only test the second strand of the eWpG, but also represent the first issuance of a syndicated tokenised bond in the financial hub of Frankfurt.

The green bond portfolio volume had reached around EUR 2.4 billion at the end of 2023. The Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection ("BMUV") and KfW decided to terminate the promotional mandate for the green bond promotional portfolio effective 31 December 2023. In order to reinforce KfW's sustainability profile and its positioning as a sustainable issuer, KfW consistently develops its green bond issuance strategy and is further expanding the green bond programme as of 1 January 2024. The content of the new green bond framework has been further developed and places an additional strategic focus on biodiversity. In addition, international financings by KfW from Financial Cooperation and project and export financing can now be allocated to "Green Bonds – Made by KfW" for the first time. This enables KfW to respond to its investors' desire for diversification. Moreover, sustainability-oriented information, including the impact data of KfW Group's promotional business from the tranSForm project, is to be used in KfW's external communication on capital market funding in future; firstly, for impact reporting on green bonds and, secondly, for holistic impact reporting on KfW bonds.

International business

Economic and geopolitical risks, the uncertainty associated with the war in Ukraine and the conflict in the Middle East, increased inflation and the effects of the global interest rate tightening cycle, as well as the expiry of economic recovery effects following the COVID-19 pandemic, are relevant for the business sector **Export and project finance**. There are opportunities in Europe and among the developing countries and emerging economies relevant for Export and project finance in regions and sectors with growth potential (e.g. digital infrastructure, digital networks, data centres, e-mobility, public transport, energy efficiency, and investments in transformation). Economic and sustainability programmes and programmes to bolster supply security may also stimulate demand for financing, particularly for infrastructure investments and transformation projects aiming for a climate-neutral economy. Financing approaches can be derived from this for the business sector Export and project finance. Although the future development of the business sector Export and project finance continues to entail many uncertainties, from today's perspective there are sufficient opportunities and potential for the targeted growth path.

With a sectoral realignment based on transformation areas, the business sector is continuing its charted growth course as in the previous year and is pursuing a significant increase in the volume of new commitments to a total of EUR 24.1 billion for 2024. Of this amount, roughly EUR 22.4 billion is expected to be attributable to the primary business Export and project finance, and roughly EUR 1.8 billion to the commercial interest reference rate ("CIRR") business, which cannot be controlled by the business sector.

The business sector **KfW Development Bank** expects commitments to remain at a consistently high level for the next few years. KfW Development Bank will continue to support projects of the German Federal Government and international institutions for development policy and international cooperation. Issues such as support for partner countries in the green energy transition, alleviating poverty and hunger, combating the effects of the war in Ukraine, achieving equal opportunities and mitigating crises and causes of displacement are high on the political agenda.

In order to fulfil its ambitious development policy promotional objectives, the Federal Government must continue to provide an adequate guarantee framework for Financial Cooperation. The federal budget funds provided for development currently expects a new business volume of EUR 11.2 billion for 2024.

The subsidiary **DEG** is assigned to the DEG business sector of the same name. Economic development in developing countries and emerging economies in 2024 will continue to be determined by the war in Ukraine, the conflict in the Middle East, high inflation and the effects of the tightened monetary policy in this context, as well as the sovereign debt problem. The aim continues to be to provide support to existing customers as a reliable partner in times of crisis to secure contributions to local development (labour force, local income, and contributions to local communities). To this end, the business sector provides its customers with long-term financing in the form of loans (also in local currency), mezzanine financing and equity investments for their environmentally and socially responsible investments. DEG provides complementary advice to its customers, particularly on issues relating to sustainability, climate, development impact and corporate governance, in order to support them in their transformation and boost their contribution to local development. With its private sector focus, DEG has a special role to play in mobilising private capital. Private capital mobilisation is essential for achieving the SDGs and climate targets of the Paris Agreement.

DEG already started growing its new business originally planned for 2025 in 2023. It is maintaining its moderate growth in new commitments and is planning a new commitment volume of EUR 2.0 billion for 2024. This growth will be achieved by granting larger financing commitments per customer with a suitable risk/return/impact profile and by using hedging instruments. New business in all three customer clusters: Banking, infrastructure and energy, Industries and services, and Private equity and venture capital is already focused more heavily on climate and development impacts. By focussing on the acquisition of new business, the aim is to further increase financing performance in terms of both impact and earnings. Three strategically important cross-sectoral focal areas, Africa, German business, and mobilisation, are also being systematically pursued.

DEG is also undergoing a transformation itself, driven by megatrends such as global warming and digitalisation. These changes not only shape the external landscape but also influence DEG itself. The business sector sees the challenges posed by the need to adapt as an opportunity to restructure and improve its delivery and performance capabilities. The strategic focus is shifting to the climate, while digitalisation is opening up new opportunities for innovative working and business models that promise considerable efficiency and market potential.

Funding projections

KfW issues bonds to **fund** its promotional activities worldwide. It issues these in a large number of currencies and with differing maturities, thereby addressing a variety of target groups. Due to the explicit direct guarantee of the Federal Government, rating agencies have assigned KfW bonds a triple A rating, signifying top credit quality. KfW has achieved a stable position in the capital markets with its diversified long-term oriented funding strategy. The funding volume via the capital markets was around EUR 90.2 billion in 2023 – an all-time high. This was driven in particular by the favourable business performance at KfW IPEX-Bank and the exceptionally high demand for promotional loans. A funding need of EUR 90–95 billion is projected for 2024. The product offering in the bond issuance business will continue to be focused on investors’ needs. KfW’s benchmark bonds in euros and US dollars will continue to constitute the largest share of total volume. Further diversification of the product range depends on the market.

programmes in Germany on behalf of the Federal Government as well as remuneration based on KfW Development Bank's General Agreement.

Administrative expense is likely to be approximately EUR 1.6 billion in 2024. This includes the implementation of business policy bank backlog projects in the areas of modernisation, digitalisation, regulation, inflation-induced adjustments, and adjustments associated with the 38-hour week.

Overall, the operating result before valuation is expected to be higher than projections made in the previous year.

At EUR 0.5 billion, KfW expects the standard risk costs for 2024 to be at the level of the risk provisions projected for 2023.

For 2024, Net income of EUR 0.2 billion and Net other operating income of EUR 0.1 billion are expected for operational level equity investments (included in Net gains/losses from other financial instruments at fair value and the Net gains/ losses from investments accounted for using the equity method).

In this regard, the risk provisions for the lending business and the valuation result depend on the further development of the macroeconomic impact of the current geopolitical situation. The continued uncertain situation may lead to significant positive or negative deviations in the projected result, especially in earnings projections for international and equity investment business.

KfW expects promotional expense of EUR 0.4 billion in 2024.

Overall conclusion

In light of the economic environment and expected demand, KfW projects new business volume of EUR 89.2 billion and Consolidated profit of EUR 1.0 billion for 2024.

The further development of the economic and geopolitical situation, the uncertainty due to the war in Ukraine and the conflict in the Middle East as well as increased inflation could have an impact on German and global economic performance, which in turn may affect the achievement of KfW's objectives set for financial year 2024. KfW will continue to closely monitor the development of the crises and the consequences for KfW's business.

Consolidated financial statements

Accounting policies 68
(1) Basis of presentation of KfW Group 68
(2) Accounting standards that are new, amended or to be adopted for the first time 68
(3) Changes to material accounting policies 71
(4) Judgements and accounting estimates 71
(5) Group of consolidated companies 72
(6) Basis of consolidation 72
(7) Financial instruments 72
(8) Derivatives and hedging relationships 83
(9) Offsetting of financial instruments 85
(10) Foreign currency translation 86
(11) Revenue from contracts with customers 86
(12) Promotional lending business at KfW 87
(13) Non-current assets held for sale 87
(14) Repurchase agreements and securities lending 88
(15) Property, plant and equipment 88
(16) Leases 88
(17) Intangible assets 89
(18) Risk provisions 89
(19) Income tax assets and liabilities 90
(20) Equity 91
(21) Trust activities 91

Notes to the statement of comprehensive income 92
(22) Net interest income 92
(23) Net gains/losses from risk provisions 94
(24) Net commission income 94
(25) Net gains/losses from hedge accounting 96
(26) Net gains/losses from other financial instruments at fair value through profit or loss 99
(27) Net gains/losses from disposal of financial assets at amortised cost 100
(28) Net gains/losses from investments accounted for using the equity method 100
(29) Administrative expense 101
(30) Net other operating income or loss 101
(31) Taxes on income 102

Segment reporting 104
(32) Segment reporting by business sector 104
(33) Segment reporting by region 108

(44) Intangible assets 119
(45) Income tax assets 120
(46) Other assets 120
(47) Financial liabilities at amortised cost 121
(48) Financial liabilities at fair value 122
(49) Value adjustments from macro fair value hedge accounting 123
(50) Derivatives designated for hedge accounting 123
(51) Risk provisions 123
(52) Income tax liabilities 127
(53) Other liabilities 127
(54) Equity 128

Notes to financial instruments **130**
(55) Gains and losses from financial instruments by measurement category 130
(56) Disclosures on fair value 131
(57) Disclosures on micro fair value hedge accounting 143
(58) Disclosures on macro fair value hedge accounting 148
(59) Additional disclosures on derivatives 151
(60) Additional disclosures on financial liabilities at fair value 153
(61) Contractual payment obligations arising from financial instruments 154
(62) Disclosures on repurchase agreements 156
(63) Disclosure on offsetting financial instruments 157

Other notes **159**
(64) Off-balance sheet transactions 159
(65) Trust activities and administered loans 159
(66) Leasing transactions as lessee 160
(67) Average number of employees during the financial year 161
(68) Remuneration report 161
(69) Related party disclosures 168
(70) Auditor's fees 170
(71) Disclosures on unconsolidated structured entities 170
(72) Disclosures on shareholdings 172
(73) Events after the balance sheet date 178

	Notes	2023 EUR in millions	2022 EUR in millions
Interest income from the effective interest method		17,300	3,065
Other interest income		1,099	721
Interest income, total	(22)	**18,399**	**3,786**
Interest expense	(22)	15,943	1,638
Net interest income[1]		**2,456**	**2,148**
Net gains/losses from risk provisions	(7), (23)	169	–124
Net interest income after risk provisions		**2,625**	**2,024**
Commission income	(11), (24)	622	649
Commission expense	(24)	29	32
Net commission income		**593**	**617**
Net gains/losses from hedge accounting	(8), (25), (57), (58)	291	150
Net gains/losses from other financial instruments at fair value through profit or loss	(26)	–177	64
Net gains/losses from disposal of financial assets at amortised cost	(27)	0	–1
Net gains/losses from investments accounted for using the equity method	(6), (28)	29	43
Administrative expense	(29)	1,561	1,525
Net other operating income or loss	(30)	–76	-8
Profit/loss from operating activities		**1,724**	**1,365**
Taxes on income	(19), (31)	165	–1
Consolidated profit		**1,559**	**1,365**

[1] Refer to Note 22 for a gross presentation of Interest income and Interest expense related to reporting of negative interest income and positive interest expense.

Consolidated statement of comprehensive income

	2023 EUR in millions	2022 EUR in millions
Consolidated profit	**1,559**	**1,365**
Other comprehensive income	**–65**	**1,007**
Change in own credit risk of liabilities designated at fair value through profit or loss	49	137
Defined benefit pension obligations (before taxes)	–121	922
Deferred taxes on defined benefit pension obligations	7	–53
Consolidated comprehensive income	**1,494**	**2,372**

Other comprehensive income comprises amounts recognised directly in equity under Revaluation reserves. These amounts include income and expense from the change in own credit risk of liabilities designated at fair value through profit or loss, changes in actuarial gains and losses for defined benefit pension obligations, and changes in deferred taxes reported depending on the underlying transaction.

Assets

	Notes	31 Dec. 2023	31 Dec. 2022
		EUR in millions	EUR in millions
Cash reserves	(34)	47,431	51,848
Financial assets at amortised cost	(7), (12), (35), (36), (37), (57), (58)	503,175	500,265
Financial assets at fair value	(7), (38), (59)	16,799	16,624
Value adjustments from macro fair value hedge accounting	(8), (39), (59)	–14,771	–25,859
Derivatives designated for hedge accounting	(8), (40), (57), (58), (59)	5,443	9,005
Investments accounted for using the equity method	(41), (6)	626	642
Non-current assets held for sale	(13), (42)	78	64
Property, plant and equipment	(15), (43)	929	929
Intangible assets	(17), (44)	82	100
Income tax assets	(19), (45)	176	239
Other assets	(11), (46)	772	771
Total		**560,741**	**554,628**

Liabilities and equity

	Notes	31 Dec. 2023	31 Dec. 2022
		EUR in millions	EUR in millions
Financial liabilities at amortised cost	(7), (47), (57), (58)	499,700	492,579
Financial liabilities at fair value	(7), (48), (59), (60)	10,365	11,401
Value adjustments from macro fair value hedge accounting	(8), (49), (59)	–1	18
Derivatives designated for hedge accounting	(8), (50), (57), (58), (59)	9,300	10,819
Provisions	(7), (18), (51)	2,811	2,672
Income tax liabilities	(19), (52)	107	61
Other liabilities	(11), (53)	386	501
Equity	(20), (54)	38,073	36,579
Paid-in subscribed capital		3,300	3,300
Capital reserve		8,447	8,447
Reserve from the ERP Special Fund		1,191	1,191
Retained earnings		25,150	23,391
Fund for general banking risks		0	200
Revaluation reserves	(7), (20), (54)	–15	50
Total		**560,741**	**554,628**

	Subscribed capital	Capital reserve	Reserve from the ERP Special Fund	Retained earnings	Fund for general banking risks	Revalua-tion reserves	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2022	**3,300**	**8,447**	**1,191**	**22,026**	**200**	**–957**	**34,207**
Consolidated comprehensive income	0	0	0	1,365	0	1,007	2,372
Consolidated profit	*0*	*0*	*0*	*1,365*	*0*	*0*	*1,365*
Other comprehensive income	*0*	*0*	*0*	*0*	*0*	*1,007*	*1,007*
Reclassifications within Equity	0	0	0	0	0	0	0
As of 31 Dec. 2022	**3,300**	**8,447**	**1,191**	**23,391**	**200**	**50**	**36,579**
Consolidated comprehensive income	0	0	0	1,559	0	–65	1,494
Consolidated profit	*0*	*0*	*0*	*1,559*	*0*	*0*	*1,559*
Other comprehensive income	*0*	*0*	*0*	*0*	*0*	*–65*	*–65*
Reclassifications within Equity	0	0	0	200	–200	0	0
As of 31 Dec. 2023	**3,300**	**8,447**	**1,191**	**25,150**	**0**	**–15**	**38,073**

The difference to the consolidated comprehensive income is allocated to Other retained earnings or – if recognised directly in equity – to revaluation reserves.

Note 54 provides details on the consolidated statement of changes in equity.

	2023 EUR in millions	2022 EUR in millions
Consolidated profit	**1,559**	**1,365**
Non-cash items included in consolidated profit and reconciliation to cash flow from operating activities:		
Depreciation, amortisation, impairment and reversal of impairment losses (assets) and changes in risk provisions for lending business	50	399
Changes in provisions for pensions and similar commitments and Other provisions	235	161
Other non-cash expenses and income	47	–47
Profit/loss from the disposal of assets	0	0
Other adjustments	–2,339	–2,102
Subtotal	**–446**	**–224**
Changes in assets and liabilities from operating activities after adjustment for non-cash items:		
Financial assets at amortised cost	–2,893	–27,304
Financial assets at fair value	–326	–431
Other assets relating to operating activities	–7,302	33,277
Financial liabilities at amortised cost	7,121	–3,806
Financial liabilities at fair value	–18	–1,818
Other liabilities relating to operating activities	–2,825	7,697
Interest and dividends received	18,399	3,786
Interest paid	–15,943	–1,638
Income tax paid	–117	-46
Cash flow from operating activities	**–4,350**	**9,492**
Property, plant and equipment/Intangible assets:		
Cash proceeds from disposals	2	10
Cash payments for acquisitions	–77	–41
Securities and investments (equity investments):		
Cash proceeds from disposals/Cash payments for acquisitions	7	–53
Cash flow from investing activities	**–68**	**–83**
Cash proceeds from/Cash payments for capital increases/decreases	0	0
Changes from other financing activities	0	0
Cash flow from financing activities	**0**	**0**
Cash and cash equivalents as of the end of the previous period	**51,848**	**42,439**
Cash flow from operating activities	–4,350	9,492
Cash flow from investing activities	–68	–83
Cash flow from financing activities	0	0
Cash and cash equivalents as of the end of the period	**47,431**	**51,848**

The statement of cash flows shows the changes in Cash and cash equivalents in the financial year classified as the Cash flows from operating activities, investing activities and financing activities. The item Other adjustments largely comprises the adjustment for net interest income in the amount of EUR –2,456 million (2022: EUR –2,148 million). The cash payments for the repayment portion of lease liabilities included in Cash flow from operating activities amounted to EUR 13 million in financial year 2023 (2022: EUR 13 million). The cash payments for the interest portion of lease liabilities are reported under Interest paid.

For more information on the group’s liquidity risk management, see the section on liquidity risk in the combined management report.

Notes

institution based in Frankfurt am Main (Palmengartenstrasse 5–9, 60325 Frankfurt am Main, Germany). KfW promotes sustainable improvement of economic, environmental and social conditions around the world, but with an emphasis on the German economy.

The Executive Board of KfW is responsible for preparing the consolidated financial statements and the combined management report. The Executive Board will approve the publication of the consolidated financial statements on 6 March 2024.

As of the reporting date, KfW Group comprises KfW and six fully consolidated subsidiaries. One joint venture and three associated companies are accounted for using the equity method.

Pursuant to Section 315e (1) of the German Commercial Code *(Handelsgesetzbuch – "HGB")*, the consolidated financial statements as of 31 December 2023 have been prepared in accordance with the International Financial Reporting Standards ("IFRS"), as adopted by the European Union ("EU"), and with the interpretations set out by the IFRS Interpretations Committee ("IFRS IC"), as mandatory consolidated accounts in accordance with Article 4 of Regulation (EC) No. 1606/2002 ("IAS Regulation") of the European Parliament and of the Council of 19 July 2002, as well as further regulations on the adoption of certain international accounting standards. The standards and interpretations that apply are those that have been published and endorsed by the European Union as of the reporting date.

The supplementary provisions of the German Commercial Code that also apply to IFRS consolidated financial statements have been taken into account. The combined management report prepared in accordance with Section 315 of the German Commercial Code includes the risk report with risk-oriented information on financial instruments as set out in IFRS 7, as well as information on capital and capital management as set out in IAS 1.134.

The consolidated financial statements were prepared in accordance with accounting policies that are consistent across KfW Group and are prepared on a going concern basis. The companies included in the consolidated financial statements have prepared their annual financial statements as of 31 December 2023, except for some associated companies accounted for using the equity method, where financial statements as of 30 September 2023 were used. Material events for the latter companies as of the reporting date were also taken into account.

The accounting policies in the consolidated financial statements were applied consistently with the exception of the items listed in Note 3.

The reporting currency is the euro. Unless otherwise specified, all amounts are stated in millions of euros (EUR in millions).

(2) Accounting standards that are new, amended or to be adopted for the first time

A. Impact of new or amended IFRS/IFRIC interpretations adopted for the first time in financial year 2023

The February 2021 amendments to IAS 1 "Presentation of Financial Statements" and IFRS Practice Statement 2 specify the extent to which accounting policy information must be disclosed in IFRS financial statements (notes). This shifts involved, the type of transaction, other events and conditions must be considered. The amendments also explain when an accounting policy is to be considered material.

The changes to IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors” focus solely on accounting estimates and are intended to provide guidance on how to distinguish between accounting policies and accounting estimates. The amendment includes a definition of accounting estimate for the first time. Moreover, it clarifies that accounting estimates based on changes and new developments or circumstances do not constitute errors requiring rectification.

The amendment to IAS 12 “Income Taxes” (Deferred Tax related to Assets and Liabilities arising from a Single Transaction) limits the scope of the initial recognition exemption, according to which deferred tax assets and liabilities are not to be recognised at the time the asset or liability is acquired. Deferred taxes are to be recognised for transactions that give rise to taxable and deductible temporary differences in the same amount. The amendment is particularly relevant for IFRS 16 applications.

With the international model rules for the reform of international corporate taxation, the OECD published the framework for international minimum taxation (Global Anti-Base Erosion [GloBE] Model Rules [Pillar Two]). The amendments to IAS 12 published in May 2023 give companies temporary relief from recognising or disclosing deferred taxes arising under the OECD’s Pillar Two income taxes. Additional disclosure requirements are provided with regard to the actual tax expense in connection with Pillar Two. In periods in which legislation implementing the Pillar Two rules has been essentially adopted but not yet enacted, known or reliably estimable information that allows the effect of the Pillar Two rules or the resulting income taxes on the company to be estimated must be disclosed.

IFRS 17 “Insurance Contracts” was issued in May 2017 and supersedes IFRS 4 “Insurance Contracts”. It sets out principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. The IASB adopted amendments and clarifications to IFRS 17 at the end of June 2020, thereby delaying the date of mandatory first-time application of IFRS 17 by two years, to 1 January 2023.

The amendments to IFRS 17 of December 2021 relate to financial assets of entities that are applying IFRS 17 and IFRS 9 in their accounting for the first time and presenting comparative information that has not been restated for IFRS 9. Entities have the option of presenting comparative information about a financial asset as if IFRS 9 classification and measurement requirements had been applied to that financial asset before. The option may be applied to each individual instrument.

The accounting standards that are new, amended or to be adopted for the first time have no significant impact on the net assets, financial and earnings position of KfW Group. The future effects of the Pillar Two rules on the net assets, financial and earnings position are currently being assessed.

Standard concerned	Mandatory application for financial years from	Description
IAS 1	1 Jan. 2024	The January 2020 amendments serve to clarify the criteria for classifying liabilities as current or non-current. In the future, the classification of liabilities as current or non-current will be based on the rights held by the entity on the reporting date. A liability is classified as non-current if, at the end of the reporting period, the entity has a substantial right to defer settlement of the liability for at least twelve months after the reporting date. Further guidance on the interpretation of specific criteria and explanatory notes have also been included. The amendment to IAS 1 published in October 2022 clarifies when debt is to be classified as current or non-current, taking into account agreed covenants. It stipulates that only covenants that must be complied with on or before the reporting date affect the classification as current or non-current liabilities. For liabilities classified as non-current with covenants which are due within twelve months after the reporting date, additional disclosures must be made in the notes to enable users of the financial statements to assess the risk of a possible early repayment of the liability.
IFRS 16	1 Jan. 2024	The amendment to IFRS 16 introduces rules on subsequent measurement for seller-lessees in the case of leases in a sale and leaseback transaction. It stipulates that in the subsequent measurement, the lease liability is to be measured in a way that does not recognise any gain or loss that relates to the right of use it retains.

KfW Group does not utilise the permitted early application options of the standard amendments. The future amendments to the standards described above are not expected to have any significant impact on the group’s net assets, financial and earnings position.

C. New or amended IFRS/IFRIC interpretations to be applied in the future that were published by the EU before the reporting date but have not yet been endorsed into European law

Standard concerned	Effective for financial years from	Description
IAS 7 / IFRS 7	1 Jan. 2024	The amendments to IAS 7 and IFRS 7 published in May 2023 are intended to enhance the transparency of supplier finance arrangements. Qualitative and quantitative information on arrangements with suppliers should be made available in order to understand their effects on the financial liabilities, cash flows and liquidity risk of the reporting entity.
IAS 21	1 Jan. 2025	The amendments to IAS 21 published in August 2023 require an entity to apply a consistent approach when assessing whether a currency is exchangeable into another currency. This determines how an entity determines the exchange rate to be applied when a currency is not exchangeable. Additional information must be disclosed in cases of non-exchangeability.

KfW does not intend to utilise the permitted early application options of the standard amendments. The amendments described above are likely to have only minor effects, if any, on the group’s net assets and financial and earnings position.

portfolio was also transitioned to SOFR in this context. This essentially makes the hedging relationship more effective, as the tenor spread is no longer a source of ineffectiveness for this portfolio. However, due to the low volume of the USD macro-hedge portfolio, this did not have any significant effect on the income statement.

The persons in key positions were limited to the KfW Executive Board and the members of the Board of Supervisory Directors. Please refer to the section “Related party disclosures”.

(4) Judgements and accounting estimates

The consolidated financial statements include amounts based on management’s judgements and/or estimates and assumptions which are determined to the best of our ability and in accordance with the applicable accounting standard. Actual results realised in a future period may differ from these estimates. Material judgements, estimates and assumptions are required, in particular, for calculating risk provisions (including risk provisions for lending business), recognising and measuring provisions (primarily for pension liabilities and legal risks), measuring the fair value of financial instruments based on valuation models (including determining the existence of an active market), determining remaining terms of leases, assessing and measuring impairment of assets, and assessing the utilisation of deferred tax assets. The estimates and the assumptions underlying these estimates are reviewed on an ongoing basis and are based, among other things, on historical experience or expected future events that appear likely given the particular circumstances. Where judgements as well as estimates and their underlying assumptions were required, the assumptions made are explained in the relevant notes.

KfW Group does not expect any deviations from its assumptions and does not foresee any uncertainties in its estimates that could result in a material adjustment to the related assets and liabilities within the next financial year. Given the strong dependency on the development of the economy and financial markets, however, such deviations and uncertainties cannot be fully ruled out. These risks are nevertheless low because valuation models – especially those involving the use of inputs not based on observable market data – are employed to measure only small parts of receivables, securities, investments and borrowings measured at fair value, on the one hand, and only a small portion of financial derivatives used to economically hedge risk, on the other hand.

The anticipated impact of the war in Ukraine and the conflict in the Middle East were taken into account in calculating risk provisions and fair values for equity investments within the framework of the established accounting policies. The procedure and the minor adjustments are presented as follows:

Risk provisions for performing loans (stages 1 and 2) and, in the retail business, also for non-performing loans (stage 3) are calculated using risk parameters which are geared to regulatory and internal credit risk models for the parameterisation of probability of default (“PD”), loss given default (“LGD”) and exposure at default (“EAD”).

Despite the current crises, expectations regarding the economic environment have improved since the start of the financial year, which led to a less conservative approach to loss ratios compared to the previous year.

In addition, the improved macroeconomic expectations compared to the previous year are reflected in the point in time adjustment of probabilities of default, which resulted in a reversal of risk provisions for performing loans in the

Environmental, social und governance risks (“ESG risks”) do not present new risks for the group to take into account, as Risk Management already addresses ESG risks in the context of business partner ratings, credit approvals and portfolio analyses as part of the group’s risk strategy. They are therefore already reflected in the risk provisions for lending business and may also be reflected in the valuation of equity investments as part of a qualitative overall risk view.

(5) Group of consolidated companies

All significant subsidiaries, joint ventures and associated companies are included in the consolidated financial statements.

Subsidiaries are all business units (including structured entities) over which the group exercises control. Control exists when a group is exposed or entitled to variable cash flows through its relationship and has the opportunity to use its power of disposal to influence the amount of such cash flows. Subsidiaries are included in the consolidated financial statements (full consolidation) from the point at which control is transferred to the group. They are deconsolidated when control is lost.

Joint ventures and associated companies are included in the consolidated financial statements in accordance with IFRS 11/IAS 28 if a joint agreement is in place or the group has significant influence. Significant influence exists when KfW can participate in financial and business policy decisions regarding the associated company even if it does not have sole or joint control.

The composition of the consolidated group is presented in the Notes under “List of KfW Group shareholdings”.

(6) Basis of consolidation

Consolidation involves revaluing the total assets and liabilities of the subsidiaries at the acquisition date, irrespective of the equity interest held, and incorporating them into the consolidated statement of financial position and accounting for them in subsequent periods in accordance with the applicable standards. If the revaluation adjustments result in an excess compared to acquisition cost, this excess amount is capitalised as goodwill. No goodwill is currently recognised.

Any intercompany assets and liabilities as well as expenses and revenues from transactions between consolidated group companies are eliminated through debt consolidation, or earnings and expenses consolidation, respectively. Intercompany profits between fully consolidated companies are also eliminated.

Investments in associates and joint ventures are accounted for using the equity method. The group’s share of the profits or losses of associates and joint ventures is recognised in the “Net gains/losses from investments accounted for using the equity method” line item in the income statement.

There are no minority interests within KfW Group.

(7) Financial instruments

A. Classification and measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The rules under IFRS 9 “Financial Instruments” serve as the basis for recognition and measurement of financial instruments.

IFRS 9 distinguishes between four categories of measurement for financial assets:

1. At amortised cost
2. At fair value through profit or loss (“FVTPL”), with the two sub-categories: mandatory and designated
3. At fair value through other comprehensive income (“FVTOCI”) with no recycling into profit or loss (not used in the group)
4. At fair value through other comprehensive income (“FVTOCI”) with recycling into profit or loss (not used in the group)

Instruments are assigned to business models on a portfolio basis. IFRS 9 provides for three business models to manage financial assets:

1. Hold to collect – financial assets are held with the objective of collecting contractual cash flows.
2. Hold to collect and sell – financial assets are held with the objective of both collecting the contractual cash flows and selling the financial assets (not used in the group).
3. Hold to sell – financial assets held with the objective of selling, or which do not fulfil the “hold to collect” or “hold to collect and sell” criteria.

The cash flow criterion is assessed for each individual financial asset as the second step. The cash flows of financial instruments are then checked for consistency with a basic lending arrangement and as to whether they thus constitute SPPIs on the outstanding loan balance. IFRS 9 defines interest as compensation for the time value of money and credit risk assumed, although it can also include a premium for liquidity risk. As is customary for the sector, compensation (e.g. for equity or administrative costs) and a profit margin may also be included.

If payments contain payments beyond SPPIs, they must be measured at fair value. This also applies to non-recourse financing where the cash flows of the financed asset are increased or limited in such a way that they no longer constitute interest or principal payments in economic terms and the bank is consequently not exposed to a credit risk but rather to a project or investment risk.

A financing agreement condition does not affect classification if its effect on the contractual cash flows of the financial asset is only minor (de minimis). The group employs group-wide rules and a standardised classification of contractual covenants in assessing the SPPI criterion. For sustainability-linked loans in which the interest rate varies depending on compliance with defined ESG criteria, a de minimis threshold value is taken as the basis for assessing the SPPI criterion. The threshold value refers to the level of margin variability.

An assessment is made in non-recourse loans as to whether mitigation of the property or project risks creates a sufficient risk buffer and whether this then outweighs the credit risk.

A financial asset must have been allocated to a portfolio with the “hold to collect” business model and meet the cash flow criterion for measurement at amortised cost. The KfW business model is focused on a long-term sustainability approach. As the group does not enter into any transactions with the intention of generating a short-term profit, the Executive Board has decided on the “hold to collect” business model for all credit portfolios (except for the two cases

– Holding arrangements for the Federal Republic of Germany: Holdings KfW maintains by mandate for the Federal Republic of Germany are not subject to KfW management. Sales are to be executed upon the Federal Government's instruction. As KfW cannot assume that these positions will remain in the portfolio for the long term, it cannot assume a "hold to collect" intention.
– KfW IPEX-Bank's syndication business: This business focuses on short-term sales and not on the objective of holding and selling the assets in equal measure.

Both cases of exception are assigned to the "hold to sell" business model. The holdings are measured at FVTPL.

Securities portfolios are also assigned to the "hold to collect" business model. This applies to the group's liquidity portfolio as well. As the group places minimum requirements on the ECB-eligibility of securities with regard to its liquidity portfolio, liquidity is secured by means of repo transactions. This therefore means that sales from the liquidity portfolio are unnecessary. The ancillary agreements are recorded and evaluated in the system to check the SPPI criterion. Securitisations are checked on a case-by-case basis to address the special rules for "contractually linked instruments". Consequently, the group's securities portfolios are largely measured at amortised cost using the effective interest method, as is its lending business.

The group's investments from equity finance are accounted for at fair value through profit or loss, as these are either equity instruments or debt instruments with no fixed interest or principal payments. The group does not exercise the option of FVTOCI for equity instruments.

Consequently, the group applies only the first two categories for financial assets: amortised cost and FVTPL.

IFRS 9 only provides for two categories for financial liabilities: amortised cost and FVTPL. Financial liabilities are accounted for at FVTPL if they are classified as held for trading (mandatory fair value) or assigned to this measurement category at initial recognition through application of the fair value option (designated fair value); otherwise they are accounted for at amortised cost. The classification must be irrevocably determined at initial recognition. Reclassification is not permitted.

All non-derivative financial liabilities are held for non-trading purposes in the group. All non-derivative financial liabilities for which the fair value option has not been exercised are classified as liabilities at amortised cost. These are thus measured at amortised cost using the effective interest method. For the group, this category covers funding reported in Financial liabilities at amortised cost (Liabilities to banks, Liabilities to customers and Certificated liabilities). The fair value option is exercised for some structured liabilities such as promissory note loans *(Schuldscheindarlehen)* and certificated liabilities. This concerns liabilities with bifurcated structures as well as liabilities with non-bifurcated structures for which there is an accounting mismatch unless they meet the requirements for application of hedge accounting. In exercising the fair value option, valuation effects resulting from changes in own credit risk are recognised directly in equity in the revaluation reserve.

Derivatives are concluded solely for hedging purposes in the group and measured at FVTPL.

Derivatives are recognised as of the trade date, and all other financial assets as of the settlement date. They are derecognised when the contractual rights from the assets have expired, the power of disposal or control has been transferred, or a substantial portion of the risks and rewards has been transferred to a third party unrelated to

Financial instruments are initially recognised at fair value. Directly attributable transaction costs are included as incidental acquisition costs.

Financial instruments subsequently measured at amortised cost are measured based on the fair value at initial recognition, taking into account any principal repayments, impairments, and where applicable, contractual amendments. The amortisation of premiums and discounts, transaction costs and fees is performed in accordance with the effective interest method on the basis of the contractual cash flows. Discounts are amortised in the promotional lending business until the end of the first fixed interest rate period (generally five to ten years).

Subsequent measurement at fair value for recognition in the financial statements or for the disclosure of financial instruments in the Notes is presented in “Section D. Fair value” below.

In accordance with Article 2 (4) of the KfW Law, the German Federal Government may mandate transactions to KfW on a case-by-case basis if there is a public interest on the part of the Federal Republic of Germany. Such transactions are referred to as mandated transactions. This means that KfW is mandated by the Federal Government to enter into or acquire certain financial instruments. Both equity and debt instruments can be used for such purposes. Mandated transactions are accounted for by applying the generally accepted IFRS rules on additions and disposals, but also on the receipt of income.

Due to the supplemental agreements with the Federal Government often associated with mandated transactions, the disposal criteria and, in particular, the existence of on-lending agreements must also be checked. In addition, a review of the initial recognition of the relevant financial instruments must be conducted. On-lending agreements ensure that cash flows between KfW and the respective party to the agreement are ultimately passed on to the Federal Government. While the disposal criteria are normally not met with respect to debt instruments, they are generally met when applied to equity instruments, and the financial instrument is thus de-recognised immediately after initial recognition in the statement of financial position. Equity instruments resulting from mandated transactions are therefore not recognised in the financial statements, but are included in disclosures on trust activities in the notes.

B. Impairments

In the group, provisions for loan losses are accounted for in accordance with IFRS 9 requirements and applied to the following financial instruments:

- Loans and receivables as well as third-party securities measured at amortised cost
- Loan commitments not measured at fair value through profit or loss
- Financial guarantees not measured at fair value through profit or loss

Impairments are calculated based on a three-stage model. All assets are assigned to stage 1 at initial recognition and an impairment is calculated that is equivalent to the 12-month expected credit loss (“ECL”).

Subsequently, expected credit losses are calculated based on changes in a financial instrument’s credit risk since initial recognition. If there has been a significant deterioration of the credit risk (stage 2) or objective evidence of impairment is identified (stage 3), expected credit losses are to be calculated over the remaining lifetime (lifetime ECLs). If, in contrast, there has been no significant increase in credit risk, the financial instrument is still assigned to stage 1 and only the ECLs for the term of the instrument resulting within the next twelve months from potential loss events are taken into account.

amount.

A lifetime ECL is also recognised for financial instruments in stage 3 as risk provisioning. Assignment to stage 3 and thus classification as impaired is undertaken in line with the group-wide default definition, which reflects the definition of “default of an obligor” in accordance with Article 178 of the Capital Requirements Regulation (“CRR”). The definition distinguishes between the 90 days past due and unlikely to pay criteria. A distinction is made in calculating impairment in stage 3 between significant (non-retail) and non-significant (retail) financial instruments. Impairment for retail business in stage 3 is calculated based on risk parameters and applying a PD of 1. Individual impairment is recognised for incurred losses and is computed on the basis of individual loans for significant portfolios in the lending business. The amount of the impairment loss equals the difference between the carrying amount of the loan and the present value of discounted expected future cash flows from interest, redemption payments and collateral cash flows. Any reversals of individual impairment losses are accounted for through profit or loss. Interest income for these financial instruments is recognised based on the net carrying amount.

In contrast to the lending business, expected losses for defaulted securities are not calculated based on cash flow but instead on market values in stage 3. This is due to the assumption that the market value in the case of impairment is primarily influenced by credit rating factors.

Purchased or originated credit-impaired financial assets (“POCI”) are not significant due to the group’s business model. The group has therefore decided not to separately disclose these special requirements. If there are individual cases that meet the POCI definition, they will be assigned to stage 3 based on the default rating at the time of purchase.

The group takes a nuanced approach to assignment to stages that takes both rating and qualitative information into account.

It uses the change in the probability of default over the remaining term (lifetime PD) compared with the probability of default expected for this period at initial recognition (forward lifetime PD) as a basis to assess whether a transaction can migrate from stage 1 to stage 2. This ensures that only transactions for which there is a significant deviation from the originally expected probability of default are transferred to stage 2. Concessions (contractual modifications) made to the obligor for economic or legal reasons (forbearance), are also considered as a factor in transfer to a subsequent stage.

As there is no individual rating specific to an obligor in the retail business, transfers from stage 1 to stage 2 are based on other credit deterioration indicators, such as negative factors or 30-days-past-due status.

The group does not exercise the option of waiving assessment on whether there has been a significant increase in credit risk, if the instrument is determined to have “low credit risk” at the reporting date (low credit risk exemption).

The IFRS 9 impairment model takes a symmetrical approach to migration, meaning that forward migration to stage 2 or stage 3 as well as reversion back from stages 2 and 3 are possible. Periods of good conduct are defined for the retail business, based on previous past-due status (> 30 days) or default. These range from 90 days to two years, depending on the specifics of the case. This accounts for the fact that no rating-based transfer criterion is applied to the retail business, and therefore, for example, in the absence of a payment default (> 30 days) without a good conduct period, there would be an immediate reversion to stage 1.

accordance with IFRS 9. This enables largely uniform credit risk modelling in line with supervisory law, risk management and IFRS requirements even though they may individually differ somewhat in scope. Therefore, essentially best estimate parameters are used to determine the expected credit loss; margins of conservatism are not included. Downturn components are only taken into account in the risk parameters in crisis situations.

Calculation of one-year PD is based on the internal rating system, in which every exposure is assigned a PD score that corresponds to a rating scale of 18 levels for non-defaulted transactions (“PL”) and two levels for defaulted transactions (“NPL”). The lifetime PDs are derived from the one-year PD via migration matrices. For IFRS-9-compliant PD modelling, the internal credit risk parameters are adjusted by placing a greater weight on macroeconomic factors from a point-in-time (“PIT”) perspective. The adjustment is made through segment and rating-specific modelling of PD premiums and discounts on regulatory PD (through-the-cycle PD). This is based on expert estimates of the economic situation of sectors and countries, with assessment of expected effects, taking into account forward-looking information. This approach differs for the retail business, for which premiums and discounts are calculated applying an expert model based on econometric factors.

LGD is the loss ratio that results in the event of default after taking collateral into account. In accordance with IFRS 9 impairment requirements, a multi-year view without taking internal costs into account is generally required. The regulatory LGD parameters are adjusted accordingly in order that internal costs for IFRS 9 are not included in the calculation of expected credit losses.

The EAD per time bucket corresponds to the loan drawdown expected at the time of default, taking into account additional drawings on open lines of credit. For the off-balance sheet portion, the expected drawdown is calculated based on credit conversion factors (“CCFs”).

In times of greater uncertainty, the economic environment is taken into account in addition to the point-in-time adjustment of default probabilities by means of a further macroeconomic scenario.

Risk provisions for on-balance sheet lending and securities business are deducted directly from the statement of financial position item Financial assets at amortised cost. Risk provisions for the off-balance sheet lending business are accounted for on the liabilities side as Provisions (sub-item: Provisions for credit risks).

The credit risks resulting from the on- and off-balance sheet lending business and from financial assets measured at amortised cost are accounted for through impairments recognised in profit or loss in the amount of the one-year expected credit loss (stage 1) or the lifetime expected credit loss (stage 2 and stage 3). Additions to and reversals of risk provisions are recognised in Net gains/losses from risk provisions in the income statement.

An asset is written off in the event that it, or a portion thereof, is estimated as irrecoverable (write-off). In the non-retail business, this is not performed until there is no longer a prospect of recovery, as, for instance, all collateral has been realised or, in the event of insolvency, creditor quotas have been distributed or insolvency proceedings have been discontinued for lack of assets. Write-offs in the retail business are performed pursuant to defined criteria such as insolvency or a fixed default period, which are both related to termination of the loan. Recovery is pursued as long as it is economically viable.

C. Contractual modifications

Contractual modifications are credit rating or market-induced adjustments to contractual cash flows. In contrast, an adjustment of contractual payments agreed at the time the contract was concluded is not deemed a contractual modification.

Substantial contractual modifications result in derecognition of financial assets even if the same or the modified contract legally remains valid. The modified financial instrument is treated in accordance with IFRS 9 as a new contract and reclassified on the basis of classification criteria. Derecognition resulting from substantial modification is not relevant for the “hold to collect” business model.

There is no write-off for non-substantial contractual modifications. Instead, the gross carrying amount is adjusted to the present value of the modified cash flows calculated using the original effective interest rate. This valuation difference is recognised in profit or loss as a modification gain or loss and amortised through net interest income on subsequent reporting dates.

The modification list serves as the group-wide basis for identification of relevant contractual modifications. This distinction between substantial and non-substantial modification is normally made based on qualitative criteria such as contractual amendments that result in a violation of the cash flow criterion within the meaning of IFRS 9.4.1.1(b).

In the event of a non-substantial modification, an assessment must be made of whether the credit risk has increased significantly and whether a stage transfer may consequently be necessary. This ensures that a credit risk-related contractual modification triggers an ad hoc rating as an early warning signal or at least a documented review of the need for an ad hoc rating in accordance with requirements for early detection of risks. This current rating is taken into account accordingly in the assignment to stages.

D. Fair value

Subsequent measurement at fair value, which, depending on the measurement category, is regularly determined either for recognition in the statement of financial position or for the disclosure of financial instruments in the Notes, is based on the following hierarchy at KfW Group:

Active market – allocation to level 1 (Quoted market price)

The best objective evidence of fair value is provided by published price quotations in an active market. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available and those prices represent current – i.e., traded on the date of conclusion or shortly before – and regularly occurring market transactions on an arm’s length basis. Together with the traded nominal volumes, the contract sizes and the number of contracts, this assessment takes into account in particular the bid-ask spreads observed which in the event of a significant increase indicate the absence of an active market.

No active market – allocation to level 2 (Valuation methods based on observable market data [model]) or level 3 (Valuation methods based in part on data not observable in a market) that the market participants would include in the pricing of that financial instrument, e.g. market interest rates, risk-free interest rates, credit spreads or swap curves. As these input parameters can generally be observed in the market and are usually the only significant parameters for measuring financial instruments using valuation techniques, the level for the financial instruments measured at fair value using valuation methods is usually level 2. This allocation also generally applies for prices quoted on inactive markets published by price service agencies.

If significant input parameters that are not observable on the market, such as expected risk-free customer margins or capital costs, are used in valuation techniques, the financial instrument is allocated to level 3.

If, at the date of initial recognition, differences arise between the market-based transaction price and the model price resulting from a valuation technique that makes significant use of unobservable parameters, an analysis is performed to determine whether there are economic reasons for these initial differences (e.g. conclusion of a transaction on a market that is not the main market for this transaction). These economic reasons only apply to a small part of the derivative portfolio of KfW Group, which comprises a hedging instrument for customers with respect to the export and project financing business. In relation to this, OTC (over the counter) derivatives in line with the market are not concluded on the main market (OTC interbank market) relevant to valuation. The initial differences determined upon conclusion of these derivatives are amortised through profit or loss over the life of the financial instruments, as the valuation parameters unobservable on the market are relevant to the valuation procedure. The reliability of this valuation technique is ensured via regular model validations.

This (valuation) hierarchy is applied in the group as follows:

Fair values are derived from active markets, in particular, for bonds and other fixed-income securities – unless there are inactive markets, and valuation techniques or prices quoted on inactive markets published by price service agencies are therefore used – as well as own issues reported on the liabilities side. Valuation techniques for non-derivative financial instruments are used primarily for products reported under Financial assets at fair value (loans and advances to banks, loans and advances to customers, and equity investments) and Financial liabilities at fair value (liabilities to banks, liabilities to customers, and certificated liabilities). Valuation techniques are also used for OTC derivatives.

The steps detailed below are taken for certain product groups:

For securities in the Securities and investments line item, the group examines whether a financial instrument is quoted on an active market on the basis of homogeneous portfolios. Market activity is assessed based on the following criteria:

- There is more than one market maker.
- Prices are set on a regular basis.
- Prices deviate only slightly between market makers.
- The bid-ask spread is narrow.

Prices on active markets are used to determine the fair value of the group’s asset securities as of the reporting date. In addition, for parts of the portfolio, prices from price service agencies are used that do not qualify as prices quoted on active markets. Should these not be available in individual cases, valuation techniques are used to determine default risk (debt valuation adjustments – “DVA”), collateral costs under credit support annexes (“CSA”) (collateral valuation adjustments – “ColVa”) and funding cost adjustments (“FCA”). KfW’s institute-specific funding costs are used to calculate the FCA. Value adjustments are not calculated separately for each transaction but for the portfolio of transactions on which a framework agreement is based. The allocation to individual transactions is based on the relative credit adjustment approach. The resulting adjustment amounts are very low as KfW generally pledges collateral for positive market values in accordance with standard market collateral agreements. In accordance with market practices, risk-free overnight interest rates are used for the valuation of the derivatives portfolio.

The fair value of Loans to banks and customers is calculated using the discounted cash flow (“DCF”) method based on the discounting of the risk-adjusted cash flows. The expected loss calculated for the respective reporting date is used to correct the contractual cash flows.

The holding arrangements for the Federal Republic of Germany are accounted for as receivables from the Federal Government. The receivables comprise the KfW-funded purchase price of the items held for the Federal Republic of Germany as well as an additional benefit from the sales proceeds of the items. The receivables are measured at fair value, with the additional benefit being accounted for as a key value driver using current market prices of the items held.

Valuation methods based on net asset value are also used in addition to the discounted cash flow method for valuation of equity investments. Due to the three-month time lag between the group’s reporting date (31 December 2023) and the reporting date for the equity funds (30 September 2023), the net asset values are adjusted, if necessary, in the event of short-term changes in the economic environment or new information regarding individual investments.

The Federal Republic of Germany’s liability for specific KfW liabilities in accordance with Article 1a of the KfW Law has an advantageous effect on KfW’s ability to refinance itself. In determining the fair value of KfW’s liabilities, the effect of this explicit direct state guarantee is also taken into account. The state guarantee does not represent an independent unit of account.

The fair value of financial instruments due on demand, such as Cash reserves or receivables and liabilities due on demand, is their carrying amount.

When no prices from liquid markets are available and prices on inactive markets cannot be provided by price service agencies, recognised valuation models and methods are used. The DCF method is used for securities, swaps, and currency and money market transactions with no embedded options or complex coupons. Stand-alone options, as well as derivatives with embedded options, triggers, guaranteed interest rates and/or complex coupon agreements, are measured using recognised models (e.g. Hull & White) unless they are listed on a stock exchange.

The aforementioned models are calibrated, if possible, on the basis of observable market data for instruments that are similar in terms of the type of transaction, maturity, and credit quality.

presentation, but rather incoming premium payments are recognised through profit or loss in Net commission income. If a financial guarantee contract is not designated to the fair value measurement category at initial recognition, a provision is recognised for expected losses from a financial guarantee as part of a subsequent assessment, applying IFRS 9 rules for risk provisioning. The group does not voluntarily designate financial guarantee contracts for measurement at fair value.

For the holder, on the other hand, this is a contingent asset that may not be capitalised. However, a (non-impaired) financial guarantee contract is, for the holder, collateral that may be included in calculating risk provisions for the recognised reference asset.

Provisions for expected losses from financial guarantees are reported under Provisions for credit risks.

F. Reporting and notes

Current interest and similar income from a financial asset are generally recorded under Interest income. If, due to the low interest environment, negative interest rates arise from a financial asset, these are also recorded in Interest income, with a minus sign. Premiums, discounts, processing fees and charges are amortised in Interest income using the effective interest method. Processing fees that are not amortised under the effective interest method are recognised under Commission income.

Any fair value changes of financial assets at fair value through profit or loss are recognised in Net gains/losses from other financial instruments at fair value through profit or loss.

Current interest arising from a financial liability is recorded in Interest expense. This also applies in the case of negative interest resulting from a low interest rate environment. Premiums and discounts are also amortised in Interest expense using the effective interest method over the expected life.

Results from the repurchase of own issues categorised as liabilities measured at amortised cost are recognised at the repurchase date in Net other operating income.

Classes for financial instruments have been largely defined in agreement with the group’s business model which is focused on the lending business. The definition is based in particular on the national requirements for balance sheet classification at banks and financial services institutions. The following classes (and sub-classes) were defined for financial assets and financial liabilities:

Statement of financial position item	Class	Sub-class
Financial assets at amortised cost	*Loans and advances to banks*	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Loans and advances to customers	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Securities and investments	Bonds and other fixed-income securities
Financial assets at fair value	*Loans and advances to banks*	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Loans and advances to customers	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Securities and investments	Bonds and other fixed-income securities
		Shares and other non-fixed income securities
		Equity investments
		Shares in non-consolidated subsidiaries
	Other derivatives	Interest-related derivatives
		Cross-currency derivatives
		Other derivatives
Financial liabilities at amortised cost	*Liabilities to banks*	Money-market transactions
		Promissory note loans
		Other financial liabilities
	Liabilities to customers	Money-market transactions
		Promissory note loans
		Other financial liabilities
	Certificated liabilities	Money-market issues
		Bonds and notes
Financial liabilities at fair value	*Liabilities to banks*	Money-market transactions
		Promissory note loans
		Other financial liabilities
	Liabilities to customers	Money-market transactions
		Promissory note loans
		Other financial liabilities
	Certificated liabilities	Money-market issues
		Bonds and notes
	Other derivatives	Interest-related derivatives
		Cross-currency derivatives
		Other derivatives

of the liability. Promotional loans that commercial banks on-lend without underwriting of liability are recognised in the class Loans and advances to customers.

The Loans and advances to banks and Loans and advances to customers classes also include loans that benefit from a subsidy (interest rate reductions) granted by KfW under the ERP economic promotion programme. The promotional grants awarded annually to KfW through the ERP Special Fund based on the ERP Economic Planning Act *(ERP-Wirtschaftsplangesetz)* for the purpose of executing the ERP economic promotion programme are recognised as deferred income in Other liabilities and are amortised in profit or loss under Interest income as the underlying funding expenses occur.

The Securities and investments class mainly comprises bonds and other fixed-income securities held in securities portfolios that belong to KfW and its subsidiaries, along with equity investments.

The securities portfolios mainly serve to support KfW's liquidity position and to stabilise and ensure the group's promotional capacity in the long term.

To achieve the same accounting treatment for equity investments with and without significant influence, individual group business areas that provide equity finance as part of their promotional mandate are considered as venture capital organisations for accounting purposes provided they meet the respective requirements. These equity investments, like other equity investments, are allocated to the Securities and investments class.

The Liabilities to banks and Liabilities to customers classes largely comprise KfW Group borrowings and money-market transactions.

Issued bonds, notes and money market securities are allocated to the Certificated liabilities class. Own issues repurchased in the open market are deducted from the liabilities as of the repurchase date.

In some of the Notes, these classes are broken down into additional sub-classes that relate mainly to products (for example, Loans and advances to banks are reported separately for money-market transactions and loans and advances).

Information about the type and extent of risks associated with financial instruments is also provided in the risk report section of the combined management report.

(8) Derivatives and hedging relationships

A. Hedging transactions/hedge accounting

KfW Group enters into financial derivatives to economically hedge interest rate fluctuation and currency risks, particularly those related to funding, lending and securities activities. Interest rate swaps, interest rate/currency swaps and base currency swaps are mainly used for this purpose. Interest rate swaps are used to convert fixed rate interest payments of the issuances or lending transactions into variable payments. In the case of refinancing in a foreign currency, payments are also converted into the functional currency (EUR). The hedge ratio for the issues is normally 1:1. Ineffectiveness therefore results exclusively from unhedged risks such as counterparty risk or tenor or basis spread risks.

Economic hedging relationships are designated as hedge accounting relationships or designated as fair value through profit or loss by using the fair value option when the IFRS requirements are met. Economic hedging relationships can

However, not all economic hedging relationships qualify for hedge accounting or the fair value option. In these cases, the risk-mitigating impact of the derivatives used for hedging purposes is not reflected in the accounts because the hedged risk associated with the underlying transactions is not recognised in profit or loss under IFRS. The applicable recognition requirements may therefore lead to one-sided valuation results from the derivatives used for hedging purposes in the group's income statement – as well as volatility in profit or loss – despite an economically effective hedging relationship.

Hedge accounting in the group is used solely in the form of fair value hedges to recognise economic hedging relationships. The hedging relationship is designated, firstly, at individual transaction and group level in the form of micro fair value hedge accounting, and, secondly, at portfolio level in the form of macro fair value hedge accounting. The group has exercised the option of applying IAS 39 rules for hedge accounting. If risk-free overnight interest rates are used in the valuation of the derivatives, this market practice is also subject to micro fair value hedge accounting for the measurement of the hedged risk related to the hedged item. The hedged risk in macro fair value hedge accounting generally relates to the variable interest rates of the derivative portfolio. The effectiveness of the hedging relationships is assessed using the dollar offset method and a regression analysis (80%–125% range for assessing effectiveness).

In micro fair value hedge accounting, interest and currency risks from bonds allocated to Securities and investments (in the Financial assets at amortised cost item) and, above all, from borrowings (in the Financial liabilities at amortised cost item) are hedged. In micro fair value hedging relationships at individual transaction level, the fair value changes attributable to the hedged risks are reported as an adjustment of the carrying amount of the hedged items with the corresponding gain or loss recognised under Net gains/losses from hedge accounting. The hedging instruments used for this purpose are recognised at fair value in Derivatives designated for hedge accounting. Changes in the value of the hedging instruments are also recognised in Net gains/losses from hedge accounting, largely compensating the profit or loss effects of the hedged items.

Macro fair value hedge accounting is used to hedge against interest risks primarily from loan receivables (in the Financial assets at amortised cost item) and firm obligations via future fixed-rate financing that are hedged against interest risks as part of dynamic asset liability management in the group. The fair value changes attributable to the hedged risks in the hedged portfolios in the Amortised cost category (loans and advances / liabilities) are accounted for in Value adjustments from macro fair value hedge accounting on the assets or liabilities side. Fair value changes attributable to the hedged risks from the hedged portfolios are reported in Net gains/losses from hedge accounting.

The hedging instruments are reported at fair value in Derivatives designated for hedge accounting. Changes in the value of these instruments are also recognised in Net gains/losses from hedge accounting, with the effect that they almost fully offset the earnings effects from the valuation of the hedged portfolios.

The portfolio of hedged items is updated monthly in the context of a dynamic hedge de-designation and designation process. The resulting fair value adjustments are amortised over the residual term of the maturity period in Net gains/losses from hedge accounting. Disposals from the hedged portfolios result in a proportional amortisation of the related fair value adjustments in Net gains/losses from hedge accounting. When cash flows from hedging presented in Financial assets at fair value or Financial liabilities at fair value, and the changes are presented in Net gains/losses from other financial instruments at fair value through profit or loss. These are largely offset by valuation effects from the hedged transactions. Fair value changes in liabilities resulting from changes in KfW's own credit risk are directly recognised in Other comprehensive income ("OCI").

Further derivative financial instruments are used to hedge risks, but their economic hedging relationships are not reflected in the accounts. The fair values of these hedging instruments are also presented in Financial assets at fair value or Financial liabilities at fair value, and the changes are presented in Net gains/losses from other financial instruments at fair value through profit or loss.

KfW Group neither uses derivatives for trading purposes nor does it enter into derivatives acting as a broker or intermediary on behalf of third parties.

B. Embedded derivatives

Derivative financial instruments can be part of a hybrid (combined) financial liability as embedded derivatives. Under certain conditions, they are accounted for separately from the host contract, similar to stand-alone derivatives. They must be bifurcated if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract. The host contract is accounted for according to its classification at inception.

KfW Group enters into contracts with separable embedded derivatives particularly with respect to its own funding. In the case of these products, the embedded derivatives must be bifurcated and recognised separately. Changes in fair value are then recognised in Net gains/losses from other financial instruments at fair value through profit or loss in the sub-line item Financial derivatives not qualifying for hedge accounting, where they have a compensatory effect on the valuation of the economic hedging derivatives.

The fair value option was selected for certificated liabilities with bifurcated (embedded) derivatives recorded prior to bifurcation.

(9) Offsetting of financial instruments

KfW uses the EUREX central clearing system to settle part of its derivative transactions. This form of settling derivative transactions results in the recognition of a net amount in the statement of financial position for the transactions affected, as the involvement of EUREX as the central counterparty (CCP) meets all of the requirements for offsetting as set out in the relevant IFRS standard. This means that positive and negative fair values of derivatives for which EUREX acts as the central counterparty are offset against the corresponding collateral and reported in a net item in the statement of financial position.

In the case of reverse repo and repo transactions, for which EUREX acts as the central counterparty, receivables and liabilities are also offset if the currencies and the value dates are the same.

In addition, framework agreements featuring netting agreements are in place between KfW and its business partners for OTC derivatives and securities repo transactions.

Close-out netting is not to be confused with the offsetting of payments in normal business. The same framework agreement may provide for the latter, i.e. that payments due on the same day and in the same currency may be offset and a net payment made instead of each individual payment (payment netting). This represents a present legal claim for offsetting.

All of KfW’s framework agreements relating to bilateral OTC derivatives (not in central clearing) include close-out netting agreements with the business partners. Payment netting is limited in the agreement to the relevant individual transaction, so that multiple transaction payment netting does not occur. The requirements for offsetting financial assets and financial liabilities are therefore not met for these KfW OTC derivatives.

KfW’s framework agreements for repo transactions include close-out netting agreements and, in some cases, payment netting agreements with the business partners as well. However, as KfW does not, as a rule, perform multiple transaction payment netting with repo transactions, the requirements for the offsetting of financial assets and financial liabilities are not met for such KfW repo transactions.

In accordance with the collateral agreements concluded for OTC derivatives and repo transactions, the values of the available collateral are used in determining the single compensation claim (or obligation) in close-out netting. Both cash and securities are permitted forms of collateral under the existing collateral agreements between KfW and its business partners. The collateral agreements provide for a transfer of title in the case of securities as collateral. Consequently, the transferred securities are not subject to any selling or pledging restrictions.

(10) Foreign currency translation

The functional currency of KfW and its consolidated subsidiaries is the euro. Monetary assets and liabilities denominated in a foreign currency are converted at the spot rate as of the reporting date.

Non-monetary assets and liabilities denominated in a foreign currency are normally converted at historical rates if they are measured at (amortised) cost. Translation is made using the European Central Bank reference rates.

The changes in value resulting from foreign currency translation are reported in the income statement under Net gains/losses from other financial instruments at fair value through profit or loss.

(11) Revenue from contracts with customers

IFRS 15 defines the nature, amount and timing of revenue arising from contracts with customers. Such revenue includes fees which are not an integral part of the effective interest rate and which are reported under Commission income. In this context, a five-step principle-based model is to be applied to relevant customer contracts. Moreover, the Notes are to include comprehensive detailed quantitative and qualitative information. IFRS 15 does not apply to fees and charges that are an integral part of the effective interest rate as they fall under the scope of IFRS 9.

There are primarily mandate contractual arrangements with the Federal Government as contracting authority within the meaning of IFRS 15. They include fees for the administration of German Financial Cooperation for the promotion

As performance obligations are mostly satisfied over time, revenue from customer contracts is recognised according to the measure of progress and is thus normally recognised over time.

KfW Group has no items that require recognising customer acquisition or contract fulfilment costs as assets. One-time advance payments to be allocated are deferred and recognised as contract liabilities in the statement of financial position under Other liabilities.

If the service has already been performed but fees have not yet been paid or if there is not yet any claim to payment, a contract asset is to be recognised in the statement of financial position under Other assets. If the claim becomes unconditional, the contract asset is to be reclassified as a Trade receivable adjusting the carrying amount where applicable. This rule is applied to fees for administration of certain programmes subsidised by the Federal Government. Based on the credit rating and short remaining life, no expected credit loss is calculated.

(12) Promotional lending business at KfW

The general promotional loans market, which distinguishes itself from the market for general lending business, is relevant for KfW's promotional lending business conducted as part of its legal promotional mandate. This market is characterised by the fact that promotional banks, as part of their legal mandate, pass on all funding advantages to the ultimate borrowers in financing projects eligible for promotion. In setting the terms and conditions of the corresponding promotional loans, KfW uses its current term-differentiated refinancing rates.

At initial recognition of such loans, the fair value is thus equivalent to the transaction value.

KfW also grants promotional loans which include additional subsidies granted during the first fixed interest rate period, in the form of interest rate reductions impacting KfW's earnings position. The fair value of these promotional loans – measured using the parameters of the general promotional loan market – is thus not equivalent to the transaction value at initial recognition as in this case the interest rate is below the market rate.

The difference that normally results from such loan commitments – present value of the nominal scheduled interest rate reductions during the first fixed interest rate period – is recognised in profit or loss as an interest expense and accounted for as an adjustment to the carrying amount in loans and advances under the item Financial assets at amortised cost. The adjustment to the carrying amount is amortised in Net interest income using the effective interest rate method. In the event of unscheduled repayment in full, this is recognised in profit or loss under Interest income.

Differences that relate to irrevocable loan commitments are reported in Provisions. Changes to the portfolio are offset via the adjustments to the carrying amounts of already disbursed promotional loans recognised on the assets side.

(13) Non-current assets held for sale

Under IFRS 5, separate presentation and measurement requirements apply to non-current assets held for sale if the assets are available for immediate sale and such sale is highly probable. Assets that meet the IFRS 5 criteria are reported in the separate statement of financial position item: Non-current assets held for sale. The IFRS 5 measurement common market practice. Credit claims are also an eligible type of collateral for open-market transactions.

The interest-bearing securities sold under repo transactions (spot sales) continue to be recognised and measured under Financial assets at amortised cost. The repayment obligation towards the counterparty is carried under Financial liabilities at amortised cost for the amount of cash consideration received. The repo rate as a fee for borrowing is recorded by the group, as the borrower, under Interest expense over the term of the agreement. The borrower is entitled to the coupon on the security. A repayment claim is recognised and measured under Financial assets at amortised cost for the amount of cash outflow generated by reverse repos. The securities received (spot purchases) are not recognised or measured. The repo rate as a fee for lending is recorded in the group as the lender under Interest income over the term of the agreement.

The term “securities lending” refers to transactions in which securities are transferred from the lender to the borrower with the obligation that the borrower transfer back securities of the same type, quality and quantity at the end of the agreed term and pay a usage fee for the duration of the loan. IFRS 9 does not distinguish between collateralised and uncollateralised securities lending. The cash collateral generally to be pledged to the lender is to be capitalised as a receivable by the borrower under the item Financial assets at amortised cost. The securities are accounted for by the lender, which bears the credit and market risk.

With respect to the refinancing of the loans mandated to it for the energy sector support measures, KfW acts as both borrower and lender in essentially uncollateralised securities lending transactions in dealing with the German Finance Agency, although as a lender it does not recognise the securities. They remain capitalised at the German Finance Agency. KfW recognises the cash collateral received under the item Financial liabilities at amortised cost.

The fee received or paid is recognised in Net interest income.

(15) Property, plant and equipment

The land and buildings and the plant and equipment reported by KfW Group are carried at cost less depreciation on a straight-line basis and any impairment, both recognised in Administrative expense. In accordance with the requirements in IAS 36, an impairment is recognised if there are indications of impairment and the carrying amount of the asset exceeds the recoverable amount, i.e. the lower of fair value less costs of disposal and value in use. The useful life is determined based on expected wear and tear. KfW Group assumes an estimated useful life of 40 to 50 years for buildings, four years for workstation computer equipment and five to 15 years for other property, plant and equipment. Gains and losses from the sale of property, plant and equipment are recognised in Net other operating income.

Payments in advance and assets under construction are recognised in Other property, plant and equipment and are not subject to depreciation.

(16) Leases

In accordance with IFRS 16 “Leases”, KfW as lessee reports each right of use in Property, plant and equipment and the associated lease obligation in Other liabilities. The lessee shall measure the lease liabilities at the present value of the lease payments not paid at that date, discounted at the lessee’s incremental borrowing rate. The incremental impairment loss identified. Depreciation, amortisation and impairments of rights of use are reported in Administrative expense. Interest expense from discounting the rights of use and the interest compounded on lease liabilities are included in Other interest expense.

The only minimal effects on net assets, financial and earnings position arise exclusively from the “leasing buildings” class.

For short-term leases with a maximum term of twelve months and leases in which the underlying asset is of low value, KfW utilises the relief provided for in IFRS 16.5 and does not recognise a right of use.

The small number of contracts in which KfW Group acts as a lessor are classified as operating leases. The leased asset is recognised under Property, plant and equipment and the corresponding rental income in Other operating income.

(17) Intangible assets

Under Intangible assets, KfW Group reports purchased and internally generated software at cost, less straight-line amortisation and impairments, both recognised in Administrative expense. The useful life is determined based on expected wear and tear. KfW Group assumes a useful life of five years.

Assets are impaired when the carrying amount of an asset exceeds the recoverable amount. An impairment is recorded when no future economic benefits can be identified.

Internally generated software under development is reported under Other intangible assets and is not subject to amortisation.

(18) Risk provisions

Provisions include provisions for pensions and similar commitments, credit risks, interest rate reductions in irrevocable loan commitments granted by KfW in the promotional lending business and negatively impacting its earnings position, as well as other obligations of uncertain amount and timing involving a probable outflow of funds.

The employees of the group participate in a company pension plan that pays retirement, long-term disability and survivor benefits. KfW Group has various pension plans, consisting exclusively of defined-benefit schemes. The benefits largely depend on the length of company service and salary. The pension plan that was applied for new hires until 1985 offered a full pension *(Gesamtversorgung)*, in which a certain portion of the income paid before the benefits were due was allocated as a benefit after deducting the state pension. Apart from employer-financed pension plans there are also plans in place involving contributions by employees.

The group pension plans are subject to the following risks in particular: longevity, interest rate fluctuation, pension adjustment risk as well as the risk of future changes to the assessment bases.

Longevity risk is the risk that higher expenses will be incurred for the company pension plan if the pensioners live longer than projected. In general, this risk is balanced out across all pensioners and would only have an impact if life expectancy were to rise faster in the future than anticipated.

The amount of the benefits promised under the existing pension plans in the group depends, among other things, on development of the income eligible for benefits and the social security contribution ceiling *(Beitragsbemessungsgrenze)*. There is a risk that the basis of assessment will develop differently than was assumed.

Pension obligations are calculated by an independent qualified actuary in accordance with the projected unit credit method on the basis of group-wide uniform parameters such as age, length of company service and salary. The pension provision is recognised at the present value of the defined-benefit obligations as of the reporting date. The discount factor is based on current market conditions for a portfolio of high-quality corporate bonds/bonds from supranational issuers with a maturity matching that of the obligations. The definition of the portfolio takes into account current market conditions. Additional demographic factors (including the 2018 G Heubeck actuarial tables) and actuarial assumptions (rate of salary and pension increases, rate of staff turnover, etc.) are taken into account.

No plan assets were defined for the pension obligations of the group, so the related special accounting rules do not apply. Provisions for pensions and similar obligations are financed in-house with assets with corresponding maturities.

Actuarial gains and losses are immediately recognised at the time they occur. They occur as a result of remeasurement of pension obligations as of the reporting date compared to the figures forecast at the beginning of the year.

Additions to pension provisions distinguish between service cost and interest expense. Service cost is reported under Administrative expense; interest expense is reported under Other interest expense. The pension provision changes recognised directly in equity comprise the actuarial gains and losses reported in Revaluation reserves; these are reported in Other comprehensive income.

Pension-like obligations include commitments for deferred compensation, early retirement and partial retirement. Actuarial reports are prepared and a provision is recognised accordingly for these types of commitments as well. No actuarial gains or losses are incurred.

Other provisions, including those for obligations to employees and for audit and consultancy services, are recognised at the estimated expenditure. Long-term provisions are discounted where the effect is material. Added to this are obligations arising from the assumption of the tasks of the State Insurance Company of the German Democratic Republic in liquidation *(Staatliche Versicherung der Deutschen Demokratischen Republik in Abwicklung – "SinA"* institution under public law*)*, which are offset by receivables in the same amount from the Federal Agency for Special Tasks Associated with Unification *(Bundesanstalt für vereinigungsbedingte Sonderaufgaben – "BvS")* reported under Other assets. If the provision is not required in full or if the reason for creating the provision no longer applies, the provision is reversed via the same income statement item that was used in creating the provision.

(19) Income tax assets and liabilities

Income taxes are accounted for and measured in accordance with IAS 12. Current and deferred income tax assets are reported in the item Income tax assets; current and deferred income tax liabilities under Income tax liabilities. Current income tax assets and liabilities are recognised in the amount expected to be returned or paid in the future.

liabilities in accordance with IFRS and the corresponding tax value. Deferred tax assets are only recognised for temporary differences from items and for unused tax loss carryforwards if their realisation is sufficiently probable; the impairment test is carried out on the basis of group business sector planning for each group company. Deferred taxes are measured at the tax rates that have been set at the respective reporting date and that are relevant to the timing of realisation of the deferred taxes. Deferred income tax assets and liabilities are offset on the assumption that they relate to the same taxable entity, the same tax type and the same tax authority.

If temporary differences have arisen from a transaction recognised directly in equity, the resulting deferred income tax assets and liabilities are also recognised directly in equity. Income from and expenses for current and deferred income taxes is recognised in the consolidated income statement under Income taxes.

(20) Equity

The equity structure is determined, in particular, by the KfW Law and the requirements of IFRS.

Pursuant to Article 10 (2) and (3) of the KfW Law, KfW's net income for the period determined in accordance with the German Commercial Code is transferred to reserves and is included in equity under IFRS.

KfW Group reports a fund for general banking risks in equity. Additions to or reductions of the fund are presented in accordance with IFRS as an addition to or reduction of retained earnings.

Under IFRS, any remaining consolidated net income is allocated to Other retained earnings in the same period.

Revaluation reserves comprise transactions to be recognised directly in equity in accordance with IFRS. These include valuation results from the change in own credit risk of liabilities measured at fair value through profit or loss and from defined benefit pension obligations. They also may include deferred taxes, depending on the underlying transaction.

(21) Trust activities

Assets and liabilities held by KfW Group in its own name but for the account of third parties are not recognised if the trustor retains all risks and opportunities. At KfW, this applies in particular to loans and equity investments made by KfW on behalf of the Federal Government. Both opportunities and risks remain with the Federal Government in such transactions.

Fees from trust activities are recognised under Commission income.

Further information can be found in the note “Financial instruments” in section “A. Classification and measurement” in the comments on mandated transactions.

	2023 EUR in millions	2022 EUR in millions
Interest and similar income from loans and advances to banks and customers	8,806	4,620
Similar income from off-balance sheet transactions	33	33
Interest income from securities and investments	454	113
Interest income from hedges recognised in the statement of financial position	6,409	–1,763
Other interest income	1,598	63
Interest income from the effective interest method	**17,300**	**3,065**
Interest and similar income from loans and advances to banks and customers	329	2
Interest income from securities and investments	85	87
Interest income from Other derivatives	685	632
Other interest income	**1,099**	**721**
Interest income, total	**18,399**	**3,786**
Interest and similar expense for liabilities to banks and customers	1,157	120
Interest expense for certificated liabilities	6,623	4,194
Interest expense from hedges recognised in the statement of financial position	7,078	–2,935
Interest expense from Other derivatives	417	–65
Other interest expense	667	323
Interest expense, total	**15,943**	**1,638**
Net interest income	**2,456**	**2,148**

Expenses for granting promotional loans below market rates – due to additional promotional funds in the form of interest rate reductions with an impact on KfW's earnings position – amount to EUR 282 million (2022: EUR 267 million) and are reported in Other interest expense. In addition to the charges resulting from the present value of the nominal scheduled interest rate reductions in new lending business, the Other interest expense item also comprises the expenses arising from amortisation at a constant effective interest rate. Interest and similar income from loans and advances to banks and customers also comprises income from accrual-based amortisation in the amount of the pro-rata nominal planned interest rate reductions for these promotional loans in the amount of EUR 189 million (2022: EUR 186 million).

Other interest income comprises interest income from balances with central banks in the amount of EUR 1,596 million (2022: EUR 54 million).

Interest income from hedges recognised in the statement of financial position comprises interest income from derivatives designated for hedge accounting as well as interest income from amortisation of value adjustments from hedge accounting. Interest income or interest expense from derivatives designated for hedge accounting is recognised depending on the related hedged item in the interest income or interest expense from hedges recognised in the statement of financial position for related financial assets or liabilities. Including the interest income or expense from the hedged items and derivatives in hedge accounting means that presentation is based on the economic substance of the hedged financial assets (floating rate financial assets) or hedged financial liabilities (floating rate financial liabilities).

Gross analysis of negative interest contributions

	2023 EUR in millions	2022 EUR in millions
Interest income, total	18,399	3,786
Negative interest from the lending business	60	203
Interest income from the deposit-taking business	303	418
Interest income (gross)	**18,763**	**4,408**
Interest expense, total	15,943	1,638
Negative interest from the deposit-taking business	303	418
Interest expense from the lending business	60	203
Interest expense (gross)	**16,307**	**2,259**

The negative interest contributions included in Interest income resulted from loans and advances to banks, loans and advances to customers, and securities and investments.

The positive interest contributions in Interest expense are largely due to liabilities to banks and liabilities to customers and certificated liabilities.

	2023 EUR in millions	2022 EUR in millions
Expenses for risk provisions for lending business (Loans and advances to banks/customers and off-balance sheet lending transactions)	905	1,193
Expenses for additions to risk provisions	873	1,163
Direct write-offs	32	30
Expenses for risk provisions for securities and investments	4	10
Expenses for additions to risk provisions	4	10
Expenses for risk provisions	**910**	**1,203**
Income from risk provisions for lending business (Loans and advances to banks/customers and off-balance sheet lending transactions)	1,063	1,078
Income from the reversal of risk provisions	998	1,016
Income from recoveries of amounts previously written off	66	62
Income from risk provisions for securities and investments	8	9
Income from the reversal of risk provisions	8	9
Income from risk provisions	**1,072**	**1,086**
Net gains/losses from non-substantial contractual modifications	**–1**	**2**
Other risk provisions for lending business	**8**	**–10**
Total	**169**	**–124**

(24) Net commission income

Analysis of Commission income

	2023 EUR in millions	2022 EUR in millions
Revenue from contracts with customers	**610**	**639**
From mandate contractual arrangements with the Federal Government[1)]	539	584
Fee income from mandate agreements, processing activities and services	16	17
Fee income from the lending business	47	38
Other revenue from contracts with customers	7	0
Other commission income	**12**	**9**
Financial guarantee contracts	0	0
Other	12	9
Commission income, total	**622**	**649**

[1)] Includes commission income in the amount of EUR 70 million (2022: EUR 69 million) from mandate contractual arrangements with the Federal Government in trust activities.

	Mittelstandsbank & Private Kunden *(SME Bank & Private Clients)*	Individualfinanzierung & Öffentliche Kunden *(Customised Finance & Public Clients)*	KfW Capital	Export and project finance
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**
Commission income	**254**	**36**	**13**	**43**
of which Federal Government	251	32	6	0
%	99%	88%	48%	0%

	KfW Development Bank	DEG	Financial markets	Head office	KfW Group
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
Commission income	**260**	**11**	**0**	**5**	**622**
of which Federal Government	245	0	0	4	539
%	94%	4%	0%	87%	87%

Commission income by segment in financial year 2022

	Mittelstandsbank & Private Kunden *(SME Bank & Private Clients)*	Individualfinanzierung & Öffentliche Kunden *(Customised Finance & Public Clients)*	KfW Capital	Export and project finance
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**
Commission income	**308**	**43**	**4**	**30**
of which Federal Government	305	38	4	0
%	99%	89%	100%	0%

	KfW Development Bank	DEG	Financial markets	Head office	KfW Group
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
Commission income	**249**	**10**	**0**	**4**	**649**
of which Federal Government	231	2	0	3	584
%	93%	26%	0%	72%	90%

	2023 EUR in millions	2022 EUR in millions
Revenue in current period resulting from services performed in the previous period(s)	8	31

Analysis of Commission expense

	2023 EUR in millions	2022 EUR in millions
Commission expense for lending business	10	10
Other commission expense	18	22
Commission expense	**29**	**32**

(25) Net gains/losses from hedge accounting

Analysis of Net gains/losses from hedge accounting by type of hedging relationship

	Hedge ineffectiveness		Items in the income statement that contain cases of hedge ineffectiveness
	2023 EUR in millions	2022 EUR in millions	
Micro fair value hedges	**44**	**18**	Net gains/losses from hedge accounting
Interest risk	45	29	–
Interest-currency risk	0	–11	–
Macro fair value hedges	**247**	**131**	Net gains/losses from hedge accounting
Interest risk	247	131	–
Total	**291**	**150**	Net gains/losses from hedge accounting

	2023 EUR in millions	2022 EUR in millions
Hedging of securities and investments	–2	–1
Hedging of liabilities to banks and customers	5	2
Hedging of certificated liabilities	42	17
Subtotal: Effectiveness of hedges	**45**	**18**
Amortisation of value adjustments	0	0
Total	**44**	**18**

Gross analysis of valuation gains/losses from micro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2023

	Hedged items EUR in millions	Hedging instruments EUR in millions	Effectiveness of hedges EUR in millions
Hedging of securities and investments	1,156	–1,159	–2
Hedging of liabilities to banks and customers	–860	864	5
Hedging of certificated liabilities	–12,952	12,994	42
Total	**–12,656**	**12,700**	**44**

Gross analysis of valuation gains/losses from micro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2022

	Hedged items EUR in millions	Hedging instruments EUR in millions	Effectiveness of hedges EUR in millions
Hedging of securities and investments	–2,550	2,550	–1
Hedging of liabilities to banks and customers	2,195	–2,193	2
Hedging of certificated liabilities	30,856	–30,839	17
Total	**30,501**	**–30,482**	**18**

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Valuation result	6,589	–7,307	–718
Amortisation	4,465	–3,586	879
Realisation	85	0	85
Net gains/losses from macro fair value hedge accounting	**11,139**	**–10,893**	**247**

Gross analysis of net gains/losses from macro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2022

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Valuation result	–32,696	31,555	–1,142
Amortisation	2,290	–1,050	1,241
Realisation	32	0	32
Net gains/losses from macro fair value hedge accounting	**–30,374**	**30,505**	**131**

Net gains/losses from macro fair value hedge accounting comprise the valuation of hedging instruments and the valuation of hedged risks from the hedged portfolios. It also includes the amortisation of the value adjustments from the dynamic hedge designation and de-designation and the pro rata reversal of value adjustments in the event of derecognition of financial instruments from the underlying portfolios as well as the pull-to-par effect of the hedging derivatives.

	2023 EUR in millions	2022 EUR in millions
Loans and advances to banks/customers	19	–10
Loans and advances	15	3
Miscellaneous receivables (money market transactions, promissory note loans and Other receivables)	4	–13
Securities and investments	–38	–46
Bonds and other fixed-income securities	0	0
Equity investments	–37	–46
Liabilities to banks and customers	–39	257
Certificated liabilities	–147	1,593
Other derivatives	104	–1,820
Financial derivatives not qualifying for hedge accounting	104	–1,820
Foreign currency translation	–75	91
Total	**–177**	**64**

Net gains/losses from assets include the net gains/losses from holding arrangements for the Federal Republic of Germany – if attributable to KfW, KfW IPEX-Bank’s syndication business with a focus on short-term placement, loans that do not meet the SPPI criterion (loans and advances to banks and loans and advances to customers), and equity investments (securities and investments).

The gains realised from the disposal of non-current assets held for sale included in net gains/losses from securities and investments amounted to EUR 6 million in financial year 2023 (2022: EUR 11 million).

Net gains/losses from liabilities measured at fair value include the results from promissory note loans (liabilities to banks/liabilities to customers) and bonds and notes (certificated liabilities).

Net gains/losses from financial derivatives not qualifying for hedge accounting are mainly attributable to derivatives in economic hedges. Economic hedges are recognised by exercising the *fair value option* for the hedged items. The hedged items include, in particular, borrowings in the form of Certificated liabilities, Liabilities to banks and Liabilities to customers.

Furthermore, this line item includes gains/losses from bifurcated embedded derivatives resulting from hybrid contracts under financial liabilities. The net gains/losses from the valuation of the associated hedging derivatives are thus compensated for.

	2023 EUR in millions	2022 EUR in millions
Borrowings	–186	1,850
Hedging instruments	162	–1,826
Total (effectiveness of economic hedges)	**–24**	**24**

(27) Net gains/losses from disposal of financial assets at amortised cost

	2023 EUR in millions	2022 EUR in millions
Expense from the disposal of financial assets at amortised cost	0	1
Total	**0**	**–1**

Expense from the disposal of financial assets at amortised cost resulted from the sale of loans on the secondary market.

(28) Net gains/losses from investments accounted for using the equity method

	2023 EUR in millions	2022 EUR in millions
Net gains/losses from investments accounted for using the equity method	29	43

	2023 EUR in millions	2022 EUR in millions
Wages and salaries	722	700
Social security contributions	108	99
Expenses for pension provision and other employee benefits	43	88
Personnel expense	**873**	**887**
Other administrative expenses	596	521
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	92	117
of which impairments of rights of use arising from leases	*9*	*10*
Non-personnel expense	**688**	**638**
Total	**1,561**	**1,525**

The Other administrative expenses item primarily includes costs for external service providers and office space and operating costs.

(30) Net other operating income or loss

Analysis of Net other operating income or loss

	2023 EUR in millions	2022 EUR in millions
Other operating income	41	41
Other operating expense	117	50
Total	**–76**	**–8**

Other operating income primarily includes income from the reversal of other provisions in the amount of EUR 17 million (2022: EUR 17 million).

The Other operating expense item includes contributions payable by KfW IPEX-Bank to the restructuring fund for banks in the amount of EUR 15 million (2022: EUR 21 million). KfW is not obligated to contribute to the fund in accordance with Section 2 of the Restructuring Fund Act *(Restrukturierungsfondsgesetz – "RStrukFG").*

In addition, the obligation to award grants under KfW's ERP promotional programmes, applicable for the first time in financial year 2023, was included in the amount of EUR 62 million in Other operating expense.

	2023 EUR in millions	2022 EUR in millions
Current taxes on income	117	46
Deferred taxes	47	–47
Total	**165**	**–1**

Current taxes include taxes on income for group companies and non-deductible investment income tax recorded at KfW level.

The reconciliation presents the relationship between the calculated income tax expense for the financial year and reported taxes on income.

Income tax reconciliation

	2023 EUR in millions	2022 EUR in millions
Profit/loss from operating activities (before taxes)	1,724	1,365
Group income tax rate	0%	0%
Calculated income tax expense in the financial year	**0**	**0**
Effects of tax rate differentials within the group	159	244
Effect of tax rate changes	0	0
Effects of previous year taxes recorded in the reporting year	0	1
Effects of non-deductible taxes on income	0	2
Effects of non-deductible business expenses	7	5
Effects of tax-free income	12	–20
Trade tax add-ons/reductions	0	4
Permanent accounting differences	–14	–113
Effects of changes in recognised deferred tax assets	1	–124
Reported taxes on income/expense	**165**	**–1**
Average effective tax rate	**10%**	**0%**

KfW's applicable income tax rate of 0%, on which the reconciliation is based, takes into account the tax status of KfW as a non-taxable public-law institution and the fact that this status predominantly determines profit/loss from operating activities.

The effects of tax rate differentials result from individual group companies being taxable and the related different tax rates. The tax rates continue to range from 0% to 32%.

registered office, transposes the Pillar Two rules into German law. In accordance with the Minimum Tax Act, KfW Group must pay a top-up tax per country where KfW Group entities are based, in the amount of the difference between the GloBE effective tax rate (which is equal to GloBE tax expense or income divided by GloBE profit or loss) and the minimum tax rate of 15%. The law applies for financial years beginning on or after 31 December 2023. Accordingly, the group was not subject to any taxes in this respect in financial year 2023. The global scope of the Pillar Two rules is currently under review. It can be assumed that, in addition to Germany, the transposition into national law of the Pillar Two rules for business entities in the UK (in 2023) and Singapore (planned for 2025) will have to be taken into account. The data for calculating the country-specific GloBE effective tax rates cannot yet be determined. Therefore, the average effective tax rates in accordance with IAS 12.86 are used as an indicator in estimating the potential impact of the GloBE rules in the form of top-up taxes.

As a state-owned promotional bank, KfW is excluded from the scope of the Minimum Tax Act in accordance with Section 5 (1) in conjunction with Section 7 (30) of the Minimum Tax Act.

With regard to the subsidiaries included in KfW Group's consolidated financial statements (including permanent establishments), profit/loss before taxes in accordance with IFRS of EUR 253 million and tax expense of EUR 162 million for 2023 are almost exclusively attributable to companies with registered offices in Germany. The average effective tax rate calculated in accordance with IAS 12.86 is 48% for consolidated subsidiaries with a profit before taxes and 13% for consolidated subsidiaries with a loss before taxes.

The profit/loss before taxes in accordance with IFRS and the tax expense for subsidiaries (including permanent establishments) with registered offices outside of Germany that are included in the consolidated financial statements, relate exclusively to IPEX Asia, based in Singapore, at EUR 1.3 million and EUR 0.3 million respectively, and to a permanent establishment of KfW IPEX-Bank in the UK, at EUR 7 million and EUR 2 million respectively. The average effective tax rate calculated in accordance with IAS 12.86 in these countries is 24% (Singapore) and 31% (UK).

Against this backdrop, top-up taxes under the Minimum Tax Act are not expected.

Specific adjustments provided for in the Pillar Two rules may result in the GloBE effective tax rate under Pillar Two differing from the average effective tax rate calculated in accordance with IAS 12.86. Due to the complexity of the application of the Pillar Two rules and the calculation of GloBE income, the quantitative effects of the adopted law cannot yet be reliably estimated. The potential impact is therefore currently being analysed as part of a project.

In accordance with the amendments to IAS 12 published in May 2023, the group has exercised the option of temporary exemption from the requirement to recognise deferred taxes in connection with implementation of the Pillar Two rules.

In accordance with the provisions of IFRS 8, segment reporting follows the internal management reporting system, which is used by the group's main decision-makers to assess each segment's performance and to allocate resources to segments.

In accordance with the business sector structure for the group, the segments and their products and services can be presented as follows:

Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*)	– Start-up financing – Financing of general corporate investments and investments in innovation, energy and environmental protection – Education financing – Financing for housing construction, conversion and refurbishment
Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*)	– Financing of municipal and social infrastructure – Customised corporate financing with equity and debt capital – Customised financing of banks and promotional institutions of the federal states – Mandated transactions for energy supply (debt capital)
KfW Capital	– Investments in German and European venture capital and venture debt funds
Export and project finance	– Financing of German and European export activities – Financing of projects and investments which are of special interest for Germany and Europe
KfW Development Bank	– Promotion of developing countries and emerging economies on behalf of the Federal Government with budget funds and complementary market funds raised by KfW
DEG	– Financing provided by DEG – Deutsche Investitions- und Entwicklungs-gesellschaft mbH in developing countries and emerging economies (private enterprise financing)
Financial markets	– Securities and money market investments – Holding arrangements for the Federal Republic of Germany – Transactions mandated by the Federal Government, loan granted to Greece – Funding
Head office	– Central interest rate and currency management – Strategic equity investments

The business sectors are measured on the basis of their contribution to consolidated profit. The individual items are based on the following methods:

- Net interest income (before promotional expense) comprises the net interest generated from lending business calculated on the basis of the market interest rate method[1]. The item also includes the imputed return on equity allocated according to the business sectors' planned regulatory capital. Head office also includes the treasury result, which largely comprises the income/loss from maturity transformation. The profit contribution from KfW funding[2] is allocated to the Financial markets business sector.

- Promotional expense included in Interest, Commission and Administrative expense and Other operating expense in the income statement is reported separately pursuant to the internal management report due to the special relevance of promotional expense as a management variable.

[1] Funding at matching maturities using KfW's internal refinancing curve is assumed for the calculation of net interest income in this method.
[2] The difference between the realised refinancing rates and the maturity-matched refinancing rates calculated in-house.

accounted for at present value[3] from new commitments as well as from the compounding effect. Additional promotional components are the expenses for upfront fees paid to sales partners (included in Commission expense), for innovative digital promotional approaches (included in Commission and Administrative expense), for available and product-related marketing and sales measures (included in Administrative expense), and, until the end of 2022, for promotional grants awarded as a supplement to the lending business (included in Other operating expense). KfW also awarded promotional grants under ERP promotion (other operating expense) for the first time in 2023.

- The allocation of Administrative expense (before promotional expense) is based on the results from activity-based accounting by cost centres[4]. Administrative expense (before promotional expense) includes depreciation on property, plant and equipment and amortisation of intangible assets and rights of use.

- In the Risk provisions for lending business item, net impairment charges, direct write-offs, recoveries on loans written off and the net gains/losses from non-substantial contractual modifications are distributed among the segments according to the underlying loan.

- The valuation result (before promotional expense) comprises the net gains/losses from hedge accounting, the net gains/losses from other financial instruments at fair value, net gains/losses from risk provisions in the securities business, the net gains/losses from the disposal of financial instruments measured at amortised cost, the net gains/losses from investments accounted for using the equity method and net other operating income (before promotional expense).

- When taxes on income are allocated to the business sectors (excluding the Head office), only the current taxes on income are taken into account. Deferred taxes are allocated to the Head office.

- In accordance with the internal management reporting system, segment assets are not reported as they are used neither to assess each segment’s performance nor to allocate resources to segments.

- The presentation of segment income and expense is based on consolidated figures. Administrative and commission expense as well as commission income and other operating income resulting from service relationships within KfW Group are adjusted in segment reporting. Any remaining negligible consolidation effects are reported in the reconciliation/consolidation column.

[3] See Note 12 for details on KfW’s interest rate reductions in the promotional lending business.
[4] The costs incurred in the organisational units are largely allocated to the products by means of core services.

Net interest income (before promotional expense)	578	165	1	915	202
Net commission income (before promotional expense)	253	37	12	42	260
Administrative expense (before promotional expense)	422	81	21	298	418
Operating result before valuation (before promotional expense)	**409**	**120**	**–7**	**660**	**44**
Risk provisions for lending business	49	5	0	–11	15
Valuation result (before promotional expense)	0	–9	–92	–23	70
Profit/loss from operating activities (before promotional expense)	**458**	**116**	**–99**	**626**	**129**
Promotional expense	358	14	0	0	0
Taxes on income	0	0	1	86	0
Consolidated profit	**100**	**102**	**–100**	**540**	**129**

	DEG	**Financial markets**	**Head office**	**Reconciliation/ consolidation**	**KfW Group**
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
Volume of new commitments	**1,869**	**480**	**0**	**–1,327**	**111,312**
Net interest income (before promotional expense)	155	447	275	0	2,738
Net commission income (before promotional expense)	3	–5	3	0	606
Administrative expense (before promotional expense)	144	94	70	0	1,547
Operating result before valuation (before promotional expense)	**14**	**349**	**209**	**0**	**1,797**
Risk provisions for lending business	110	–3	0	0	165
Valuation result (before promotional expense)	–42	15	215	0	134
Profit/loss from operating activities (before promotional expense)	**82**	**360**	**423**	**0**	**2,095**
Promotional expense	0	0	0	0	371
Taxes on income	31	0	48	0	165
Consolidated profit	**51**	**360**	**376**	**0**	**1,559**

[1] The valuation result of the business sectors includes the following net gains/losses from investments accounted for using the equity method: KfW Capital EUR 0.7 million, Export and project finance EUR 18.2 million and KfW Development Bank EUR 10.2 million.

(before promotional expense)	465	165	0	781	175
Net commission income (before promotional expense)	307	42	1	30	249
Administrative expense (before promotional expense)	432	84	15	282	403
Operating result before valuation (before promotional expense)	**340**	**124**	**–14**	**529**	**21**
Risk provisions for lending business	–37	2	0	24	–4
Valuation result (before promotional expense)	0	40	34	52	–59
Profit/loss from operating activities (before promotional expense)	**303**	**166**	**20**	**605**	**–43**
Promotional expense	278	27	0	0	0
Taxes on income	0	0	0	28	0
Consolidated profit	**25**	**139**	**20**	**578**	**–43**

	DEG	Financial markets	Head office	Reconciliation/ consolidation	KfW Group
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Volume of new commitments	**1,644**	**415**	**0**	**–241**	**166,938**
Net interest income (before promotional expense)	242	497	90	0	2,416
Net commission income (before promotional expense)	–1	–4	4	0	629
Administrative expense (before promotional expense)	139	97	57	0	1,509
Operating result before valuation (before promotional expense)	**103**	**396**	**37**	**0**	**1,536**
Risk provisions for lending business	–113	5	2	0	–122
Valuation result (before promotional expense)	26	8	156	–1	256
Profit/loss from operating activities (before promotional expense)	**16**	**409**	**195**	**–1**	**1,669**
Promotional expense	0	0	0	0	305
Taxes on income	16	0	–44	0	–1
Consolidated profit	**0**	**409**	**239**	**–1**	**1,365**

[1)] The valuation result of the business sectors includes the following net gains/losses from investments accounted for using the equity method: KfW Capital EUR 6.6 million, Export and project finance EUR 36.4 million and KfW Development Bank EUR 0.3 million.

made by Mittelstandsbank & Private Kunden *(SME Bank & Private Clients)* and Individualfinanzierung & Öffentliche Kunden *(Customised Finance & Public Clients)* for which KfW IPEX-Bank acts as on-lending bank. The other amounts in this column result from minimal consolidation effects.

(33) Segment reporting by region

Net interest and commission income are allocated on the basis of the customers' geographical location. The imputed return on equity included in net interest income, the profit contribution from KfW funding and the treasury result are allocated to Germany. KfW receives commission income from the Federal Government for supporting developing countries and emerging economies using budget funds of the Federal Government. These funds are allocated according to the region of the country receiving the investment.

Property, plant and equipment and intangible assets are not reported according to region because, apart from immaterial amounts, these assets relate to Germany.

Segment reporting by region for financial year 2023

	Germany	Europe (excl. Germany)	Rest of the world	Reconciliation/ consolidation	KfW Group
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Net interest income	1,360	457	639	0	2,456
Net commission income	297	47	249	0	593
Segment income	**1,657**	**504**	**888**	**0**	**3,049**

Segment reporting by region for financial year 2022

	Germany	Europe (excl. Germany)	Rest of the world	Reconciliation/ consolidation	KfW Group
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Net interest income	1,078	427	644	0	2,148
Net commission income	349	39	229	0	617
Segment income	**1,427**	**465**	**873**	**0**	**2,766**

The reconciliation/consolidation column includes all adjustments that were necessary to reconcile segment information with the aggregated information for the group. The amounts in this column result solely from minimal consolidation effects.

Analysis of Cash reserves

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Cash	0	0
Balances with central banks	47,430	51,848
Total	**47,431**	**51,848**

(35) Financial assets at amortised cost

Analysis of Financial assets at amortised cost by class

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Loans and advances to banks		
Money market transactions	14,353	5,211
Loans and advances	299,388	304,194
Other receivables	10,901	4,762
Loans and advances to customers		
Money market transactions	270	406
Loans and advances	140,705	151,780
Promissory note loans	1,611	1,018
Other receivables	1,742	1,273
Securities and investments		
Bonds and other fixed-income securities	36,065	33,733
Total gross	**505,035**	**502,378**
Less risk provisions for		
Loans and advances to banks	–167	–248
Loans and advances to customers	–1,685	–1,853
Securities and investments	–8	–12
Total net	**503,175**	**500,265**

The receivables from reverse repurchase agreements (reverse “repos”) are included in Loans and advances to banks – Other receivables.

Receivables from securities lending transactions with the German Finance Agency were included in Loans and advances to customers – Other receivables in the previous year.

The cash collateral pledged of EUR 5,260 million (31 Dec. 2022: EUR 5,154 million) is attributable to cash collateral on derivatives and included in Loans and advances to banks – Other receivables and Loans and advances to customers – Other receivables.

	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Direct loans	70,221	70,173	130,092	141,272
On-lent customer loans with full underwriting borne by the on-lending commercial bank	209,573	208,729	0	0
On-lent customer loans with partial underwriting borne by the on-lending commercial bank	20,001	25,617	0	0
On-lent customer loans without underwriting borne by the on-lending commercial bank	0	0	6,650	8,137
Direct customer loans with full underwriting borne by the on-lending commercial bank	0	0	2,947	1,218
Direct and on-lent subordinated loans	356	318	1,054	1,191
Adjustment to the carrying amount due to the interest rate being below the market rate for promotional loans paid out with additional promotional funds in the form of interest rate reductions with an impact on KfW's earnings position.	–762	–644	–37	–39
Total	**299,388**	**304,194**	**140,705**	**151,780**

Direct loans to banks include in particular global loans granted as part of financing for domestic housing construction and SMEs.

Direct loans to customers include in particular loans granted under export and project financing, municipal financing and education financing. The item also includes loans connected with certain transactions mandated by the Federal Government in accordance with the KfW Law.

	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions
As of 1 Jan.	**310,314**	**2,836**	**1,018**	**314,168**	**305,962**	**1,880**	**648**	**308,489**
Transfer from stage 2 and stage 3 to stage 1	715	–714	–1	0	451	–451	0	0
Transfer from stage 1 and stage 3 to stage 2	–986	1,001	–16	0	–1,863	1,872	–9	0
Transfer from stage 1 and stage 2 to stage 3	–633	–260	893	0	–646	–48	694	0
Additions – New business and increased utilisation	108,196	54	12	108,263	83,945	234	22	84,202
Disposals	–93,852	–821	–756	–95,429	–77,402	–654	–411	–78,466
of which financial assets written off	*–93,852*	*–821*	*–743*	*–95,416*	*–77,402*	*–654*	*–403*	*–78,459*
of which default on receivables	*0*	*0*	*–13*	*–13*	*0*	*0*	*–7*	*–7*
Changes from non-substantial contractual modification	0	1	0	1	0	0	0	0
Exchange rate and other changes	–2,339	1	–23	–2,361	–133	2	75	–57
As of 31 Dec.	**321,416**	**2,098**	**1,128**	**324,642**	**310,314**	**2,836**	**1,018**	**314,168**

	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan.	**140,311**	**8,827**	**5,339**	**154,478**	**101,598**	**24,773**	**4,531**	**130,902**
Transfer from stage 2 and stage 3 to stage 1	3,819	–3,819	0	0	19,351	–19,351	0	0
Transfer from stage 1 and stage 3 to stage 2	–2,712	2,799	–87	0	–4,372	4,651	–279	0
Transfer from stage 1 and stage 2 to stage 3	–724	–554	1,278	0	–2,175	–310	2,485	0
Additions – New business and increased utilisation	33,599	474	63	34,137	54,423	415	380	55,218
Disposals	–41,467	–2,401	–1,808	–45,676	–30,847	–1,921	–2,320	–35,087
of which financial assets written off	*–41,467*	*–2,400*	*–1,664*	*–45,531*	*–30,842*	*–1,920*	*–2,243*	*–35,006*
of which default on receivables	*–1*	*0*	*–144*	*–145*	*–5*	*0*	*–77*	*–82*
Changes from non-substantial contractual modification	–1	0	–2	–4	0	1	1	3
Exchange rate and other changes	1,544	–74	–76	1,394	2,333	568	541	3,442
As of 31 Dec.	**134,370**	**5,252**	**4,707**	**144,328**	**140,311**	**8,827**	**5,339**	**154,478**

	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions
As of 1 Jan.	**33,725**	**8**	**0**	**33,733**	**35,784**	**0**	**0**	**35,784**
Transfer from stage 2 and stage 3 to stage 1	7	–7	0	0	0	0	0	0
Transfer from stage 1 and stage 3 to stage 2	–117	117	0	0	–8	8	0	0
Additions – New business and increased utilisation	25,942	0	0	25,942	26,530	0	0	26,530
Disposals	–24,653	–51	0	–24,704	–25,914	–1	0	–25,915
of which financial assets written off	*–24,653*	*–51*	*0*	*–24,704*	*–25,914*	*–1*	*0*	*–25,915*
Exchange rate and other changes	1,096	–2	0	1,093	–2,666	0	0	–2,666
As of 31 Dec.	**36,001**	**64**	**0**	**36,065**	**33,725**	**8**	**0**	**33,733**

Development of gross carrying amounts of off-balance sheet lending transactions

	Financial year 2023				Financial year 2022			
	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions
As of 1 Jan.	**129,693**	**2,777**	**532**	**133,002**	**109,184**	**4,725**	**312**	**114,220**
Transfer from stage 2 and stage 3 to stage 1	40	–40	0	0	86	–86	0	0
Transfer from stage 1 and stage 3 to stage 2	–63	64	–1	0	–218	218	0	0
Transfer from stage 1 and stage 2 to stage 3	–5	–1	6	0	–15	–168	183	0
Additions – New business and increased utilisation	66,223	147	134	66,503	67,791	336	156	68,283
Disposals	–58,633	–1,097	–211	–59,941	–47,237	–2,239	–116	–49,592
Exchange rate and other changes	–28	–3	–5	–36	104	–9	–3	91
As of 31 Dec.	**137,227**	**1,847**	**455**	**139,528**	**129,693**	**2,777**	**532**	**133,002**

The gross carrying amount of financial assets for which risk provisioning at the time of modification was assigned to stages 2 or 3 and was transferred back to stage 1 during the reporting period amounted to EUR 1,083 million as of the reporting date (31 Dec. 2022: EUR 3,639 million).

	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions
As of 1 Jan.	**81**	**40**	**128**	**248**	**104**	**33**	**101**	**238**
Transfer from stage 2 and stage 3 to stage 1	13	–13	0	0	6	–6	0	0
Transfer from stage 1 and stage 3 to stage 2	–5	6	–1	0	–12	12	–1	0
Transfer from stage 1 and stage 2 to stage 3	0	–3	4	0	0	–2	2	0
Additions	22	20	11	54	37	30	30	98
Utilisation	0	0	–9	–9	0	0	–5	–5
Reversals	–54	–17	–11	–83	–57	–27	–9	–94
Net present value effect	0	0	5	5	0	0	5	5
Exchange rate and other changes	–4	0	–43	–48	3	0	3	6
As of 31 Dec.	**52**	**32**	**84**	**167**	**81**	**40**	**128**	**248**

Development of risk provisions for financial assets at amortised cost – Loans and advances to customers

	Financial year 2023				Financial year 2022			
	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions	Stage 1 EUR in millions	Stage 2 EUR in millions	Stage 3 EUR in millions	Total EUR in millions
As of 1 Jan.	**237**	**406**	**1,211**	**1,853**	**192**	**275**	**1,238**	**1,705**
Transfer from stage 2 and stage 3 to stage 1	128	–127	0	0	78	–78	0	0
Transfer from stage 1 and stage 3 to stage 2	–34	54	–20	0	–37	87	–49	0
Transfer from stage 1 and stage 2 to stage 3	–6	–81	87	0	–13	–61	74	0
Additions	132	243	330	705	214	336	384	934
Utilisation	0	0	–197	–197	0	0	–135	–135
Reversals	–296	–190	–291	–776	–201	–156	–455	–812
Net present value effect	0	0	89	89	0	0	119	119
Exchange rate and other changes	2	–4	13	10	3	4	35	42
As of 31 Dec.	**162**	**300**	**1,223**	**1,685**	**237**	**406**	**1,211**	**1,853**

	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan.	**11**	**1**	**0**	**12**	**10**	**0**	**0**	**10**
Transfer from stage 2 and stage 3 to stage 1	1	–1	0	0	0	0	0	0
Additions	4	1	0	4	8	2	0	10
Reversals	–8	0	0	–8	–7	–1	0	–8
As of 31 Dec.	**8**	**0**	**0**	**8**	**11**	**1**	**0**	**12**

Development of Risk provisions for lending business (off-balance sheet lending transactions)

	Financial year 2023				Financial year 2022			
	Stage 1 EUR in millions	**Stage 2** EUR in millions	**Stage 3** EUR in millions	**Total** EUR in millions	**Stage 1** EUR in millions	**Stage 2** EUR in millions	**Stage 3** EUR in millions	**Total** EUR in millions
As of 1 Jan.	**42**	**26**	**47**	**115**	**32**	**48**	**15**	**94**
Transfer from stage 2 and stage 3 to stage 1	9	–9	0	0	4	–4	0	0
Transfer from stage 1 and stage 3 to stage 2	–2	2	0	0	1	0	0	0
Transfer from stage 1 and stage 2 to stage 3	0	–3	3	0	0	–29	29	0
Additions	44	31	40	115	80	39	12	131
Reversals	–68	–31	–39	–138	–76	–26	–9	–110
Exchange rate and other changes	–1	0	–2	–2	0	–1	0	0
As of 31 Dec.	**24**	**16**	**50**	**90**	**42**	**26**	**47**	**115**

Provisions for losses on loans and advances also include money market investments and reverse repos.

In the reporting year, EUR 95 million (2022: EUR 124 million) in interest income was not collected for impaired loans and advances.

The contractual balance outstanding of financial assets that were written off during the reporting period and that are still subject to enforcement measures amounted to EUR 76 million as of the reporting date. (31 Dec. 2022: EUR 63 million).

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Loans and advances to banks – FVM		
Loans and advances	0	0
Other receivables	41	38
Loans and advances to customers – FVM		
Loans and advances	9,927	9,681
Other receivables	1	0
Securities and investments – FVM		
Equity investments	4,418	4,342
Shares in non-consolidated subsidiaries	90	80
Other derivatives – FVM		
Interest-related derivatives	1,630	1,787
Cross-currency derivatives	692	695
Total	**16,799**	**16,624**

Cross-currency swaps are presented under Cross-currency derivatives.

Other derivatives include derivatives with positive fair values of EUR 106 million (31 Dec. 2022: EUR 163 million) attributable to embedded derivatives that are bifurcated.

(39) Value adjustments from macro fair value hedge accounting

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Value adjustments to assets under macro fair value hedge accounting	–14,771	–25,859

The fair values attributable to hedged risks in the hedged portfolios in the at *amortised cost* measurement category are included in this item.

(40) Derivatives designated for hedge accounting

Analysis of derivatives with positive fair values designated for hedge accounting by type of hedging relationship

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Micro fair value hedge accounting	3,980	6,699
Macro fair value hedge accounting	1,463	2,306
Total	**5,443**	**9,005**

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Interest-related derivatives	2,326	2,817
Cross-currency derivatives	3,118	6,188
Total	**5,443**	**9,005**

Only Interest-related derivatives are designated for macro fair value hedge accounting. Cross-currency swaps are presented under Cross-currency derivatives.

(41) Investments accounted for using the equity method

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Investments accounted for using the equity method	626	642
Total	**626**	**642**

The note regarding “Disclosures on shareholdings” includes a list of Investments accounted for using the equity method.

(42) Non-current assets held for sale

This item from the statement of financial position contains equity investments of DEG with a fair value of EUR 78 million (31 Dec. 2022: EUR 64 million) in companies in Asia, Africa and Latin America, which meet the criteria under IFRS 5 as “non-current assets held for sale”, and are therefore to be reported separately. These equity investments are recognised in the business sector DEG.

Disposal of the equity investments within the next twelve months is highly likely.

It was not possible in 2023 to sell, as planned, four equity investments recognised as assets held for sale in the consolidated financial statements as of 31 December 2022 (31 Dec. 2021: four equity investments). This was due to the deteriorated market environment resulting from the Russia-Ukraine war and the macroeconomic situation. This decreased probability of sale resulted in an accounting reclassification, but had no impact on the earnings position.

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Land and buildings	828	823
Plant and equipment	67	60
Rights of use arising from leases	31	39
Other property, plant and equipment	4	7
Total	**929**	**929**

Additions to rights of use arising from leases amounted to EUR 1 million (2022: EUR 0 million). Payments in advance and assets under construction are presented in Other property, plant and equipment.

Development of Property, plant and equipment in financial year 2023

	Acquisition/ production cost EUR in millions	Accumulated amortisation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 2023	**1,496**	**–568**	**929**
Additions/reversals of impairment losses	58	0	58
Disposals	–22	20	–2
Amortisation	0	–55	–55
Impairment losses	0	–1	–1
Carrying amount as of 31 Dec. 2023	**1,533**	**–604**	**929**

Development of Property, plant and equipment in financial year 2022

	Acquisition/ production cost EUR in millions	Accumulated amortisation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 2022	**1,513**	**–541**	**971**
Additions/reversals of impairment losses	26	0	26
Disposals	–42	32	–10
Amortisation	0	–58	–58
Carrying amount as of 31 Dec. 2022	**1,496**	**–568**	**929**

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Software	75	95
Purchased software	*31*	*37*
Internally generated software	*44*	*58*
Other intangible assets	7	5
Total	**82**	**100**

Other intangible assets include, in particular, software under development.

Development of Intangible assets in financial year 2023

	Acquisition/ production cost EUR in millions	Accumulated amortisation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 2023	**457**	**–357**	**100**
Additions/reversals of impairment losses	18	0	18
Disposals	–2	2	0
Amortisation	0	–36	–36
Impairment losses	0	0	0
Carrying amount as of 31 Dec. 2023	**473**	**–391**	**82**

Development of Intangible assets in financial year 2022

	Acquisition/ production cost EUR in millions	Accumulated amortisation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 2022	**446**	**–302**	**144**
Additions/reversals of impairment losses	14	0	14
Disposals	–3	3	0
Amortisation	0	–58	–58
Impairment losses	0	0	0
Carrying amount as of 31 Dec. 2022	**457**	**–357**	**100**

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Current income tax assets	15	22
Deferred income tax assets	161	218
Total	**176**	**239**

Current income tax assets result from creditable taxes (investment income tax/solidarity surcharge) and tax receivables from advance tax payments of the taxable group subsidiaries during financial year 2023.

Deferred income tax assets mostly result from valuation differences relating to the statement of financial position items listed below. Deferred tax assets relating to loss carryforwards are based on the business plan for 2024–2027. As of 31 December 2023, the volume of deferred tax assets not recognised was EUR 4 million (31 Dec. 2022: EUR 3 million) relating to loss carryforwards, and EUR 0 million (31 Dec. 2022: EUR 0 million) relating to accounting issues.

Further information on the amount recognised directly in equity as deferred taxes under Revaluation reserves can be found in the note “Equity”.

Composition of deferred tax assets by statement of financial position item

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Financial assets at amortised cost	76	109
Financial assets at fair value	3	4
Financial liabilities at amortised cost	1	0
Financial liabilities at fair value	2	2
Provisions	42	37
Tax loss carryforwards	41	76
Subtotal	**165**	**228**
Offset against deferred tax liabilities	4	10
Total	**161**	**218**

(46) Other assets

Analysis of Other assets

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Other assets and receivables	723	706
Prepaid expenses and deferred charges	49	65
Total	**772**	**771**

assumption of the operations of the State Insurance Company of the German Democratic Republic in liquidation *(Staatliche Versicherung der Deutschen Demokratischen Republik in Abwicklung – "SInA",* an institution under public law).

Prepaid expenses and deferred charges include financial assets resulting from contractual rights ("contract assets" in accordance with IFRS 15). These developed as follows:

Development of assets from contractual rights

	2023 EUR in millions	2022 EUR in millions
As of 1 Jan.	**0**	**2**
Additions	0	0
Disposals	0	–2
As of 31 Dec.	**0**	**0**

(47) Financial liabilities at amortised cost

Analysis of Financial liabilities at amortised cost by class

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Liabilities to banks		
Money market transactions	2,104	4,453
Promissory note loans	1,123	1,456
Other financial liabilities	2,549	5,545
Liabilities to customers		
Money market transactions	975	299
Promissory note loans	38,027	51,038
Other financial liabilities	9,288	11,619
Certificated liabilities		
Money market issues	37,694	39,058
Bonds and notes	407,940	379,111
Total	**499,700**	**492,579**

1,324 million (31 Dec. 2022: EUR 1,472 million).

New securities (money market issues, bonds and notes) under sub-item certificated liabilities, with a nominal volume of EUR 201.4 billion and which are to be measured at amortised cost, were issued during the current financial year (2022: EUR 268.2 billion). The volume of repayments due to maturity during the same period amounted to EUR 181.4 billion (nominal) (2022: EUR 262.9 billion) and the volume of early repurchases to EUR 0.4 billion (nominal) (2022: EUR 0.1 billion).

Liabilities include liabilities from repurchase agreements and securities lending transactions under "Other financial liabilities".

(48) Financial liabilities at fair value

Analysis of Financial liabilities at fair value by class

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Liabilities to banks – FVD		
Promissory note loans	221	208
Liabilities to customers – FVD		
Promissory note loans	818	812
Certificated liabilities – FVD		
Bonds and notes	6,613	6,699
Other derivatives – FVM		
Interest-related derivatives	1,585	2,018
Cross-currency derivatives	1,129	1,664
Total	**10,365**	**11,401**

As in the previous year, there were no new issues in the current financial year under sub-item certificated liabilities to be measured at fair value. The volume of repayments due to maturity during the same period amounted to EUR 0.3 billion (nominal) (2022: EUR 0.1 billion) and the volume of early repurchases to EUR 0.0 billion (nominal) (2022: EUR 0.0 billion).

Cross-currency swaps are presented under Cross-currency derivatives.

Other derivatives include derivatives with negative fair values of EUR 6 million (31 Dec. 2022: EUR 5 million) attributable to embedded derivatives that are bifurcated.

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Value adjustments to liabilities under macro fair value hedge accounting	–1	18

The fair values attributable to hedged risks in the hedged portfolios in the at amortised cost measurement category are included in this item.

(50) Derivatives designated for hedge accounting

Analysis of derivatives with negative fair values designated for hedge accounting by type of hedging relationship

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Micro fair value hedge accounting	8,188	10,600
Macro fair value hedge accounting	1,112	219
Total	**9,300**	**10,819**

Analysis of derivatives with negative fair values designated for hedge accounting by type of hedging instrument

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Interest-related derivatives	5,834	7,252
Cross-currency derivatives	3,466	3,567
Total	**9,300**	**10,819**

(51) Risk provisions

Analysis of Provisions by class

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Provisions for pensions and similar commitments	1,844	1,683
Provisions for credit risks	90	115
Other provisions	877	873
Total	**2,811**	**2,672**

	Defined benefit obligations EUR in millions	Early retirement EUR in millions	Partial retirement EUR in millions	Total EUR in millions
As of 1 Jan. 2023	**1,638**	**42**	**3**	**1,683**
Additions	104	1	1	105
Current service cost	*40*	*0*	*1*	*41*
Interest cost	*64*	*0*	*0*	*64*
Actuarial gains and losses	121	0	0	121
Changes in demographic assumptions	*0*	*0*	*0*	*0*
Changes in financial assumptions	*124*	*0*	*0*	*124*
Changes in experience adjustments	*–3*	*0*	*0*	*–3*
Utilisation	–60	–9	–2	–70
Contributions by members (recognised in equity)	6	0	0	6
As of 31 Dec. 2023	**1,809**	**33**	**2**	**1,844**

The average expected residual term of the defined-benefit pension obligations is 16.4 years as of 31 December 2023 (31 Dec. 2022: 15.9 years).

Development of Provisions for pensions and similar commitments in financial year 2022

	Defined benefit obligations EUR in millions	Early retirement EUR in millions	Partial retirement EUR in millions	Total EUR in millions
As of 1 Jan. 2022	**2,496**	**53**	**7**	**2,556**
Additions	118	–4	1	115
Current service cost	*85*	*0*	*1*	*86*
Interest cost	*34*	*–4*	*0*	*29*
Actuarial gains and losses	–922	0	0	–922
Changes in demographic assumptions	*–2*	*0*	*0*	*–2*
Changes in financial assumptions	*–925*	*0*	*0*	*–925*
Changes in experience adjustments	*4*	*0*	*0*	*4*
Utilisation	–60	–7	–4	–71
Contributions by members (recognised in equity)	5	0	0	5
As of 31 Dec. 2022	**1,638**	**42**	**3**	**1,683**

Provisions for pensions and similar commitments are calculated on the basis of the 2018 G Heubeck actuarial tables and the following other actuarial assumptions:

	31 Dec. 2023	31 Dec. 2022
Technical discount rate	3.41	3.89
Rate of salary increases	2.20	2.20
Rate of pension increases	2.50	2.50
Rate of staff turnover	3.17	3.17

The technical discount rate as of 31 December 2023 reflects an adjustment to the average residual term of the defined benefit pension obligations translating into an adjustment to the average capital commitment period used.

Sensitivity of defined benefit pension obligations as of 31 December 2023

	Difference	Change in defined benefit obligations EUR in millions	Difference	Change in defined benefit obligations EUR in millions
Life expectancy	+1 year	71	–1 year	–73
Technical discount rate	+0.25%	–69	–0.25%	74
Rate of salary increases	+0.50%	13	–0.50%	–12
Rate of pension increases	+0.50%	102	–0.50%	–57
Rate of staff turnover	+1.00%	–1	–1.00%	1

Sensitivity of defined benefit pension obligations as of 31 December 2022

	Difference	Change in defined benefit obligations EUR in millions	Difference	Change in defined benefit obligations EUR in millions
Life expectancy	+1 year	60	–1 year	–62
Technical discount rate	+0.25%	–61	–0.25%	65
Rate of salary increases	+0.50%	7	–0.50%	–7
Rate of pension increases	+0.50%	88	–0.50%	–52
Rate of staff turnover	+1.00%	–1	–1.00%	1

Development of Risk provisions for lending business

For the development of Risk provisions for lending business (off-balance sheet transactions) see the note regarding “Risk provisions”.

	Obligations to employees	Other provisions	Total
	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2023	**32**	**842**	**873**
Additions	8	141	148
Utilisation	–4	–123	–127
Reversals	0	–18	–18
As of 31 Dec. 2023	**35**	**842**	**877**

The Obligations to employees column shows other long-term employee benefits including provisions for service anniversaries. Corresponding actuarial reports have been prepared for these obligations.

An Other provision item in the amount of EUR 57 million (31 Dec. 2022: EUR 95 million) is reported due to the interest rate being below the market rate for irrevocable promotional loan commitments with additional promotional funds in the form of interest rate reductions impacting KfW's earnings position. Changes to existing provisions are presented as net additions or, in the case of a decline, as a transfer via the adjustments to the carrying amounts of already disbursed promotional loans recognised on the assets side under Financial assets at amortised cost – Loans and advances to banks or customers.

Other provisions also comprise obligations arising from the assumption of the operations of the State Insurance Company of the German Democratic Republic in liquidation *(Staatliche Versicherung der Deutschen Demokratischen Republik in Abwicklung – "SInA",* an institution under public law), which are offset by receivables in the same amount from the Federal Agency for Special Tasks Associated with Unification *(Bundesanstalt für vereinigungsbedingte Sonderaufgaben – "BvS")* recognised in Other assets. Other provisions also include provisions for legal risks offset by receivables from the Federal Government in the same amount.

Development of Other provisions in financial year 2022

	Obligations to employees	Other provisions	Total
	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2022	**36**	**890**	**926**
Additions	3	65	68
Utilisation	–4	–95	–99
Reversals	–4	–18	–22
As of 31 Dec. 2022	**32**	**842**	**873**

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Current income tax liabilities	82	19
Deferred income tax liabilities	26	42
Total	**107**	**61**

Current income tax liabilities as of 31 December 2023 primarily consist of tax provisions at the level of taxable companies included in the group.

Deferred income tax liabilities mostly resulted from valuation differences relating to the statement of financial position items listed below.

Composition of deferred tax liabilities by statement of financial position item

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Financial assets at fair value – Other derivatives	1	8
Financial assets at amortised cost	1	0
Financial assets at fair value – Securities and investments	23	40[1)]
Investments accounted for using the equity method	4	3
Other statement of financial position items	1	1
Subtotal	**30**	**52**
Offset against deferred tax assets	4	10
Total	**26**	**42**

1) From financial year 2023, the deferred tax liabilities from shares in companies accounted for using the equity method included in the previous year and the corresponding prior-year figure of EUR 3 million will be reported separately.

(53) Other liabilities

Analysis of Other liabilities

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Other financial liabilities	312	413
Deferred income	39	43
Lease liabilities	34	45
Total	**386**	**501**

Development of liabilities from contractual obligations

	2023 EUR in millions	2022 EUR in millions
As of 1 Jan.	**38**	**41**
Additions	15	13
Disposals	–16	–16
As of 31 Dec.	**37**	**38**

(54) Equity

Analysis of Equity

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Subscribed capital	3,750	3,750
less uncalled outstanding contributions	–450	–450
Paid-in subscribed capital	**3,300**	**3,300**
Capital reserve	8,447	8,447
Reserve from the ERP Special Fund	1,191	1,191
Retained earnings	25,150	23,391
Statutory reserve under Article 10 (2) KfW Law	*1,875*	*1,875*
Special reserve under Article 10 (3) KfW Law	*17,117*	*15,781*
Special reserve less the special loss account from provisioning pursuant to Section 17 (4) of the D-Mark Balance Sheet Law	*21*	*21*
Other retained earnings	*6,137*	*5,714*
Fund for general banking risks	0	200
Revaluation reserves	–15	50
Valuation result from the change in own credit risk of liabilities designated at fair value through profit or loss	*55*	*6*
Actuarial gains and losses from defined-benefit pension obligations (after tax)	*–70*	*44*
Total	**38,073**	**36,579**

KfW Law. KfW's net income amounting to EUR 1,336 million (2022: EUR 1,026 million) was used to increase the special reserve under Article 10 (3) KfW Law.

Equity forms the basis for the capital available for covering risks, which is matched against the capital requirements derived from internal management.

For information concerning Equity in relation to risk-bearing capacity, see the risk report in the combined management report.

The revaluation reserves developed as follows:

Development of revaluation reserves

	Valuation result from the change in own credit risk of liabilities designated at fair value through profit or loss	Actuarial gains and losses from defined benefit pension obligations	Effects of deferred taxes	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2022	**–131**	**–870**	**44**	**–957**
Consolidated comprehensive income	137	922	–53	1,007
Other comprehensive income	*137*	*922*	*–53*	*1,007*
As of 31 Dec. 2022	**6**	**52**	**–9**	**50**
Consolidated comprehensive income	49	–121	7	–65
Other comprehensive income	*49*	*–121*	*7*	*–65*
As of 31 Dec. 2023	**55**	**–68**	**–2**	**–15**

ACO = Financial instruments measured at amortised cost
FVM = Financial instruments measured at fair value
FVD = Financial instruments designated at fair value

(55) Gains and losses from financial instruments by measurement category

The following tables show the results from financial instruments included in the different statement of comprehensive income items presented by measurement category. The result from foreign currency translation is not included.

Gains and losses from financial instruments by measurement category in financial year 2023

	Financial assets at amortised cost	Financial liabilities at amortised cost	Financial assets at fair value – FVM	Financial liabilities at fair value – FVM	Financial liabilities at fair value – FVD	Derivatives designated for hedge accounting	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Interest income	10,837[1)]	0	725	374	0	6,464	18,399
Interest expense	–284	–7,599	–64	–354	–347	–7,231	–15,878
Net gains/losses from risk provisions	169	0	0	0	0	0	169
Commission income	9	0	0	0	0	0	9
Commission expense	–10	–5	0	0	0	0	–15
Net gains/losses from hedge accounting	12,277	–13,793	0	0	0	1,807	291
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	–311	304	–186	0	–194
Net gains/losses from disposal of financial assets at amortised cost	0	0	0	0	0	0	0
Net other operating income	0	6	0	0	0	0	6
Change in revaluation reserves	0	0	0	0	49	0	49
Total	**22,997**	**–21,391**	**350**	**323**	**–484**	**1,040**	**2,836**

1) Includes interest income from financial guarantees of EUR 33 million.

	Financial assets at amortised cost	Financial liabilities at amortised cost	Financial assets at fair value – FVM	at fair value		Derivatives designated for hedge accounting	Total
				FVM	FVD		
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Interest income	4,737[1)]	0	110	610	0	–1,672	3,786
Interest expense	–268	–3,789	57	7	–349	2,738	–1,603
Net gains/losses from risk provisions	–124	0	0	0	0	0	–124
Commission income	9	0	1	0	0	0	9
Commission expense	–10	–5	–1	0	0	0	–16
Net gains/losses from hedge accounting	–32,943	33,070	0	0	0	23	150
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	470	–2,254	1,850	0	65
Net gains/losses from disposal of financial assets at amortised cost	–1	0	0	0	0	0	–1
Net other operating income	0	0	0	0	0	0	0
Change in revaluation reserves	0	0	0	0	137	0	137
Total	**–28,600**	**29,277**	**636**	**–1,637**	**1,638**	**1,089**	**2,403**

1) Includes interest income from financial guarantees of EUR 33 million.

(56) Disclosures on fair value

The following tables show the financial instruments measured at fair value or for which the fair value is indicated in the Notes according to the valuation methods used. There is also a comparison of fair value and carrying amount.

	Carrying amount (statement of financial position)	Fair value Level 1	Level 2	Level 3	Total	Difference from carrying amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets						
Cash reserves	47,431	47,431	0	0	47,431	0
Financial assets at amortised cost						
Loans and advances to banks	324,475	12	24,706	282,628	307,346	–17,129
Loans and advances to customers	142,644	0	1,257	139,437	140,694	–1,950
Securities and investments	36,057	28,723	2,637	4,609	35,969	–88
Financial assets at fair value						
Loans and advances to banks – FVM	41	0	0	41	41	0
Loans and advances to customers – FVM	9,928	0	9,644	284	9,928	0
Securities and investments – FVM	4,509	109	3,029	1,370	4,509	0
Other derivatives – FVM	2,322	0	2,278	44	2,322	0
Value adjustments from macro fair value hedge accounting	–14,771	n/a	n/a	n/a	n/a	14,771
Derivatives designated for hedge accounting	5,443	0	5,443	0	5,443	0
Non-current assets held for sale	78	0	66	12	78	0
Total	**558,156**	**76,275**	**49,061**	**428,424**	**553,760**	**–4,396**
Liabilities and equity						
Financial liabilities at amortised cost						
Liabilities to banks	5,777	0	5,754	0	5,754	–23
Liabilities to customers	48,290	0	47,455	0	47,455	–835
Certificated liabilities	445,634	387,020	52,738	0	439,758	–5,875
Financial liabilities at fair value						
Liabilities to banks – FVD	221	0	221	0	221	0
Liabilities to customers – FVD	818	0	818	0	818	0
Certificated liabilities – FVD	6,613	4,095	2,519	0	6,613	0
Other derivatives – FVM	2,714	0	2,691	23	2,714	0
Value adjustments from macro fair value hedge accounting	–1	n/a	n/a	n/a	n/a	1
Derivatives designated for hedge accounting	9,300	0	9,300	0	9,300	0
Total	**519,363**	**391,115**	**121,493**	**23**	**512,631**	**–6,732**

	Carrying amount (statement of financial position)	Level 1	Level 2	Level 3	Total	Difference from carrying amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets						
Cash reserves	51,848	51,848	0	0	51,848	0
Financial assets at amortised cost						
Loans and advances to banks	313,919	0	9,354	275,683	285,037	–28,882
Loans and advances to customers	152,624	0	1,334	146,636	147,970	–4,655
Securities and investments	33,721	26,453	3,257	3,954	33,664	–57
Financial assets at fair value						
Loans and advances to banks – FVM	38	0	0	38	38	0
Loans and advances to customers – FVM	9,682	0	9,480	202	9,682	0
Securities and investments – FVM	4,422	87	3,336	1,000	4,422	0
Other derivatives – FVM	2,482	0	2,481	1	2,482	0
Value adjustments from macro fair value hedge accounting	–25,859	n/a	n/a	n/a	n/a	25,859
Derivatives designated for hedge accounting	9,005	0	9,005	0	9,005	0
Non-current assets held for sale	64	0	16	49	64	0
Total	**551,948**	**78,388**	**38,262**	**427,562**	**544,213**	**–7,735**
Liabilities and equity						
Financial liabilities at amortised cost						
Liabilities to banks	11,454	0	11,408	4	11,412	–42
Liabilities to customers	62,956	0	61,784	42	61,826	–1,130
Certificated liabilities	418,169	355,134	55,595	0	410,729	–7,440
Financial liabilities at fair value						
Liabilities to banks – FVD	208	0	208	0	208	0
Liabilities to customers – FVD	812	0	812	0	812	0
Certificated liabilities – FVD	6,699	4,257	2,442	0	6,699	0
Other derivatives – FVM	3,682	0	3,639	43	3,682	0
Value adjustments from macro fair value hedge accounting	18	n/a	n/a	n/a	n/a	–18
Derivatives designated for hedge accounting	10,819	0	10,819	0	10,819	0
Total	**514,816**	**359,391**	**146,705**	**90**	**506,186**	**–8,630**

Interest-related changes in value are also included in measuring the fair value of the financial instruments. Accordingly, when the comparison is made with the carrying amount, it is necessary to take into account the changes in value (interest-related) resulting from the recognition of Loans and advances and borrowings in macro fair value hedge accounting.

	Transfer from level 1 to level 2 EUR in millions	Transfer from level 2 to level 1 EUR in millions
Assets		
Financial assets at fair value		
Loans and advances to banks – FVM	0	0
Loans and advances to customers – FVM	0	0
Securities and investments – FVM	0	6
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Non-current assets held for sale	0	0
Total	**0**	**6**

Liabilities and equity		
Financial liabilities at fair value		
Liabilities to banks – FVD	0	0
Liabilities to customers – FVD	0	0
Certificated liabilities – FVD	278	0
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Total	**278**	**0**

The group primarily made transfers from level 1 to level 2 in financial year 2023 where there were no quoted market prices from active markets available for the respective financial instruments. In contrast, there were transfers from level 2 to level 1 in financial year 2022 where quoted market prices from active markets were available again for the respective financial instruments.

	Transfer from level 1 to level 2	Transfer from level 2 to level 1
	EUR in millions	EUR in millions
Assets		
Financial assets at fair value		
Loans and advances to banks – FVM	0	0
Loans and advances to customers – FVM	0	0
Securities and investments – FVM	0	5
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Non-current assets held for sale	0	0
Total	**0**	**5**

	Transfer from level 1 to level 2	Transfer from level 2 to level 1
Liabilities and equity		
Financial liabilities at fair value		
Liabilities to banks – FVD	0	0
Liabilities to customers – FVD	0	0
Certificated liabilities – FVD	0	186
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Total	**0**	**186**

	Loans and advances to banks – FVM	Loans and advances to customers – FVM	Securities and investments – FVM	Other derivatives – FVM	Non-current assets held for sale	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2023	**38**	**202**	**1,000**	**1**	**49**	**1,289**
A. Changes recognised in the income statement						
Net interest and commission income	0	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*	*0*
Net gains/losses from hedge accounting	0	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*	*0*
Net gains/losses from other financial instruments at fair value through profit or loss	4	0	4	35	–4	39
Contracts still valid at year-end	*4*	*–1*	*–75*	*16*	*–4*	*–61*
Total changes recognised in the income statement	**4**	**0**	**4**	**35**	**–4**	**39**
B. Changes recognised directly in equity						
Changes in level assignment	0	0	398	1	–24	375
Transfer from level 1 and level 2	0	0	711	2	0	712
Transfer to level 1 and level 2	0	0	–313	0	–24	–337
Additions	1	288	40	0	0	329
Disposals	–1	–202	–48	0	0	–252
Total changes recognised directly in equity	**0**	**86**	**390**	**1**	**–24**	**453**
Changes in consolidated group	0	0	0	0	0	0
Exchange rate changes	–1	–3	–21	6	–2	–22
Other changes	0	0	–3	1	–6	–8
As of 31 Dec. 2023	**41**	**284**	**1,370**	**44**	**12**	**1,751**

	Liabilities to banks – FVD	Liabilities to customers – FVD	Certificated liabilities – FVD	Other derivatives – FVM	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2023	**0**	**0**	**0**	**43**	**43**
A. Changes recognised in the income statement					
Net interest and commission income	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*
Net gains/losses from hedge accounting	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	0	–15	–15
Contracts still valid at year-end	*0*	*0*	*0*	*–25*	*–25*
Total changes recognised in the income statement	**0**	**0**	**0**	**–14**	**–14**
B. Changes recognised directly in equity					
Change in revaluation reserves	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*
Changes in level assignment	0	0	0	–6	–6
Transfer from level 1 and level 2	0	0	0	10	10
Transfer to level 1 and level 2	0	0	0	–17	–17
Additions	0	0	0	0	0
Disposals	0	0	0	0	0
Total changes recognised directly in equity	**0**	**0**	**0**	**–6**	**–6**
Exchange rate changes	0	0	0	0	0
Other changes	0	0	0	1	1
As of 31 Dec. 2023	**0**	**0**	**0**	**23**	**23**

The group carried out transfers from levels 1 and 2 to level 3 because in financial years 2023 and 2022 quoted prices on the active market or observable market parameters were no longer available or their effect on fair value was deemed material. In contrast, the group carried out transfers from level 3 to levels 1 and 2 if quoted prices on the active market or observable market parameters were available again or the effect of non-observable parameters on fair value was deemed immaterial.

Development of financial assets measured at fair value assigned to level 3 in financial year 2022

	Financial assets at fair value					
	Loans and advances to banks – FVM	**Loans and advances to customers – FVM**	**Securities and investments – FVM**	**Other derivatives – FVM**	**Non-current assets held for sale**	**Total**
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
As of 1 Jan. 2022	**49**	**135**	**619**	**616**	**51**	**1,471**
A. Changes recognised in the income statement						
Net interest and commission income	0	–2	0	–5	0	–7
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*	*–1*
Net gains/losses from hedge accounting	0	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*	*0*
Net gains/losses from other financial instruments at fair value through profit or loss	–13	–7	–117	–746	11	–872
Contracts still valid at year-end	*–12*	*7*	*–111*	*–8*	*–1*	*–125*
Total changes recognised in the income statement	**–13**	**–9**	**–117**	**–751**	**11**	**–878**
B. Changes recognised directly in equity						
Changes in level assignment	0	0	457	–28	–11	418
Transfer from level 1 and level 2	0	0	522	1	0	524
Transfer to level 1 and level 2	0	0	–65	–30	–11	–106
Additions	0	155	67	0	0	222
Disposals	–2	–87	–55	0	–16	–160
Total changes recognised directly in equity	**–2**	**69**	**469**	**–28**	**–27**	**481**
Changes in consolidated group	0	0	–1	0	0	–1
Exchange rate changes	3	7	40	8	2	60
Other changes	0	0	–11	156	11	156
As of 31 Dec. 2022	**38**	**202**	**1,000**	**1**	**49**	**1,289**

	Liabilities to banks – FVD	Liabilities to customers – FVD	Certificated liabilities – FVD	Other derivatives – FVM	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2022	**0**	**0**	**0**	**86**	**86**
A. Changes recognised in the income statement					
Net interest and commission income	0	0	0	28	28
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*
Net gains/losses from hedge accounting	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	0	918	918
Contracts still valid at year-end	*0*	*0*	*0*	*40*	*40*
Total changes recognised in the income statement	**0**	**0**	**0**	**946**	**946**
B. Changes recognised directly in equity					
Change in revaluation reserves	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*
Changes in level assignment	0	0	0	–1,113	–1,113
Transfer from level 1 and level 2	0	0	0	2	2
Transfer to level 1 and level 2	0	0	0	–1,115	–1,115
Additions	0	0	0	0	0
Disposals	0	0	0	–3	–3
Total changes recognised directly in equity	**0**	**0**	**0**	**–1,116**	**–1,116**
Exchange rate changes	0	0	0	–19	–19
Other changes	0	0	0	146	146
As of 31 Dec. 2022	**0**	**0**	**0**	**43**	**43**

Information on unobservable data as of 31 December 2023

Major classes	Valuation method used	Relevant unobservable data with alternative determination	Range
Loans and advances to banks and loans and advances to customers – FVM	Discounted cash flow method	Risk costs	+/– 10%
Securities and investments from equity finance business – FVM	Discounted cash flow method[1)]	Cost of capital	0.5% to 1.5% (absolute fluctuation)
		Long-term result	5% (relative fluctuation)
		Risk costs	+/– 10%
Non-current assets held for sale	Discounted cash flow method	Cost of capital	0.5% to 1.5% (absolute fluctuation)
		Long-term result	5% (relative fluctuation)
Other derivatives – derivatives with positive or negative fair values, which comprise a hedging instrument for customers with respect to export and project finance – FVM	Discounted cash flow method	Expected loss	+/– 30%

1) If the cost of capital and the long-term result could not be used for valuation, the sensitivities were calculated on the basis of the cost of risk.

Major classes	Valuation method used	Relevant unobservable data with alternative determination	Range
Loans and advances to banks and loans and advances to customers – FVM	Discounted cash flow method	Risk costs	+/– 10%
Securities and investments from equity finance business – FVM	Discounted cash flow method[1)]	Cost of capital	0.5% to 1.5% (absolute fluctuation)
		Long-term result	5% (relative fluctuation)
		Risk costs	+/– 10%
Non-current assets held for sale	Discounted cash flow method	Cost of capital	0.5% to 1.5% (absolute fluctuation)
		Long-term result	5% (relative fluctuation)
Other derivatives – derivatives with positive or negative fair values, which comprise a hedging instrument for customers with respect to export and project finance – FVM	Discounted cash flow method	Expected loss	+/– 30%

[1)] If the cost of capital and the long-term result could not be used for valuation, the sensitivities were calculated on the basis of the cost of risk.

Sensitivity analysis for the financial assets measured at fair value assigned to level 3 as of 31 December 2023

	Best case scenario	Reported value	Worst case scenario
	EUR in millions	EUR in millions	EUR in millions
Financial assets at fair value			
Loans and advances to banks – FVM	43	41	39
Loans and advances to customers – FVM	292	284	275
Securities and investments – FVM	1,527	1,370	1,225
Other derivatives – FVM	46	44	43
Non-current assets held for sale	13	12	11
Total	**1,921**	**1,751**	**1,593**

Sensitivity analysis for the financial liabilities measured at fair value assigned to level 3 as of 31 December 2023

	Best case scenario	Reported value	Worst case scenario
	EUR in millions	EUR in millions	EUR in millions
Financial liabilities at fair value			
Other derivatives – FVM	23	23	23
Total	**23**	**23**	**23**

	Best case scenario	Reported value	Worst case scenario
	EUR in millions	EUR in millions	EUR in millions
Financial assets at fair value			
Loans and advances to banks – FVM	41	38	35
Loans and advances to customers – FVM	212	202	191
Securities and investments – FVM	1,115	1,000	896
Other derivatives – FVM	1	1	1
Non-current assets held for sale	56	49	43
Total	**1,425**	**1,289**	**1,166**

Sensitivity analysis for the financial liabilities measured at fair value assigned to level 3 as of 31 December 2022

	Best case scenario	Reported value	Worst case scenario
	EUR in millions	EUR in millions	EUR in millions
Financial liabilities at fair value			
Other derivatives – FVM	43	43	43
Total	**43**	**43**	**43**

	Carrying amount of hedged items	Accumulated hedge fair value adjustment (fair value of the hedged risk for the hedged item)	Hedge fair value adjustment to be amortised (discontinued hedge relationships)	Statement of financial position items in which the hedged items are reported	Fair value changes in hedged items to determine hedge ineffectiveness (income statement effect – hedged items)
	EUR in millions	EUR in millions	EUR in millions		EUR in millions
Assets					
Interest risk					
Securities and investments – Bonds and other fixed-income securities	28,866	–1,296	0	Financial assets at amortised cost	1,156
Interest-currency risk					
Securities and investments – Bonds and other fixed-income securities	0	0	0	Financial assets at amortised cost	1
Liabilities and equity					
Interest risk					
Liabilities to banks/customers – promissory note loans	29,549	–1,314	1	Financial liabilities at amortised cost	–860
Certificated liabilities	223,440	–12,002	135	Financial liabilities at amortised cost	–9,891
Interest-currency risk					
Liabilities to banks/customers – promissory note loans	0	0	0	Financial liabilities at amortised cost	0
Certificated liabilities	114,305	–2,286	523	Financial liabilities at amortised cost	–3,062

	Carrying amount of hedged items	Accumulated hedge fair value adjustment (fair value of the hedged risk for the hedged item)	Hedge fair value adjustment to be amortised (discontinued hedge relationships)	Statement of financial position items in which the hedged items are reported	Fair value changes in hedged items to determine hedge ineffectiveness (income statement effect – hedged items)
	EUR in millions	EUR in millions	EUR in millions		EUR in millions
Assets					
Interest risk					
Securities and investments – Bonds and other fixed-income securities	26,960	–2,453	0	Financial assets at amortised cost	–2,548
Interest-currency risk					
Securities and investments – Bonds and other fixed-income securities	101	–1	0	Financial assets at amortised cost	–2
Liabilities and equity					
Interest risk					
Liabilities to banks/customers – promissory note loans	27,249	–2,176	2	Financial liabilities at amortised cost	2,195
Certificated liabilities	192,316	–21,947	184	Financial liabilities at amortised cost	23,783
Interest-currency risk					
Liabilities to banks/customers – promissory note loans	0	0	0	Financial liabilities at amortised cost	0
Certificated liabilities	102,770	–5,645	803	Financial liabilities at amortised cost	7,074

	Par value of hedging instruments	Carrying amount of hedging instruments	Statement of financial position items in which the hedging instruments are reported	Fair value changes in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)	Average interest rate of hedging instruments[1]
	EUR in millions	EUR in millions		EUR in millions	%
Assets					
Interest risk					
Interest-related transactions: interest rate swap	71,418	863	Derivatives designated for hedge accounting	–1,158	–2.1
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	68,931	3,118	Derivatives designated for hedge accounting	–1	1.9[2]
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	224,233	4,722	Derivatives designated for hedge accounting	10,797	–3.7
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	113,102	3,466	Derivatives designated for hedge accounting	3,061	–0.2[2]

[1] Average interest rate based on the coupon of the fixed leg of the derivatives weighted with nominal volume
[2] Cross-currency interest rate swaps are primarily used to hedge interest risks, but also to hedge foreign currency risks. The difference between the average interest rate of the interest rate swaps and the cross-currency interest rate swaps results from the different interest rate of the hedged currencies, among other factors.

	Par value of hedging instruments	Carrying amount of hedging instruments	Statement of financial position items in which the hedging instruments are reported	Fair value changes in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)	Average interest rate of hedging instruments[1]
	EUR in millions	EUR in millions		EUR in millions	%
Assets					
Interest risk					
Interest-related transactions: interest rate swap	37,838	511	Derivatives designated for hedge accounting	2,547	–0.9
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	69,391	6,188	Derivatives designated for hedge accounting	2	3.0[2]
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	233,512	7,033	Derivatives designated for hedge accounting	–25,947	–2.7
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	101,100	3,567	Derivatives designated for hedge accounting	–7,085	0.6[2]

[1] Average interest rate based on the coupon of the fixed leg of the derivatives weighted with nominal volume
[2] Cross-currency interest rate swaps are primarily used to hedge interest risks, but also to hedge foreign currency risks. The difference between the average interest rate of the interest rate swaps and the cross-currency interest rate swaps results from the different interest rate of the hedged currencies, among other factors.

Due	In up to 1 month	Between 1 and 3 months	Between 3 months and 1 year	Between 1 year and 5 years	In more than 5 years
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets					
Interest risk					
Interest-related transactions: interest rate swap	731	1,302	3,042	36,229	30,115
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	215	7,423	9,903	34,736	16,654
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	4,107	2,035	36,775	115,733	65,583
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	0	9,913	19,431	74,855	8,902

Analysis of par values of hedging instruments by hedge relationship according to remaining terms as of 31 December 2022

Due	In up to 1 month	Between 1 and 3 months	Between 3 months and 1 year	Between 1 year and 5 years	In more than 5 years
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets					
Interest risk					
Interest-related transactions: interest rate swap	2,860	1,215	4,519	16,837	12,406
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	4,094	5,378	10,199	40,755	8,966
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	914	7,228	16,609	131,059	77,702
Interest-currency risk					
Cross-currency transactions: cross-currency interest rate swap	3,873	4,486	14,205	67,921	10,615

	Carrying amount of hedged items	Value adjustment from macro fair value hedge accounting	Value adjustment from macro fair value hedge accounting to be amortised (discontinued hedge relationships)	Statement of financial position items in which the hedged items are reported: Carrying amount before value adjustment from macro fair value hedge accounting	Statement of financial position items in which the hedged items are reported: Value adjustment from macro fair value hedge accounting	Fair value changes in hedged items to determine hedge ineffectiveness (income statement effect – hedged items)
	EUR in millions	EUR in millions	EUR in millions			EUR in millions
Interest risk						
Assets	*277,527*	*–14,771*	*27*	*Financial assets at amortised cost*	*Value adjustment from macro fair value hedge accounting*	*11,120*
Liabilities and equity	*0*	*–1*	*–1*	*Financial liabilities at amortised cost*	*Value adjustment from macro fair value hedge accounting*	*19*

Disclosures on hedged items in macro fair value hedge accounting by risk type – 2022

	Carrying amount of hedged items	Value adjustment from macro fair value hedge accounting	Value adjustment from macro fair value hedge accounting to be amortised (discontinued hedge relationships)	Statement of financial position items in which the hedged items are reported: Carrying amount before value adjustment from macro fair value hedge accounting	Statement of financial position items in which the hedged items are reported: Value adjustment from macro fair value hedge accounting	Fair value changes in hedged items to determine hedge ineffectiveness (income statement effect – hedged items)
	EUR in millions	EUR in millions	EUR in millions			EUR in millions
Interest risk						
Assets	*262,713*	*–25,859*	*105*	*Financial assets at amortised cost*	*Value adjustment from macro fair value hedge accounting*	*–30,393*
Liabilities and equity	*0*	*18*	*18*	*Financial liabilities at amortised cost*	*Value adjustment from macro fair value hedge accounting*	*19*

	hedging instruments	amount of hedging instruments	financial position items in which the hedging instruments are reported	in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)
	EUR in millions	EUR in millions		EUR in millions
Assets				
Interest risk				
Interest-related transactions: interest rate swap	199,107	1,463	Derivatives designated for hedge accounting	–9,338
Liabilities and equity				
Interest risk				
Interest-related transactions: interest rate swap	47,231	1,112	Derivatives designated for hedge accounting	–1,555

Disclosures on hedging instruments in macro fair value hedge accounting by risk type – 2022

	Par value of hedging instruments	Carrying amount of hedging instruments	Statement of financial position items in which the hedging instruments are reported	Fair value changes in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)
	EUR in millions	EUR in millions		EUR in millions
Assets				
Interest risk				
Interest-related transactions: interest rate swap	211,820	2,306	Derivatives designated for hedge accounting	28,932
Liabilities and equity				
Interest risk				
Interest-related transactions: interest rate swap	21,863	219	Derivatives designated for hedge accounting	1,573

Due	In up to 1 month	Between 1 and 3 months	Between 3 months and 1 year	Between 1 year and 5 years	In more than 5 years
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets					
Interest risk					
Interest-related transactions: interest rate swap	1,245	1,582	20,643	89,843	85,793
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	846	850	1,215	17,048	27,271

Analysis of par values of hedging instruments by remaining terms as of 31 December 2022

Due	In up to 1 month	Between 1 and 3 months	Between 3 months and 1 year	Between 1 year and 5 years	In more than 5 years
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets					
Interest risk					
Interest-related transactions: interest rate swap	0	488	12,015	94,337	104,981
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	6,850	450	4,088	7,763	2,712

	Par value		Fair value 31 Dec. 2023		Fair value 31 Dec. 2022	
	31 Dec. 2023	31 Dec. 2022	positive	negative	positive	negative
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Interest-related derivatives	662,522	621,417	3,861	7,417	4,478	9,268
Cross-currency derivatives	156,750	148,515	3,799	4,590	6,846	5,227
Credit derivatives	0	0	0	0	0	0
Total	**819,271**	**769,932**	**7,660**	**12,007**	**11,324**	**14,496**

Cross-currency swaps are presented under Cross-currency derivatives.

Analysis of derivatives by counterparty

	Par value		Fair value 31 Dec. 2023		Fair value 31 Dec. 2022	
	31 Dec. 2023	31 Dec. 2022	positive	negative	positive	negative
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OECD banks	771,486	736,340	6,843	9,424	10,685	11,700
Non-OECD banks	142	172	4	4	4	6
Other counterparties	47,515	33,308	812	2,560	635	2,762
Public sector	129	112	0	20	0	27
Total	**819,271**	**769,932**	**7,660**	**12,007**	**11,324**	**14,496**

The analysis includes financial and credit derivatives which are presented in derivatives designated for hedge accounting and the sub-item other derivatives under Financial assets at fair value or Financial liabilities at fair value. Embedded derivatives that must be bifurcated are not included.

The economic hedge effect of financial derivatives with an aggregate principal amount of EUR 736.2 billion (31 Dec. 2022: EUR 688.0 billion) is reflected in the accounts; it was not possible to reflect the risk-mitigating impact of the remaining financial derivatives in the accounts (hedge accounting).

Unchanged from 31 December 2022, KfW Group did not pledge any collateral (in the form of securities) under derivative transactions that can be resold or repledged at any time without payments being past due.

Unchanged from 31 December 2022, KfW Group did not receive any collateral (in the form of securities) under derivative transactions that can be resold or repledged at any time without payments by the protection seller being past due.

However, liquid collateral totalling EUR 1,549 million (31 Dec. 2022: EUR 3,922 million) was accepted, which was reported under Financial liabilities at amortised cost – Liabilities to banks or Liabilities to customers.

The volume of initial differences between the transaction price and model value arising from the use of a valuation technique that makes significant use of unobservable data which have yet to be amortised over the life of the financial instrument developed as follows during the reporting period:

Day one profit or loss

	2023 EUR in millions	2022 EUR in millions
As of 1 Jan.	–108	–108
Addition	–22	–15
Reversal	16	17
Exchange rate changes	1	–1
As of 31 Dec.	**–112**	**–108**

The net gains/losses from financial derivatives not qualifying for hedge accounting includes amortisation effects in the amount of EUR 11 million (2022: EUR 10 million).

	Financial liabilities at fair value			Total
	Liabilities to banks	Liabilities to customers	Certificated liabilities	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Carrying amount	221	818	6,613	7,651
Repayment amount at maturity	245	1,137	8,900	10,281
Difference	**24**	**319**	**2,287**	**2,630**
thereof borrowings for which the repayment amount builds up as a result of the capitalisation over time of interest due	0	316	2,522	2,838

Disclosures on financial liabilities at fair value as of 31 December 2022

	Financial liabilities at fair value			Total
	Liabilities to banks	Liabilities to customers	Certificated liabilities	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Carrying amount	208	812	6,699	7,718
Repayment amount at maturity	245	1,187	9,321	10,752
Difference	**37**	**375**	**2,622**	**3,034**
thereof borrowings for which the repayment amount builds up as a result of the capitalisation over time of interest due	0	371	2,755	3,126

	Up to 1 month	More than 1 and up to 3 months	More than 3 months and up to 1 year	More than 1 and up to 5 years	More than 5 years	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Financial liabilities at amortised cost						
Liabilities to banks	2,549	1,674	529	822	378	5,952
Liabilities to customers	9,520	2,449	12,247	19,838	6,670	50,723
Certificated liabilities	19,930	24,939	78,067	240,928	122,946	486,809
Financial liabilities at fair value						
Liabilities to banks	0	0	1	5	246	252
Liabilities to customers	0	1	6	266	998	1,271
Certificated liabilities	46	15	209	3,806	6,820	10,896
Net obligations arising from derivative financial instruments	518	–151	334	1,407	3,307	5,416
thereof gross obligations arising from derivative financial instruments	*14,911*	*19,557*	*40,188*	*104,057*	*37,311*	*216,024*
Obligations arising from on-balance sheet financial instruments	**32,562**	**28,928**	**91,393**	**267,071**	**141,365**	**561,318**
Obligations arising from off-balance sheet transactions	**142,462**	**0**	**0**	**0**	**0**	**142,462**
Total	**175,024**	**28,928**	**91,393**	**267,071**	**141,365**	**703,781**

1) Net obligations arising from derivative financial instruments comprise payment obligations which are offset against the corresponding payment claims from derivative contracts; gross obligations are reported as obligations arising from derivative financial instruments. Off-balance sheet transactions are generally allocated to the first maturity range.

	Up to 1 month	More than 1 and up to 3 months	More than 3 months and up to 1 year	More than 1 and up to 5 years	More than 5 years	Total
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
Financial liabilities at amortised cost						
Liabilities to banks	8,046	1,962	60	738	959	11,764
Liabilities to customers	9,906	6,007	14,682	29,388	6,130	66,113
Certificated liabilities	19,519	38,837	54,425	231,400	115,403	459,584
Financial liabilities at fair value						
Liabilities to banks	0	0	1	5	247	254
Liabilities to customers	0	53	6	69	1,202	1,330
Certificated liabilities	24	14	298	1,298	9,767	11,400
Net obligations arising from derivative financial instruments	–441	167	–863	–2,987	407	–3,718
thereof gross obligations arising from derivative financial instruments	*17,920*	*22,773*	*23,898*	*85,172*	*28,573*	*178,336*
Obligations arising from on-balance sheet financial instruments	**37,053**	**47,040**	**68,608**	**259,911**	**134,115**	**546,727**
Obligations arising from off-balance sheet transactions	**135,695**	**0**	**0**	**0**	**0**	**135,695**
Total	**172,748**	**47,040**	**68,608**	**259,911**	**134,115**	**682,422**

1) Net obligations arising from derivative financial instruments comprise payment obligations which are offset against the corresponding payment claims from derivative contracts; gross obligations are reported as obligations arising from derivative financial instruments. Off-balance sheet transactions are generally allocated to the first maturity range.

The maturity analysis of lease liabilities as lessee is reported under Other notes (in the “Leasing transactions as lessee” section).

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Carrying amount of securities sold under repo transactions that continue to be recognised in Financial assets at amortised cost – Securities and investments	260	498
Financial liabilities at amortised cost – Liabilities to banks (countervalue)	257	501
Financial liabilities at amortised cost – Liabilities to customers (German Finance Agency)	0	2,367

The fair value of interest-bearing securities sold under repo transactions that continue to be recognised in Financial assets at amortised cost totalled EUR 260 million (31 Dec. 2022: EUR 498 million). The fair value of the corresponding repayment obligations was EUR 257 million (31 Dec. 2022: EUR 501 million).

Under Liabilities to customers, the group reported repo transactions with the German Finance Agency in the amount of EUR 2,367 million as of 31 December 2022, under which securities sold under repo transactions were available with KfW acting as borrower in securities lending transactions.

Moreover, as in 2022, KfW Group did not pledge any collateral (in the form of securities) under repo transactions that can be resold or repledged at any time without payments being past due.

As in 2022, the group did not receive any collateral (in the form of securities) under repo transactions that can be resold or repledged at any time without payments being past due.

As in 2022, the group neither pledged nor accepted any liquid collateral.

Disclosures on reverse repo transactions

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Financial assets at amortised cost – Loans and advances to banks (countervalue)	6,083	0
Financial assets at amortised cost – Loans and advances to customers (countervalue)	0	0
Total	**6,083**	**0**

The fair value of interest-bearing securities purchased under reverse repos that are not recognised amounted to EUR 5,950 million (31 Dec. 2022: EUR 0 million).

Moreover, KfW Group did not receive any collateral (in the form of securities) under reverse repo transactions that can be resold or repledged at any time without payments by the protection seller being past due, unchanged from 31 December 2022.

As in 2022, the group neither pledged nor accepted any liquid collateral.

(63) Disclosure on offsetting financial instruments

Disclosures on financial assets with netting agreements as of 31 December 2023

	Carrying amount of financial assets before offsetting (gross amount)	Netted figure as carrying amount of financial liabilities (gross amount)	Reported financial assets (net amount)	Carrying amount of non-offsettable financial liabilities	Fair value of collateral received	Total net amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OTC derivatives	27,775	20,217[1)]	7,559	5,912	1,538	109
Reverse repos	6,083	0	6,083	178	5,905	0
Total	**33,858**	**20,217**	**13,641**	**6,089**	**7,443**	**109**

[1)] Thereof obligations from cash collateral for OTC derivatives with EUREX as the central counterparty in the amount of EUR 4,827 million

Disclosures on financial liabilities with netting agreements as of 31 December 2023

	Carrying amount of financial liabilities before offsetting (gross amount)	Netted figure as carrying amount of financial assets (gross amount)	Reported financial liabilities (net amount)	Carrying amount of non-offsettable financial assets	Fair value of collateral pledged	Total net amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OTC derivatives	26,480	15,377	11,103	5,912	5,107	85
Repos	257	0	257	178	80	0
Total	**26,737**	**15,377**	**11,360**	**6,089**	**5,186**	**85**

The disclosures on financial instruments with netting agreements only include gross and net amounts for financial assets and financial liabilities with netting agreements. The Notes on the two classes Derivatives designated for hedge accounting and Other derivatives also include financial assets with a carrying amount of EUR 207 million (31 Dec. 2022: EUR 185 million) and financial liabilities with a carrying amount of EUR 910 million (31 Dec. 2022: EUR 1,261 million), in particular from bifurcated embedded derivatives and derivatives not subject to netting agreements.

Receivables from reverse repo transactions are reported under Financial assets at amortised cost – Loans and advances to banks and Loans and advances to customers.

	amount of financial assets before offsetting (gross amount)	as carrying amount of financial liabilities (gross amount)	financial assets (net amount)	amount of non-offsettable financial liabilities	collateral received	amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OTC derivatives	38,602	27,300[1)]	11,302	7,745	3,542	15
Reverse repos	0	0	0	0	0	0
Total	**38,602**	**27,300**	**11,302**	**7,745**	**3,542**	**15**

1) Thereof obligations from cash collateral for OTC derivatives with EUREX as the central counterparty in the amount of EUR 6,563 million

Disclosures on financial liabilities with netting agreements as of 31 December 2022

	Carrying amount of financial liabilities before offsetting (gross amount)	Netted figure as carrying amount of financial assets (gross amount)	Reported financial liabilities (net amount)	Carrying amount of non-offsettable financial assets	Fair value of collateral pledged	Total net amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OTC derivatives	33,977	20,737	13,240	7,745	5,149	345
Repos	2,868	0	2,868	0	2,850	18
Total	**36,845**	**20,737**	**16,108**	**7,745**	**8,000**	**363**

Analysis by class

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Irrevocable loan commitments	136,159	129,648
Financial guarantee contracts	1,454	2,054
Contingent liabilities from financial guarantees	2,033	1,490
Other contingent liabilities	2,727	2,388
Total	**142,372**	**135,580**

All off-balance-sheet transactions are disclosed in the Notes at their par values less any related provisions.

Other contingent liabilities include payment obligations attributable to equity investments which are not fully paid up and do not have to be consolidated.

As part of the sale of its stake in Deutsche Industriebank ("IKB") in 2008, KfW agreed to indemnify IKB for certain legal risks up to a certain amount after IKB's excess. As of the end of the reporting period, no proceedings are pending against IKB which are relevant in this context.

In accordance with IAS 37.92, no further disclosures on contingent liabilities were made.

(65) Trust activities and administered loans

Analysis of trust activities (transactions in KfW's own name but for the account of third parties)

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Loans and advances to banks	692	724
Loans and advances to customers	10,590	9,957
Securities and investments	10,018	8,692
Assets held in trust	**21,299**	**19,374**
Liabilities to banks	0	0
Liabilities to customers	21,299	19,374
Liabilities held in trust	**21,299**	**19,374**

and investments.

Moreover, KfW held guarantees of EUR 145 million (31 Dec. 2022: EUR 145 million) issued under the European Fund for Sustainable Development (EFSD), in trust for the European Union.

Volume of administered loans granted (loans in the name and for the account of third parties)

	31 Dec. 2023 EUR in millions	31 Dec. 2022 EUR in millions
Administered loans	21,549	19,657

(66) Leasing transactions as lessee

Disclosures on lessee agreements as of 31 December 2023

	Due within one year EUR in millions	Due in between one and five years EUR in millions	Due in more than five years EUR in millions	Total EUR in millions
Lease liabilities (undiscounted)	12	21	5	38

Disclosures on lessee agreements as of 31 December 2022

	Due within one year EUR in millions	Due in between one and five years EUR in millions	Due in more than five years EUR in millions	Total EUR in millions
Lease liabilities (undiscounted)	11	25	9	45

Lease payments in the amount of EUR 1 million (2022: EUR 1 million) were incurred for short-term leases in the reporting period. For leases in which the underlying asset is of low value, lease payments amounted to EUR 4 million (2022: EUR 2 million). The group does not apply recognition requirements in either case as provided for in IFRS 16.5.

	2023	2022
Female employees	3,918	3,843
Male employees	4,230	4,140
Gender undisclosed	0	1
Total	**8,149**	**7,984**
Staff not covered by collective agreements	*5,409*	*5,242*
Staff covered by collective agreements	*2,315*	*2,325*
Staff in external offices	*424*	*417*

(68) Remuneration report

The remuneration report describes the basic structure of the remuneration plan for members of the Executive Board and Board of Supervisory Directors; it also discloses their remuneration on an individual basis. The remuneration report is an integral part of the notes to the consolidated financial statements.

Overview of total remuneration of members of the Executive Board and Board of Supervisory Directors

	2023[1] EUR in thousands	2022 EUR in thousands
Members of the Executive Board	3,766.7	3,255.2
Former members of the Executive Board and their surviving dependants	4,781.3	4,868.5
Members of the Board of Supervisory Directors	185.2	194.8
Total	**8,733.3**	**8,318.5**

1) The following changes were made in the composition of the Executive Board in financial year 2023:
– Katharina Herrmann was appointed to the Executive Board of KfW with effect from 8 April 2023.

Remuneration of the Executive Board

The remuneration system for KfW's Executive Board is aimed at appropriately compensating members of the Executive Board for their duties and responsibilities. Executive Board contracts are drawn up based on the 1992 version of the policy for hiring executive board members at credit institutions of the Federal Government *(Grundsätze für die Anstellung der Vorstandsmitglieder bei den Kreditinstituten des Bundes).* The Federal Public Corporate Governance Code *(Public Corporate Governance Kodex des Bundes – "PCGK")* is taken into account when drawing up contracts. Each contract is individualised accordingly on this basis.

Components of remuneration

The Executive Board members receive fixed monetary remuneration paid in equal monthly instalments.

The following table shows total remuneration, broken down into remuneration components and other forms of remuneration, as well as additions to pension provisions for each member of the Executive Board.

	Salary		Other remuneration		Total		Additions to pension provisions[1]	
	2023	2022	2023	2022	2023	2022	2023	2022
	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
Stefan Wintels (Chief Executive Officer)	830.5	810.3	18.0	18.8	848.5	829.1	710.5	422.6
Katharina Herrmann[2]	412.7	/	3.7	/	416.4	/	627.8	/
Melanie Kehr	597.4	560.6	12.2	12.8	609.6	573.4	485.9	–565.5
Christiane Laibach	562.8	549.1	14.8	24.8	577.6	573.9	313.9	117.1
Bernd Loewen	665.8	649.6	30.9	27.8	696.7	677.4	778.3	–2,200.3
Dr Stefan Peiß	597.4	582.9	20.5	18.6	617.9	601.5	573.0	–1,793.8
Total	**3,666.6**	**3,152.5**	**100.1**	**102.7**	**3,766.7**	**3,255.2**	**3,489.4**	**–4,019.9**

[1] The discount rate for pension obligations decreased in 2023 due to the fall in long-term capital market rates, from 3.89% (31 Dec. 2022) to 3.41% (31 Dec. 2023).
[2] Executive Board member since 8 April 2023

Breakdown of other remuneration of the Executive Board in financial year 2023

	Company car	Group accident insurance	Health insurance	Long-term care insurance	Cost of maintaining a second home	Other	Total
	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
Stefan Wintels (Chief Executive Officer)	11.5	0.6	4.9	1.0	0.0	0.0	18.0
Katharina Herrmann[1]	0.0	0.3	3.0	0.4	0.0	0.0	3.7
Melanie Kehr	7.1	0.4	4.2	0.5	0.0	0.0	12.2
Christiane Laibach	9.6	0.4	4.2	0.6	0.0	0.0	14.8
Bernd Loewen	12.3	0.5	17.2	1.0	0.0	0.0	31.0
Dr Stefan Peiß	12.0	0.4	7.1	1.0	0.0	0.0	20.5
Total	**52.5**	**2.6**	**40.6**	**4.5**	**0.0**	**0.0**	**100.1**

[1] Executive Board member since 8 April 2023

	car	accident insurance	insurance	care insurance	maintaining a second home		
	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
Stefan Wintels (Chief Executive Officer)	12.3	0.6	4.7	0.9	0.0	0.3	18.8
Melanie Kehr	7.5	0.4	4.2	0.3	0.0	0.3	12.8
Christiane Laibach	11.8	0.4	4.1	0.4	7.8	0.3	24.8
Bernd Loewen	11.6	0.5	14.5	0.9	0.0	0.3	27.8
Dr Stefan Peiß	10.2	0.4	6.8	0.9	0.0	0.3	18.6
Total	**53.5**	**2.2**	**34.4**	**3.4**	**7.8**	**1.5**	**102.7**

Breakdown of remuneration of the Executive Board from secondary employment in financial years 2023 and 2022

	2023	2022
	EUR in thousands	EUR in thousands
Stefan Wintels (Chief Executive Officer)[1)]	342.0	221.8
Katharina Herrmann[2)]	0.0	/
Melanie Kehr	37.8	33.8
Christiane Laibach	0.0	0.0
Bernd Loewen	0.0	16.7
Dr Stefan Peiß	0.0	0.0

1) Remuneration payments for 2022 were made in 2023.
2) Katharina Herrmann was appointed to the Executive Board of KfW with effect from 8 April 2023.

Responsibilities

The Presidial and Nomination Committee has discussed the Executive Board remuneration system including contract components since the committee structure was modified in accordance with the applicable Section 25d of the German Banking Act *(Kreditwesengesetz – "KWG")* and adopts and regularly reviews it. The Presidial and Nomination Committee is advised on these matters by the Remuneration Committee, which in turn works together with the Risk and Credit Committee in order to perform its duties. Likewise after consulting with the Remuneration Committee on the matter, the Board of Supervisory Directors decides upon the basic structure of the Executive Board's remuneration system.

The Presidial and Nomination Committee most recently discussed remuneration issues on 6 December 2023.

protected by a special legal expenses group policy for employees covering criminal activities.

No remuneration is paid to members of the Executive Board for assuming executive body functions at group companies.

As with all other executives, Executive Board members may also opt to participate in the deferred remuneration programme – a supplemental company pension scheme financed via tax-free salary conversion. Moreover, they are entitled to anniversary bonuses in accordance with KfW's general company policy.

In addition, the fringe benefits include the cost of security systems at Executive Board members' homes; these benefits are not recognised as Other remuneration but as Non-personnel expenses.

The contractual fringe benefits are subject to taxation as benefits in money's worth for Executive Board members if they cannot be granted on a tax-free basis or if this is contractually agreed. No Executive Board member was granted or promised any benefits by a third party during the past financial year with a view to his/her position as a member of the KfW Executive Board.

Pension benefits and other benefits in the case of early retirement

In accordance with Article 1 (3) of the KfW Bylaws, the appointment of an Executive Board member should not generally extend past the legal age of retirement. Upon reaching the age of 65 or statutory retirement age and the expiry of their Executive Board contract, Executive Board members are entitled to claim pension payments; they are also entitled to pension benefits if their employment relationship terminates due to permanent disability.

Pension commitments for Executive Board members as well as their surviving dependants are based on the 1992 version of the Federal Government's policy for hiring executive board members at credit institutions. The PCGK is taken into account when drawing up the Executive Board contracts.

Executive Board member contracts include a severance pay cap in accordance with the recommendations of the PCGK. In other words, payments to these Executive Board members due to early termination of the Executive Board function without good cause in accordance with Section 626 of the German Civil Code (*Bürgerliches Gesetzbuch – "BGB"*) should not exceed the equivalent of two years' salary or remuneration including fringe benefits for the remainder of the contract, depending on which of the amounts is lower.

The Executive Board contracts contain additional individual provisions, in particular concerning vesting of pension benefits. The newer contracts also include provisions on retrospective pension contributions where pension benefits are not yet vested and the member in question has not been reappointed.

Pension payments to former Executive Board members or their surviving dependants were as follows in 2023 and 2022:

Pension payments to former Executive Board members or their surviving dependants

	2023		2022	
	Headcount	EUR in thousands	Headcount	EUR in thousands
Former members of the Executive Board	18	4,033.8	19	4,058.1
Surviving dependants	7	747.5	8	810.4
Total	**25**	**4,781.3**	**27**	**4,868.5**

Provisions for pension obligations to former members of the Executive Board and their surviving dependants in the amount of EUR 61,827 thousand (31 Dec. 2022: EUR 60,446 thousand) were set up at the end of financial year 2023.

Remuneration of members of the Board of Supervisory Directors

The amount of remuneration to members of the Board of Supervisory Directors is determined by the supervisory authority in accordance with Article 7 (10) of the KfW Bylaws. With the last revision in May 2010, compensation to members of the Federal Government who are members of the Board of Supervisory Directors pursuant to Article 7 (1) No. 1 and No. 2 of the KfW Law was set at EUR 0.

In the reporting year, remuneration for other members of the Board of Supervisory Directors pursuant to Article 7 (1) Nos. 3–7 of the KfW Law amounted to EUR 5,100 p. a.; remuneration for membership of a Board of Supervisory Directors committee was a standard amount of EUR 600 p. a. for each member. Committee chairs did not receive special remuneration.

Members who join during the year receive their remuneration on a pro rata basis.

A daily allowance (EUR 200 per meeting day) is paid and travel expenses and applicable VAT are reimbursed upon request.

The following table provides details on the remuneration paid to the Board of Supervisory Directors in financial year 2023; stated amounts are net amounts in thousands of euros. Travel expenses are reimbursed upon submission of receipts and are not taken into account in the table.

No.	Name	Dates of membership	Board of Supervisory Directors membership[1]	Committee membership[1]	Daily allowance[3]	Total
			EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
1.	Christian Lindner	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
2.	Dr Robert Habeck	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
3.	Annalena Baerbock	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
4.	Katharina Beck	1 Jan. – 31 Dec.	5.1	1.1	0.2	6.4
5.	Dr André Berghegger	1 Jan. – 31 Dec.	5.1	1.5	0.8	7.4
6.	Volker Bouffier[2]	1 Jan. – 31 Dec.	5.1	1.0	0.2	6.3
7.	Dr Andreas Dressel[2]	1 Jan. – 31 Dec.	5.1	0.6	0.2	5.9
8.	Yasmin Fahimi	24 May – 31 Dec.	3.2	0.7	0.0	3.9
9.	Björn Fecker[2]	20 Oct. – 31 Dec.	1.1	0.0	0.0	1.1
10.	Robert Feiger	1 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
11.	Tanja Gönner	1 Jan. – 31 Dec.	5.1	1.0	0.4	6.5
12.	Dr Louis Hagen[5]		0.0	0.0	0.2	0.2
13.	Gerald Heere[2]	1 Jan. – 31 Dec.	5.1	1.5	0.4	7.0
14.	Prof. Dr Hans-Günter Henneke[4]	1 Jan. – 31 Dec.	5.1	0.5	1.4	7.0
15.	Reiner Hoffmann	1 Jan. – 8 Feb.	0.6	0.2	0.0	0.8
16.	Dr Bruno Hollnagel	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
17.	Verena Hubertz	1 Jan. – 31 Dec.	5.1	1.8	0.2	7.1
18.	Harald Hübner[2]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
19.	Dr Dirk Jandura[4]	1 Jan. – 31 Dec.	5.1	0.6	1.6	7.3
20.	Andrea Kocsis	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
21.	Stefan Körzell	1 Jan. – 31 Dec.	5.1	1.2	0.4	6.7
22.	Ulrich Lange	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
23.	Steffi Lemke	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
24.	Rainer Neske[4]	1 Jan. – 31 Dec.	5.1	0.6	1.0	6.7
25.	Cem Özedemir	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
26.	Dr Marcus Optendrenk[2, 6]	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
27.	Dr Bettina Orlopp	1 Jan. – 31 Dec.	5.1	0.5	0.0	5.6
28.	Dr Hans-Walter Peters[4]	1 Jan. – 31 Dec.	5.1	2.5	1.2	8.8
29.	Achim Post	1 Jan. – 31 Dec.	5.1	1.0	0.0	6.1
30.	Daniel Quinten	1 Jan. – 31 Dec.	5.1	1.0	1.0	7.1
31.	Michael Richter[2, 4]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
32.	Joachim Rukwied	1 Jan. – 31 Dec.	5.1	0.5	0.0	5.6
33.	Frank Schäffler	1 Jan. – 31 Dec.	5.1	1.2	0.6	6.9
34.	Helmut Schleweis	1 Jan. – 31 Dec.	5.1	2.5	0.0	7.6
35.	Svenja Schulze	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
36.	Holger Schwannecke	1 Jan. – 31 Dec.	5.1	1.8	0.2	7.1
37.	Dietmar Strehl[2]	1 Jan. – 5 July	2.8	0.7	1.0	4.5
38.	Dr Martin Wansleben	1 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
39.	Dr Kai H. Warnecke	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
40.	Dr Volker Wissing	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
Total			**145.4**	**25.2**	**14.6**	**185.2**

[1] The amounts had not yet been paid out as of the reporting date 31 December 2023.
[2] Amount governed by state law
[3] Amounts for financial year 2023 until the date of assessment. Any later claims will be included in the next report.
[4] The daily allowance includes payments for 2022.
[5] Payments for meeting attendance for 2022
[6] Member waived entitlement.

No.	Name	Dates of membership	Board of Supervisory Directors membership[1]	Committee membership[1]	Daily allowance[3]	Total
			EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
1.	Dr Robert Habeck	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
2.	Christian Lindner	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
3.	Doris Ahnen[5]		0.0	0.0	0.2	0.2
4.	Annalena Baerbock	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
5.	Dr Danyal Bayaz[2, 4]	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
6.	Katharina Beck	13 Jan. – 31 Dec.	5.1	0.5	0.2	5.8
7.	Dr André Berghegger	1 Jan. – 31 Dec.	5.1	1.8	0.6	7.5
8.	Volker Bouffier[2, 4]	1 Jan. – 31 Dec.	5.1	1.2	0.2	6.5
9.	Dr Andreas Dressel[2]	1 Jan. – 31 Dec.	5.1	0.5	0.0	5.6
10.	Ingeborg Esser	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
11.	Robert Feiger	1 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
12.	Albert Füracker[2, 4]	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
13.	Olav Gutting[5]		0.0	0.0	0.2	0.2
14.	Dr Louis Hagen	1 Jan. – 31 Dec.	5.1	1.2	0.4	6.7
15.	Prof. Dr Hans-Günter Henneke	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
16.	Reinhold Hilbers[2]	1 Jan. – 31 Dec.	5.1	1.8	1.2	8.1
17.	Reiner Hoffmann[4]	1 Jan. – 31 Dec.	5.1	1.2	0.6	6.9
18.	Gerhard Hofmann	1 Jan. – 6 Apr.	1.5	0.3	0.2	2.0
19.	Dr Bruno Hollnagel	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
20.	Verena Hubertz	13 Jan. – 31 Dec.	5.1	1.4	0.0	6.5
21.	Dr Dirk Jandura	1 Jan. – 31 Dec.	5.1	0.5	0.8	6.4
22.	Alois Karl	1 Jan. – 31 Dec.	5.1	0.6	1.7	7.4
23.	Andrea Kocsis[4]	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
24.	Stefan Körzell	1 Jan. – 31 Dec.	5.1	1.2	0.4	6.7
25.	Dr Joachim Lang	1 Jan. – 31 Dec.	5.1	1.2	0.0	6.3
26.	Steffi Lemke	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
27.	Rainer Neske[4]	1 Jan. – 31 Dec.	5.1	0.6	1.2	6.9
28.	Cem Özdemir	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
29.	Dr Hans-Walter Peters	1 Jan. – 31 Dec.	5.1	2.5	1.0	8.6
30.	Achim Post	13 Jan. – 31 Dec.	5.1	0.9	0.4	6.4
31.	Daniel Quinten	7 Apr. – 31 Dec.	3.6	0.9	0.8	5.3
32.	Michael Richter[2]	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
33.	Joachim Rukwied	1 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
34.	Frank Schäffler	13 Jan. – 31 Dec.	5.1	0.9	0.2	6.2
35.	Helmut Schleweis	1 Jan. – 31 Dec.	5.1	2.5	0.0	7.6
36.	Svenja Schulze	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
37.	Holger Schwannecke[4]	1 Jan. – 31 Dec.	5.1	1.4	1.2	7.7
38.	Dietmar Strehl[2]	1 Jan. – 31 Dec.	5.1	0.9	0.8	6.8
39.	Dr Martin Wansleben[4]	1 Jan. – 31 Dec.	5.1	0.5	0.6	6.2
40.	Dr Volker Wissing	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
Total			**153.0**	**25.7**	**16.1**	**194.8**

[1] The amounts had not yet been paid out as of the reporting date 31 December 2022.
[2] Amount governed by state law
[3] Amounts for financial year 2022 until the date of assessment. Any later claims will be included in the next report.
[4] The daily allowance includes payments for 2021.
[5] Payments for meeting attendance for 2021

Members of the Board of Supervisory Directors did not receive remuneration in the reporting year for personal services provided.

Members of the Board of Supervisory Directors are also covered by a directors' and officers' liability insurance policy, which insures them against the risks of financial loss associated with their actions in their capacity as Supervisory Directors and by a supplemental legal expenses insurance policy and a contractual protection insurance policy. There are currently no deductibles agreed. KfW Supervisory Directors acting in that capacity are also protected by a special legal expenses group policy for employees covering criminal action brought against Supervisory Directors and by a group accident insurance policy.

(69) Related party disclosures

Transactions between KfW and related parties are concluded as part of operating activities. KfW Group's related parties in accordance with IAS 24 include its subsidiaries which are not consolidated for reasons of immateriality, joint ventures, associates, KfW shareholders, interests held by the Federal Government over which it directly has significant influence, key management personnel and their family members and entities over which this group of persons exercise control. As for the persons in the remuneration report, the persons in key positions are limited to the KfW Executive Board and the members of the Board of Supervisory Directors.

KfW has exercised the relief option in accordance with IAS 24.25 for government-related entities.

Transactions with shareholders

KfW is a public-law institution in which the Federal Republic of Germany (Federal Government) holds an 80% stake and the Federal States hold a 20% stake. Any transactions with the Federal Government and the Federal States in financial year 2023 are covered by the rules and regulations set forth in the KfW Law. This also includes guarantees received for operations in which the Federal Republic of Germany has a state interest and for which the Federal Government has mandated KfW (mandated transactions in accordance with article 2 (4) of the KfW Law). Transactions with the Federal Government are, as a rule, offset by countertrade transactions with a third party. They do not constitute transactions within the meaning of IAS 24. For this reason, the treatment under IAS 24 is exclusively limited to business relationships with the Federal Government.

KfW Group reported receivables in the amount of EUR 20.1 billion (31 Dec. 2022: EUR 19.3 billion) arising from business relationships with shareholders, resulting in particular from the promotional mandate. These include, for example, the holding arrangements and the BAföG government loans. Promissory notes are held in "Financial assets at amortised cost" under Securities and investments in the amount of EUR 2.8 billion (31 Dec. 2022: EUR 3.3 billion). Hedging interest risks yielded a net gain from hedge accounting in the amount of EUR 133 million (2022: a loss of EUR 365 million). Under Other assets, KfW reported mainly claims for reimbursement from the Federal Government in the amount of EUR 636 million (31 Dec. 2022: EUR 626 million); these were offset in the same amount by provisions relating to agency agreements. Assets are offset by liabilities of EUR 8.3 billion (31 Dec. 2022: EUR 8.2 billion).

Irrevocable loan commitments of around EUR 11.5 billion (31 Dec. 2022: EUR 12.1 billion) were granted under the BAföG government loans. On the other hand, the group received loan commitments and guarantees from the

Transactions with shareholders resulted in Net interest income of EUR 383 million (2022: EUR 48 million). There were also agency agreements between the Federal Government and KfW, which are reflected in Net commission income, in particular. Please refer to the information provided in the Notes on “Net commission income” and “Trust activities”.

Transactions with interests held by the Federal Government

As of 31 December 2023, KfW maintained credit balances at Deutsche Bundesbank in the amount of EUR 47.4 billion (31 Dec. 2022: EUR 51.8 billion). This resulted in interest income of EUR 1.6 billion (2022: EUR 54 million).

KfW recognised liabilities to the German Finance Agency of EUR 34.8 billion (31 Dec. 2022: EUR 50.8 billion). This includes promissory note loans to refinance support services in the context of the COVID-19 pandemic and the energy industry in connection with the Russia-Ukraine war. These promissory note loans are hedged against interest risk by means of a micro hedge. This resulted in a net loss from hedge accounting in the amount of EUR 0.8 billion (31 Dec. 2022: gain of EUR 1.9 billion). Transactions with the German Finance Agency resulted in a net interest expense of EUR 575 million (31 Dec. 2022: EUR –45 million).

In financial year 2022, the German Finance Agency had transferred German government securities to KfW for funding under the Energy security package via securities lending transactions. Repo transactions had then been concluded with the German Finance Agency, based on the previously transferred German government securities, which were not recognised by KfW (see notes on “Repurchase agreements and securities lending” and “Disclosures on repurchase agreements”).

Transactions with the remainder of the interests held by the Federal Government primarily include loans in the amount of EUR 342 million (31 Dec. 2022: EUR 449 million) in connection with corporate financing.

Transactions with group companies

Transactions with group companies mainly resulted in receivables in the amount of EUR 145 million (31 Dec. 2022: EUR 144 million), which were offset by risk provisions of EUR 11 million (31 Dec. 2022: EUR 15 million), and customer derivatives with a negative fair value of EUR 21 million (31 Dec. 2022: EUR 24 million). Moreover, liabilities to tbg Technologie-Beteiligungsgesellschaft mbH of EUR 72 million were reported (31 Dec. 2022: EUR 66 million).

Transactions with key persons

The business relationships between KfW and the members of the Executive Board and of the Board of Supervisory Directors are primarily determined by the KfW By-Laws and by applying the principles of the Federal Public Corporate Governance Code. KfW primarily provides direct loans under its promotional mandate, such as in the area of education financing, and disbursed grants of minor significance. The conditions and prices reflect market conditions or are concluded in accordance with KfW’s general conditions for its loan programmes open to the general public.

	2022	2022
	EUR in thousands	EUR in thousands
Audit	6,451	7,163
Other attestation services	1,216	828
Total	**7,668**	**7,991**

The auditor’s fees comprise reversals of provisions for the 2022 auditor’s fees amounting to a total of EUR 120,000.

(71) Disclosures on unconsolidated structured entities

The group’s unconsolidated structured entities within the meaning of IFRS 12 relate to the following business sectors:

Structured entities in the business sector Financial markets

KfW makes investments in ABS and ABCP transactions as part of liquidity management and to promote the financing of climate and environmental protection projects. Moreover, the business sector Financial markets also manages an existing portfolio to which no further investments are added. This portfolio currently consists of securities issued since 2004.

As of 31 December 2023, the carrying amount of the positions held totalled EUR 6.1 billion (31 Dec. 2022: EUR 5.9 billion).

Structured entities in the business sector Export and project finance

Tailored leasing/financing concepts are structured via property leasing companies, primarily in the “Aviation and Rail” and “Maritime Industries” sector departments. A separate entity is created for each transaction, with the group participating as the lender. In the case of some of these business partners, the sponsoring banks act as managers of trust companies, but in the majority of cases, these business partners are set up as separate legal entities. The group provides loans to these companies, generally together with other credit institutions. KfW also has credit relationships with some structured entities as market participants in the commodities financing business, where the group supports these customers with pre-export financing structures.

As of 31 December 2023, the carrying amount of the positions held totalled EUR 1.8 billion (31 Dec. 2022: EUR 2.1 billion).

Structured entities in the business sector DEG

As a finance and advisory institution, DEG provides support within its development mandate in line with its business activity guidelines. DEG’s mandate is to promote the development of the private sector of a) developing countries, b) central and eastern European countries and New Independent States (NIS), and c) other countries approved by its shareholder KfW in agreement with the Federal Government. In certain isolated cases this is undertaken via investments in structured entities in the form of equity investments and loans. In accordance with the applied risk principles, the risk of loss is limited to the volume invested or committed.

As of 31 December 2023, the carrying amount of the positions held totalled EUR 0.3 billion (31 Dec. 2022: EUR 0.2 billion).

The following table shows the carrying amounts of assets relating to unconsolidated structured entities and the maximum possible loss that could result from these exposures.

	Loans and advances to customers	Securities and investments	Other assets	Contingent liabilities; irrevocable loan commitments
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Carrying amount	1,688	6,185	1	405
Risk and other provisions	24	0	0	1
Max. risk of loss	**1,664**	**6,185**	**1**	**404**

Maximum risk of loss as of 31 December 2022

	Loans and advances to customers	Securities and investments	Other assets	Contingent liabilities; irrevocable loan commitments
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Carrying amount	1,924	5,926	0	351
Risk and other provisions	35	1	0	0
Max. risk of loss	**1,889**	**5,925**	**0**	**351**

The maximum risk of loss is equal to the nominal amount for credit lines, (financial) guarantees and other liquidity facilities minus the provisions for credit risks recognised in the statement of financial position. The maximum risk of loss relating to the group's investments is their carrying amount (net). The maximum risk of loss does not include effects from the group's hedging instruments used to reduce the maximum risk of loss.

No support is provided to structured entities in the group beyond the respective financing.

In exceptional cases, the group acts as sponsor for structured entities in which it holds shares purely on a trust basis on behalf of the Federal Government. The risk of these structured entities lies exclusively with the Federal Government. In such cases, the group is considered the sponsor of the structured entities because the entities were initiated and/or structured by the group on behalf of the Federal Government.

Name/registered office	Capital share	Equity (IFRS) as of 31 Dec. 2023	Equity (IFRS) as of 31 Dec. 2022
	%	EUR in millions	EUR in millions
KfW IPEX-Bank GmbH, Frankfurt am Main, Germany	100.0	4,682	4,498
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany	100.0	3,105	3,067
KfW Beteiligungsholding GmbH, Bonn, Germany	100.0	3,119	3,182
Interkonnektor GmbH, Frankfurt am Main, Germany	100.0	53	70
KfW Capital GmbH & Co. KG, Frankfurt am Main, Germany	100.0	979	857
KfW IPEX-Bank Asia Ltd., Singapore	100.0	13	12

Associates included in the consolidated financial statements using the equity method

Name/registered office	Capital share	Equity as of 30 Sept. 2023	Equity as of 30 Sept. 2022
	%	EUR in millions	EUR in millions
Microfinance Enhancement Facility S. A., Luxembourg	18.5	440	516
Green for Growth Fund, Southeast Europe S. A., Luxembourg	13.3	600	557
coparion GmbH & Co. KG, Cologne, Germany	16.4	358	350
Name/registered office	**Capital share**	**Equity as of 31 Dec. 2023**	**Equity as of 31 Dec. 2022**
	%	EUR in millions	EUR in millions
DC Nordseekabel GmbH und Co. KG, Bayreuth, Germany	50.0	772	805

Green for Growth Fund, Southeast Europe S.A. (GGF) has been included in the consolidated financial statements using the equity method since 2010. GGF is a fund to promote SME and private household investment in energy efficiency and renewable energy in the Western Balkans and Turkey (KfW's investment in GGF is also part of the business sector KfW Development Bank).

DC Nordseekabel GmbH und Co. KG (DC Nordseekabel) was accounted for using the equity method, as a joint venture of Interkonnektor GmbH (Nordseekabel-Projekt NordLink in the business sector Export and project finance), for the first time in financial year 2015. The NordLink project is one of the major projects in the European energy sector and comprises an investment volume of around EUR 1.5 to 2 billion. As it will primarily serve as a conduit for renewably sourced energy, the underwater cable will play an important role in the success of Germany's energy transition. Norwegian state-owned power grid operator Statnett, KfW and the transmission systems operator TenneT, which is responsible for the German territory of the North Sea, concluded a cooperation agreement in February 2015 to construct an underwater cable between Germany and Norway. The NordLink project will be realised by a syndicate in which Statnett and DC Nordseekabel each hold a 50% stake. KfW – via its subsidiary Interkonnektor GmbH – and TenneT each hold a 50% stake in DC Nordseekabel, which is responsible for construction and obtaining permits in Germany.

coparion GmbH & Co. KG (coparion; business sector KfW Capital) as an associated company was accounted for using the equity method for the first time in financial year 2016. This co-investment fund by KfW and the German Federal Ministry for Economic Affairs and Climate Action (BMWK) participates in young technology companies by offering venture capital, together with private lead investors.

Entities not included in the consolidated financial statements

Five subsidiaries, one joint venture, seven associated companies, and one special purpose vehicle (including structured entities) of minor significance to the presentation of the net assets, financial and earnings position of KfW Group have not been consolidated; instead, they are shown in the statement of financial position under Securities and investments or Loans and advances. These companies account for approximately 0.05% of KfW Group's total assets.

No.	Name	Place	Capital share in %	CU	Exchange rate EUR 1.00 = CU as of 31 Dec. 2023[2)]	Equity in TCU[2), 3)]	Net income in TCU[2), 3)]
KfW shareholdings							
A. Fully consolidated subsidiaries included in the consolidated financial statements							
1	DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH	Cologne	100.0	EUR	1.0000	2,516,872	10,250
2	Interkonnektor GmbH	Frankfurt am Main	100.0	EUR	1.0000	71,780	–9,887
3	KfW Beteiligungsholding GmbH	Bonn	100.0	EUR	1.0000	1,770,628	165,933
4	KfW Capital GmbH & Co. KG	Frankfurt am Main	100.0	EUR	1.0000	662,601	0
B. Subsidiaries not included in the consolidated financial statements							
5	Finanzierungs- und Beratungsgesellschaft mbH	Berlin	100.0	EUR	1.0000	5,664	9
6	tbg Technologie- Beteiligungsgesellschaft mbH	Bonn	100.0	EUR	1.0000	72,676	5,504
C. Other shareholdings (only capital shares totalling at least 20%)							
7	Berliner Energieagentur GmbH	Berlin	25.0	EUR	1.0000	8,215	418
Shareholdings of KfW IPEX-Bank GmbH							
A. Fully consolidated subsidiaries included in the consolidated financial statements							
1	KfW IPEX-Bank Asia Ltd.[6)]	Singapore, Singapore	100.0	SGD	1.4591	18,648	1,046
Shareholdings of KfW Beteiligungsholding GmbH							
A. Fully consolidated subsidiaries included in the consolidated financial statements							
1	KfW IPEX-Bank GmbH	Frankfurt am Main	100.0	EUR	1.0000	3,206,313	0

No.	Name	Place	Capital share in %	CU	Exchange rate EUR 1.00 = CU as of 31 Dec. 2023[2)]	Equity in TCU[2), 3)]	Net income in TCU[2), 3)]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
A. Subsidiaries not included in the consolidated financial statements							
1	DEG Impact GmbH	Cologne	100.0	EUR	1.0000	2,297	651
2	DEG Impulse GmbH	Cologne	100.0	EUR	1.0000	2,911	–89
B. Other shareholdings (only capital shares totalling at least 20%)							
3	Aavishkaar Frontier Fund	Mumbai, India	20.8	USD	1.1050	21,996	–22,836
4	AC Capitales Infrastructure Fund II L.P.	Toronto, Canada	32.4	USD	1.1050	1,134	–738
5	Ace Power Embilipitiya Pvt Ltd.	Colombo, Sri Lanka	26.0	LKR	358.1040	4,548,019	355,860
6	ACON Latin America Opportunities Fund IV-A, L.P.	Washington D.C., USA	39.9	USD	1.1050	70,095	1,936
7	Acon Latin America Opportunities Fund-A, L.P.	Washington, D.C., USA	40.0	USD	1.1050	18,299	–5,597
8	ACON Retail MXD, L.P.	Toronto, Canada	100.0	USD	1.1050	19,346	2,623
9	Adobe Social Mezzanine Fund I, L.P.	Mexico City, Mexico	32.9	USD	1.1050	2,064	–3,582
10	ADP Enterprises W.L.L.	Manama, Bahrain	23.3	EUR	1.0000	217,246	45,747
11	ADP II Holding 11 S.A.R.L.	Luxembourg, Luxembourg	22.2	USD	1.1050	72,002	–129
12	Advent Latin American Private Equity Fund III-B, L.P.	Wilmington, USA	100.0	USD	1.1050	[5)]	[5)]
13	AEP China Hydro Ltd.	Ebène CyberCity, Mauritius	30.2	USD	1.1050	[5)]	[5)]
14	AfricInvest III – SPV 1	Port Louis, Mauritius	21.8	EUR	1.0000	54,310	5,687
15	Agrofundo Brasil VI Fundo de Investimento em Participações Multiestratégia	São Paulo, Brazil	29.9	BRL	5.3618	[5)]	[5)]
16	AO Bucharagips	Kogon, Uzbekistan	24.9	UZS	13,651.1750	[5)]	[5)]
17	Apis Growth 2 Ltd.	Ebène CyberCity, Mauritius	25.6	USD	1.1050	33,062	–5,715
18	Ashmore Andean Fund III, L.P.	Toronto, Canada	60.0	USD	1.1050	199	–802
19	Banque Nationale de Développement Agricole S. A.	Bamako, Mali	21.4	XOF	655.9570	81,224,000	11,795,000
20	BanyanTree Growth Capital, LLC	Ebène CyberCity, Mauritius	27.0	USD	1.1050	17,143	6,688
21	Benetex Industries Ltd.	Dhaka, Bangladesh	28.3	BDT	121.3397	[5)]	[5)]
22	Berkeley Energy Wind Mauritius Ltd.	Ebène CyberCity, Mauritius	25.8	EUR	1.0000	[5)]	[5)]
23	Catalyst MENA Clean Energy Fund, L.P.	Amman, Jordan	24.6	USD	1.1050	75,318	33,339

No.	Name	Place	Capital share in %	CU [1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2023[2]	Equity in TCU[2], [3]	Net income in TCU[2], [3]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
24	CGFT Capital Pooling GmbH & Co. KG	Berlin, Germany	40.0	EUR	1.0000	[5]	[5]
25	CoreCo Central America Fund I, L.P.	Wilmington, USA	22.0	USD	1.1050	18,753	–1,079
26	Crescera Growth Capital Fund I-B, L.P.	Toronto, Canada	24.2	USD	1.1050	54,367	14,077
27	Crescera Investimentos Growth Capital Fund I-B, L.P.	Wilmington, USA	20.0	USD	1.1050	72,606	–36,864
28	Da Vinci Emerging Technologies Fund III L.P.	St. Peter Port, Guernsey	20.0	USD	1.1050	[5]	[5]
29	Darby Latin American Private Debt Fund IIIA, L.P.	Toronto, Canada	37.6	USD	1.1050	27,629	344
30	ECP Africa Fund IV LLC	Ebène CyberCity, Mauritius	34.5	USD	1.1050	101,799	–10,523
31	Elbrus Capital Fund III B, S.C.Sp.	Luxembourg, Luxembourg	100.0	USD	1.1050	[5]	[5]
32	Emerald Sri Lanka Fund I Ltd.	Ebène CyberCity, Mauritius	23.5	USD	1.1050	7,045	–5,012
33	EMF NEIF I (A), L.P.	Fareham, United Kingdom	28.1	USD	1.1050	35,039	–4,609
34	EMX Capital Partners, L.P.	Mexico City, Mexico	20.1	USD	1.1050	[5]	[5]
35	Evonik Lanxing (Rizhao) Chemical Industrial Co. Ltd.	Rizhao, China	41.0	CNY	7.8509	183,267	–1,334
36	Fortio Co. Ltd.	George Town, Grand Cayman, Cayman Islands	46.2	USD	1.1050	11,212	1,462
37	Frontier Bangladesh II, L.P.	George Town, Cayman Islands	27.2	USD	1.1050	19,926	–5,953
38	Grand Bremner Corp Pte. Ltd.	Singapore, Singapore	23.3	USD	1.1050	55,692	–14,413
39	Grassland Finance Ltd.	Hong Kong, Hong Kong	24.9	CNY	7.8509	384,748	–57,171
40	Greater Pacific Capital MIV Ltd.	George Town, Cayman Islands	26.7	USD	1.1050	[5]	[5]
41	Kandeo Fund II (A), L.P.	Bogota, Colombia	54.4	USD	1.1050	14,718	–9,288
42	Knauf Gips Buchara OOO	Bukhara, Uzbekistan	25.0	USD	1.1050	[5]	[5]
43	Knauf Gypsum Philippines Inc.	Calaca, Philippines	25.0	PHP	61.2830	1,663,840	–5,038
44	Landsberg Investments LLC.	Wilmington, USA	52.9	USD	1.1050	[5]	[5]
45	Lereko Metier REIPPP Fund Trust	Dunkeld, South Africa	32.3	ZAR	20.3477	436,223	5,359
46	Lereko Metier Solafrica Fund I Trust	Johannesburg, South Africa	47.5	ZAR	20.3477	[5]	[5]

No.	Name	Place	Capital share in %	CU	Exchange rate EUR 1.00 = CU as of 31 Dec. 2023[2)]	Equity in TCU[2), 3)]	Net income in TCU[2), 3)]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
47	MC II Pasta Ltd.	Ta' Xbiex, Malta	32.2	EUR	1.0000	5)	5)
48	Metier Retailability en Commandite Partnership	Dunkeld, South Africa	22.1	ZAR	20.3477	1,636,419	381,589
49	Navegar II (Netherlands) B.V.	Amsterdam, Netherlands	29.2	USD	1.1050	5)	5)
50	Novel Sky Global Limited	Road Town, Brit. Virgin Islands	25.0	USD	1.1050	5)	5)
51	OAO Belgips	Minsk, Belarus	50.0	BYN	3.6503	5)	5)
52	Onstar Galaxy SPV Pte. Ltd.	Singapore, Singapore	33.1	USD	1.1050	5)	5)
53	Openspace Ventures IV, L.P.	George Town, Cayman Islands	20.0	USD	1.1050	5)	5)
54	Operadora de Servicios Mega, S.A. de C.V., SOFOM E.R.	Zapopan, Mexico	21.9	MXN	18.7231	2,771,068	278,289
55	Osmanthus II Cayman Investment, L.P.	George Town, Cayman Islands	100.0	USD	1.1050	5)	5)
56	Russia Partners Technology Fund, L.P.	George Town, Cayman Islands	21.6	USD	1.1050	210,633	–190,545
57	SEAF Central and Eastern Europe Growth Fund LLC	Wilmington, USA	23.9	USD	1.1050	5)	5)
58	Sierra Madre Philippines I, L.P.	George Town, Cayman Islands	20.0	USD	1.1050	81,771	10,881
59	Siguler Guff Global Emerging Markets Co-Investment Opportunities (AIF), LP	London, United Kingdom	100.0	USD	1.1050	41,713	2,184
60	Stratus SCP Fleet Fundo de Investimento em Participações – Multiestratégia	São Paulo, Brazil	39.7	BRL	5.3618	83,546	2,269
61	Stratus SCP II Investors – B LP	São Paulo, Brazil	75.0	USD	1.1050	10,053	–3,907
62	Takura II Feeder Fund Partnership	Cape Town, South Africa	25.0	USD	1.1050	52,650	–6,218
63	Tolstoi Investimentos S.A.	São Paulo, Brazil	31.1	BRL	5.3618	5)	5)
64	TOO Isi Gips Inder	Inderborskiy, Kazakhstan	40.0	KZT	503.4450	5)	5)
65	TOO Knauf Gips Kaptschagaj. Enterprise with share of DEG LLP	Kapchagay, Kazakhstan	40.0	KZT	503.4450	5)	5)
66	Triple P SEA Financial Inclusion Fund LP	Singapore, Singapore	25.2	USD	1.1050	71,502	10,869
67	Vietnam Opportunity Fund II PTE. LTD.	Singapore, Singapore	32.0	USD	1.1050	34,594	3,114
68	Vinci Impact and Return IV A, LP	Toronto, Canada	51.8	USD	1.1050	6,233	562
69	Whitlam Holding PTE. Ltd.	Singapore, Singapore	38.7	USD	1.1050	72,872	10,522

No.	Name	Place	Capital share in %	CU[1)]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2023[2)]	Equity in TCU[2), 3)]	Net income in TCU[2), 3)]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
70	Worldwide Group, Inc	Charlestown, Saint Kitts and Nevis	33.4	USD	1.1050	27,639	1,848
71	wpd Duqueco S.p.A.	Santiago de Chile, Chile	24.5	USD	1.1050	24,934	–1,888
72	wpd Malleco S.p.A.	Santiago Providencia, Chile	24.5	MUR	48.6650	103,262	–17,025
73	wpd Negrete S.p.A.	Santiago de Chile, Chile	24.5	USD	1.1050	13,553	–2,914
Shareholdings of Interkonnektor GmbH							
A. Joint ventures included in the consolidated financial statements							
1	DC Nordseekabel GmbH & Co. KG	Bayreuth	50.0	EUR	1.0000	766,819	30,918
B. Joint ventures not included in the consolidated financial statements							
2	DC Nordseekabel Beteiligungs GmbH	Bayreuth	50.0	EUR	1.0000	72	3
Shareholdings of KfW Capital GmbH & Co. KG							
A. Subsidiaries not included in the consolidated financial statements							
1	KfW Capital Verwaltungs GmbH	Frankfurt am Main	100.0	EUR	1.0000	41	1

1) ISO currency code
2) CU = currency units in local currency; TCU = thousand currency units in local currency
3) Financial statements prepared in accordance with local financial reporting framework
4) The company is in the start-up phase; no annual financial statements have been prepared yet.
5) No current annual financial statements are available.
6) Preliminary data is available as of 31 December 2023.

The data is based on the most recent annual financial statements of the investee (where available).

(73) Events after the balance sheet date

No significant events have occurred since 31 December 2023.

Attestations

Audit Opinions

We have audited the consolidated financial statements of Kreditanstalt für Wiederaufbau Anstalt des öffentlichen Rechts, Frankfurt am Main/Germany, and its subsidiaries (the Group), which comprise the statement of financial position as at 31 December 2023, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from 1 January to 31 December 2023, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report for the parent and the group of Kreditanstalt für Wiederaufbau Anstalt des öffentlichen Rechts, Frankfurt am Main/Germany, for the financial year from 1 January to 31 December 2023. In accordance with the German legal requirements, we have not audited the content of the separate combined non-financial report of KfW as the parent company and the group in accordance with Section 289b (3), Sections 315c in conjunction with 289b (3) German Commercial Code (HGB), which is in turn part of the sustainability report of KfW Group and which is referred to in the section “Non-financial statement” of the combined management report, nor the other parts of the sustainability report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB 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 2023 and of its financial performance for the financial year from 1 January to 31 December 2023, and

- the accompanying combined management report as a whole provides an appropriate view of the Group’s position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the combined management report does not cover the content of the above-mentioned combined non-financial report of KfW as the parent company and the group in accordance with Section 289b (3), Sections 315c in conjunction with 289b (3) HGB, nor the other parts of the sustainability report of KfW Group.

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 combined management report.

[1)] Translation of the independent auditor’s report issued in German language on the consolidated financial statements prepared in German language by the Executive Board of KfW, Frankfurt am Main. The German language statements are decisive.

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (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 Combined Management Report” section of our auditor’s report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the combined management report.

Other information

The executive directors and/or the board of supervisory directors are responsible for the other information. The other information comprises

- the report of the board of supervisory directors which is expected to be presented to us after the date of this auditor’s report,
- the separate combined non-financial report of KfW as the parent company and the group in accordance with Section 289b (3), Sections 315c in conjunction with 289b (3) HGB, which is in turn part of the sustainability report of KfW Group and which is referred to in the section “Non-financial statement” of the combined management report, and which is expected to be presented to us after the date of this auditor’s report,
- the corporate governance report, which also includes the “Declaration of compliance”, which is referred to in the section “Declaration of compliance” in the combined management report and which is expected to be presented to us after the date of this auditor’s report,
- the executive directors’ confirmation regarding the consolidated financial statements and the combined management report pursuant to Section 297 (2) sentence 4 and Section 315 (1) sentence 5 HGB, and
- all other parts of the annual report,
- but not the consolidated financial statements, not the audited content of the combined management report and not our auditor’s report thereon.

The board of supervisory directors is responsible for the report of the board of supervisory directors. In accordance with Section 19 of the KfW Bylaws, the executive directors and the board of supervisory directors are required to annually declare that they recognise the Federal Public Corporate Governance Code as amended and to publish the declaration of compliance as part of the corporate governance report. Otherwise, the executive directors are responsible for the other information.

Our audit opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

- is materially inconsistent with the consolidated financial statements, with the audited content of the combined management report or our knowledge obtained in the audit, or

- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Board of Supervisory Directors for the Consolidated Financial Statements and the Combined Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are 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 (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group’s ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the combined management report that as a whole provides an appropriate view of the Group’s position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined 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 combined management report.

The board of supervisory directors is responsible for overseeing the Group’s financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined 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 audit opinions on the consolidated financial statements and on the combined management report.

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 combined 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 combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement 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 relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- conclude on the appropriateness of the executive directors' 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 combined management report or, if such disclosures are inadequate, to modify our respective audit 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 IFRS as adopted by the EU and with 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 audit opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors 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 audit 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.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Audit of the Electronic Reproductions of the Consolidated Financial Statements and of the Combined Management Report Prepared for Publication Pursuant to Section 317 (3a) HGB

Audit Opinion

We have performed an audit in accordance with Section 317 (3a) HGB to obtain reasonable assurance whether the electronic reproductions of the consolidated financial statements and of the combined management report (hereinafter referred to as "ESEF documents") prepared for publication, contained in the file, which has the SHA 256 value e4bd7529201b4ff9b38172e022a9f2f69c6f64508df57942f9245c09918a8b3a, meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB ("ESEF format"). In accordance with the German legal requirements, this audit only covers the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format, and therefore covers neither the information contained in these electronic reproductions nor any other information contained in the file identified above.

In our opinion, the electronic reproductions of the consolidated financial statements and of the combined management report prepared for publication contained in the file identified above meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB. Beyond this audit opinion and our audit opinions on the accompanying consolidated financial statements and on the accompanying combined management report for the financial year from 1 January to 31 December 2023 contained in the "Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report" above, we do not express any assurance opinion on the information contained within these electronic reproductions or on any other information contained in the file identified above.

Basis for the Audit Opinion

We conducted our audit of the electronic reproductions of the consolidated financial statements and of the combined management report contained in the file identified above in accordance with Section 317 (3a) HGB and on the basis of the IDW Auditing Standard: Audit of the Electronic Reproductions of Financial Statements and Management Reports Prepared for Publication Purposes Pursuant to Section 317 (3a) HGB (IDW AuS 410 (06.2022)). Our responsibilities in this context are further described in the "Group Auditor's Responsibilities for the Audit of the ESEF Documents" section. Our audit firm has applied the requirements of the IDW Quality Management Standards.

The executive directors of the parent are responsible for the preparation of the ESEF documents based on the electronic files of the consolidated financial statements and of the combined management report according to Section 328 (1) sentence 4 no. 1 HGB and for the tagging of the consolidated financial statements according to Section 328 (1) sentence 4 no. 2 HGB.

In addition, the executive directors of the parent are responsible for such internal controls 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 for the electronic reporting format pursuant to Section 328 (1) HGB.

The board of supervisory directors is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Group Auditor's Responsibilities for the Audit of the ESEF Documents

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 audit. 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 audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion.

- obtain an understanding of internal control relevant to the audit of the ESEF documents in order to design audit 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 containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815, in the version in force at the reporting date, on the technical specification for this electronic file.

- evaluate whether the ESEF documents enable a XHTML reproduction with content equivalent to the audited consolidated financial statements and to the audited combined 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, in the version in force at the reporting date, enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Our auditor’s report must always be read together with the audited consolidated financial statements and the audited combined management report as well as with the audited ESEF documents. The consolidated financial statements and the combined management report converted into the ESEF format – including the versions to be submitted for inclusion in the Company Register – are merely electronic reproductions of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our audit opinion contained therein are to be used solely together with the audited ESEF documents made available in electronic form.

Frankfurt am Main/Germany, 6 March 2024

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed:
Prof. Dr Carl-Friedrich Leuschner
Wirtschaftsprüfer
(German Public Auditor)

Signed:
Christian Schweitzer
Wirtschaftsprüfer
(German Public Auditor)

on Form 18-K of KfW for the year ended December 31, 2023.

/s/ Deloitte GmbH Wirtschaftsprüfungsgesellschaft
Frankfurt am Main, Germany
May 13, 2024

the United States of America.

May 13, 2024

The Federal Republic of Germany

By: DR. MARKUS HÖRMANN

Name: Dr. Markus Hörmann

Title: *Ministerialrat* (Head of Division)

Ministry of Finance