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, 2021

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

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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, 2021 was EUR 284.0 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, 2021)," p. 44 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, 2021)," p. 44 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, 2021 was EUR 6.56 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, 2021 was:

Currency	Principal amount outstanding in currency	Equivalent in euro with conversion rate as of December 31, 2021
AUD	1,060,000,000.00	678,834,454.05
GBP	2,800,000,000.01	3,332,222,592.48
USD	47,134,096,999.70	41,615,837,011.92
CNY	5,870,000,000.14	815,878,354.92
ZAR	13,150,000,000.16	728,027,681.67
HKD	2,999,999,999.83	339,623,923.09
Total		47,510,424,018.13

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 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. 14 to 17, 67, 75 to 99 and 100 to 109 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 2021.

(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 2021.

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, 2021 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, 2021 was EUR 1,284.42 billion (Source: Monthly Report of the Federal Ministry of Finance, January 2022, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2021", page 74 (https://www.bundesfinanzministerium.de/Monatsberichte/2022/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen.html).

For further information on the principal amount of the outstanding direct debt of the Federal Republic, 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", p. G-46 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 "Tables and Supplementary Information —I. Direct Debt of the Federal Government", pp. G-46 to G-49 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.

Not practicable.

(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, 2021 was EUR 153.98 billion (Source: Monthly Report of the Federal Ministry of Finance, January 2022, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2021", page 74 (https://www.bundesfinanzministerium.de/Monatsberichte/2022/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen.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 2021.

(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 2021.

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-29 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 (d) - Description of KfW and the Federal Republic of Germany, dated May 12, 2022.

Exhibit (e) - KfW Financial Information 2021.

Exhibit (f) - Consent of Ernst & Young 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

of 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 11, 2022, the euro foreign exchange reference rate as published by the European Central Bank was EUR 1.00 = U.S. dollar 1.0553 (EUR 0.9476 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, 2022.

KfW Group's total assets increased by 0.7 %, or EUR 3.8 billion, from EUR 551 billion as of December 31, 2021 to EUR 554.7 billion as of March 31, 2022. KfW Group's operating result before valuation and promotional activities amounted to EUR 442 million for the three months ended March 31, 2022, compared to EUR 468 million for the corresponding period in 2021. The main driver for KfW Group's operating result before valuation and promotional activities during the three months ended March 31, 2022, 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:

- Expenses for risk provisions in an amount of EUR 188 million for the three months ended March 31, 2022, compared to income in an amount of EUR 60 million for the corresponding period in 2021;
- Negative effects amounted to EUR 135 million resulting from a decrease in market values of securities and equity investments in the three months ended March 31, 2022, compared to positive effects of EUR 178 million for the corresponding period in 2021;
- Net gains in an amount of EUR 88 million for the three months ended March 31, 2022 due to fair value changes of derivatives used exclusively for hedging purposes in closed risk positions, compared to net expenses in an amount of EUR 75 million for the corresponding period in 2021(1); and
- Expenses relating to promotional activities in an amount of EUR 100 million for the three months ended March 31, 2022, compared to expenses in an amount of EUR 22 million for the corresponding period in 2021.

KfW Group's consolidated result for the three months ended March 31, 2022 amounted to a profit of EUR 60 million, compared to a profit of EUR 569 million for the corresponding period in 2021.

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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.

	March 31,		Year-to-Year
	2022	2021	% change
	(EUR in millions)		(in %)
SME Bank & Private Clients (Mittelstandsbank & Private Kunden)	**26,164**	**16,992**	**54**
Customized Finance & Public Clients (Individualfinanzierung & Öffentliche Kunden)	**10,595**	**2,670**	**>100**
KfW Capital	**43**	**74**	**-42**
Export and Project Finance (KfW IPEX-Bank)	**3,310**	**3,363**	**-2**
KfW Entwicklungsbank	**608**	**925**	**-34**
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	**139**	**249**	**-44**
Financial Markets	**126**	**240**	**-48**
Total Promotional Business Volume (1)	**40,985**	**24,513**	**67**

(1) 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.

KfW's total promotional business volume increased to EUR 41.0 billion for the three months ended March 31, 2022, compared to EUR 24.5 billion for the corresponding period in 2021. While commitments in KfW's business sectors SME Bank & Private Clients and Customized Finance & Public Clients increased significantly, this increase was partially offset by a substantial decrease in commitments in the business sectors KfW Entwicklungsbank, DEG as well as Financial Markets and a slight decrease in Export and Project Finance.

Commitments in the SME Bank & Private Clients business sector amounted to EUR 26.2 billion for the three months ended March 31, 2022, compared to EUR 17.0 billion for the corresponding period in 2021. This significant increase was attributable to higher commitments in SME Bank, mainly under the KfW Renewable Energy Program and under the program Federal Funding for Efficient Buildings (*Bundesförderung für effiziente Gebäude* – "BEG"). Commitments in SME Bank under the KfW Renewable Energy Program amounted to EUR 2.1 billion for the three months ended March 31, 2022 and commitments under the program Federal Funding for Efficient Buildings (BEG) amounted to EUR 5.0 billion for the three months ended March 31, 2022. In addition, commitments in Private Clients increased to EUR 13.4 billion for the three months ended March 31, 2022, compared to EUR 10.9 billion for the corresponding period in 2021, also primarily driven by the program Federal Funding for Efficient Buildings (BEG). For information on the suspension of the program Federal Funding for Efficient Buildings (BEG) in late January 2022 and its re-launch in April 2022, see "—Other Recent Developments—Domestic Business" below.

Commitments in the business sector Customized Finance & Public Clients amounted to EUR 10.6 billion for the three months ended March 31, 2022, compared to EUR 2.7 billion for the corresponding period in 2021. This increase was primarily driven by an increase in loan commitments to energy companies with a commitment volume of EUR 7.5 billion in credit facility agreements as of March 31, 2022. These loan commitments were made under special mandates in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäfte*) with full government protection of KfW. For more information, see "—Other Recent Developments—Impact of Russia's Invasion of Ukraine on KfW—Special Mandates of the Federal Government."

Commitments related to KfW Capital decreased to EUR 43 million for the three months ended March 31, 2022, compared to EUR 74 million for the corresponding period in 2021.

this development represents a year-on-year decline, it should be noted that the intensity of deal origination usually varies, and may increase, over the course of a year.

Commitments in KfW's Financial Markets business sector decreased to EUR 126 million for the three months ended March 31, 2022, compared to EUR 240 million for the corresponding period in 2021, with all commitments in KfW's Financial Markets business sector having been made under KfW's green bond portfolio.

Sources of Funds

The volume of funding raised in the capital markets for the three months ended March 31, 2022 totaled EUR 37.5 billion, of which 67% was raised in euro, 14% in U.S. dollar and the remainder in 14 other currencies.

Capitalization and Indebtedness of KfW Group as of March 31, 2022

	(EUR in millions)
Borrowings	
Short-term funds	56,611
Bonds and other fixed-income securities	401,596
Other borrowings	50,873
Total borrowings	509,080
Equity	
Paid-in subscribed capital (1)	3,300
Capital reserve	8,447
Reserve from the ERP Special Fund	1,191
Retained earnings	22,086
Fund for general banking risks	200
Revaluation reserve	-658
Total equity	34,566
Total capitalization	**543,646**

(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, 2022, 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, 2022 is not necessarily indicative of its capitalization to be recorded as of December 31, 2022.

KfW Group's total equity as of March 31, 2022 was EUR 34,566 million, compared to EUR 34,207 million as of December 31, 2021. The increase of EUR 358 million in total equity reflected:

(i) KfW Group's consolidated profit of EUR 60 million for the three months ended March 31, 2022; and

(ii) an increase of EUR 299 million of revaluation reserves due to valuation results recognized directly in equity relating to pensions and own credit risk.

year to date)[1]. The increase of the total capital ratio and the Tier 1 capital ratio compared to December 31, 2021, when both the total capital ratio and the Tier1 Capital ratio amounted to 23.9%, was mainly due to the recognition of the profit of the second half of 2021.

Other Recent Developments

Domestic Business

On January 24, 2022, the Federal Funding for Efficient Buildings program was suspended by KfW with immediate effect after consultation with the Federal Ministry for Economic Affairs and Climate Action (the "Ministry for Economic Affairs"). This program supports investments in the construction of energy-efficient new buildings and the energy-efficient refurbishment of existing ones and accounted for total commitments of EUR 21.2 billion in KfW's domestic promotional business in 2021 (EUR 15.2 billion in 2021 in Private Clients, EUR 5.5 billion in SME Bank and EUR 0.5 billion in Public Clients). As a result of the high number of applications in an aggregate amount of more than EUR 20 billion made since November 2021, the federal funds budgeted for the program were depleted and rendered a suspension necessary. On February 1, 2022, the Ministry for Economic Affairs announced that approximately 24,000 applications submitted prior to the program suspension on January 24, 2022, that had not been approved by the time of the suspension, will be examined by KfW based on the program criteria previously in place. If eligible for support, these applications will be approved. On April 5, 2022, the Ministry of Economic Affairs announced the re-launch of the program in three phases. Due to the very high number of applications, the first phase, with a budget of EUR 1.0 billion in federal funds and somewhat modified program conditions, already closed on April 20, 2022, the day of its launch. Phase 2 of the program, with more stringent sustainability criteria, launched on April 21, 2022 and extends until December 31, 2022. Phase 3, to be launched in January 2023, is expected to consist of a new comprehensive program entitled "Climate-friendly construction" (*Klimafreundliches Bauen*). This program is expected to place a greater emphasis on greenhouse gas emissions in the lifecycle of buildings and is currently being developed by the Ministry of Economic Affairs and the Federal Ministry for Construction (*Bundesministerium für Wohnen, Stadtentwicklung und Bauwesen*).

Impact of Russia's Invasion of Ukraine on KfW

Expected impact of Russia's invasion of Ukraine on KfW's results. While KfW's direct exposures in Ukraine and Russia are limited and tightly managed, KfW anticipates that the current developments related to Russia's invasion of Ukraine will affect KfW's business and earnings position. For information on KfW's expectations regarding the impact of Russia's invasion of Ukraine on KfW's net assets, financial and earnings position, see note 73 to the financial statements included in Exhibit (e) to this annual report.

Special mandates of the Federal Government. Against the background of rising energy prices and Germany's current dependency on imports of energy from Russia, see also "Federal Republic of Germany—Other Recent Developments—Germany's Response to Russia's Invasion of Ukraine", the Federal Government has recently requested that KfW engage in a number of activities under special mandates in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäfte*) with full protection of KfW. These activities are being, or will be, carried out at the Federal Republic's economic risk and to date include the following:

- At the beginning of March 2022, KfW entered into a credit facility agreement of up to EUR 5.5 billion available until December 31, 2022 with the energy company Lausitz Energie Kraftwerke AG.
- On January 4, 2022, KfW entered into a credit facility agreement of up to EUR 2.0 billion with the international energy company Uniper SE, which would have expired on April 30, 2022. At the end of March 2022, in view of the ongoing Russian invasion of Ukraine and the associated volatility on the commodity markets, KfW and Uniper agreed as a precautionary measure to extend the facility until April 30, 2023.

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1 According to Article 26(2) CRR.

mandate by the Federal Government.

Depending on further developments with respect to Russia's invasion of the 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 April 2022, the Federal Government announced that it seeks to support companies affected by Russia's invasion of Ukraine and related sanctions. On May 9, 2022, KfW launched a new 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 quickly 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 can 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 is also being offered. For more information on the Federal Government's support for companies affected by Russia's invasion of Ukraine and related sanctions as well as other measures taken in response to Russia's invasion of Ukraine, see "—Federal Republic of Germany—Other Recent Developments—Germany's Response to Russia's Invasion of Ukraine".

GROSS DOMESTIC PRODUCT

(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 2021	-1.7	-2.7
2nd quarter 2021	2.2	10.4
3rd quarter 2021	1.7	2.9
4th quarter 2021	-0.3	1.8
1st quarter 2022	0.2	3.7

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

Germany's gross domestic product ("GDP") rose by 0.2% in the first quarter of 2022 compared to the fourth quarter of 2021 after adjustment for price, seasonal and calendar effects. Economic performance thus increased slightly in the first quarter of 2022, following the recovery of the German economy in the summer of 2021 and the decline at the end of 2021. This development was mainly due to higher capital formation, whereas the balance of exports and imports had a downward effect on economic growth. The economic consequences of Russia's invasion of Ukraine have been having a growing impact on the short-term economic development since late February 2022.

Compared to the first quarter of 2021, in which the German economy had been affected by the consequences of the second wave of the COVID-19 pandemic, price- and calendar-adjusted GDP in the first quarter of 2022 increased by 3.7%. Compared to the fourth quarter of 2019, i.e., the quarter before the COVID-19 pandemic began, price-, seasonal- and calendar-adjusted GDP in the first quarter of 2022 declined by 0.9%.

Due to the continuing COVID-19 pandemic and the war in Ukraine, these results are subject to larger uncertainties than usual.

Source: Federal Statistical Office, Gross domestic product in the 1st quarter of 2022 up 0.2% on the previous quarter, press release of April 29, 2022 (https://www.destatis.de/EN/Press/2022/04/PE22_184_811.html).

May 2021	0.5	2.5
June 2021	0.4	2.3
July 2021	0.9	3.8
August 2021	0.0	3.9
September 2021	0.0	4.1
October 2021	0.5	4.5
November 2021	-0.2	5.2
December 2021	0.5	5.3
January 2022	0.4	4.9
February 2022	0.9	5.1
March 2022	2.5	7.3
April 2022	0.8	7.4

The inflation rate in Germany, measured as the year-on-year change in the consumer price index, stood at 7.4% in April 2022, thus reaching an all-time high for the second month in a row since German reunification after the inflation rate had increased to 7.3% in March 2022 mainly due to the development of energy prices. Energy prices, in particular, have increased considerably since Russia's invasion of Ukraine and have had a substantial impact on the inflation rate. A similarly high inflation rate was last recorded in the Federal Republic of Germany (pre-reunification) in autumn 1981, when petroleum prices had sharply increased as a consequence of the Gulf war between Iraq and Iran. Additional factors include delivery bottlenecks due to interruptions in supply chains caused by the COVID-19 pandemic and significant price increases at upstream stages in the economic process. These factors accelerated price increases for consumers not only for energy, but also other product groups such as food.

Prices of goods (total) increased by 12.2% from April 2021 to April 2022. Energy prices in April 2022 increased by 35.3% compared to April 2021, following a 39.5% increase in March 2022 compared to March 2021. Prices of heating oil (+98.6%) nearly doubled in April 2022 compared to April 2021, and substantial price rises were also recorded for motor fuels (+38.5%) and natural gas (+47.5%). Price increases for other energy products also significantly exceeded the overall inflation rate (e.g., prices of solid fuels (+23.9%) and of electricity (+19.3%)). The increases of energy prices were influenced by several factors, including effects related to Russia's invasion of the Ukraine, the COVID-19 pandemic and the increase in the CO_2 charge from EUR 25 to EUR 30 per ton of CO_2. Food prices rose considerably by 8.6% in April 2022 compared to April 2021, which represented a significant acceleration compared to March 2022 (+6.2%). Considerable price rises were recorded for edible fats and oils (+27.3%), meat and meat products (+11.8%), dairy products and eggs (+9.4%) and fresh vegetables (+9.3%). Prices were up not only for energy and food but also for other products such as vehicles (+8.9%) and information processing equipment (+8.0%). The prices of non-durable consumer goods (total) increased by 16.0% and those of durable consumer goods by 5.2% on April 2021. Excluding energy prices, the inflation rate in April 2022 would have been 4.3%; excluding energy and food prices, it would have been 3.8%.

In April 2022, the prices of services (total) increased by 3.2% compared to April 2021. Net rents exclusive of heating expenses, which are important as they account for a large part of household consumption expenditure, rose by 1.6% and thus had a downward effect on the overall inflation rate. In addition, price decreases were observed for telecommunications (-1.1%) and for services of social facilities (-2.6%), the latter being due to the implementation of the long-term care reform adopted in June 2021. However, the prices of some services were markedly up, including maintenance and repair of dwellings and residential buildings (+12.2%) and of vehicles (+6.1%).

Compared to March 2022, the consumer price index rose by 0.8% in April 2022. Food prices, in particular, were noticeably higher (+3.6%), in addition to the seasonal price increases observed for package holidays (+17.6%). Consumers paid more for groceries, particularly for edible fats and oils (+10.2%) and meat and meat products (+7.1%). These price increases were partially offset by lower energy prices. Energy prices overall declined by 3.1% from the previous month, and substantial price decreases were observed for heating oil (-20.3%) and motor fuels (-5.7%).

Sources: Federal Statistical Office, Short-term indicators: Price indices at a glance (consumer prices, retail prices, producer prices, selling prices in wholesale trade, import prices, export prices). Tables with values and rates of change (https://www.destatis.de/EN/Themes/Economy/Short-Term-Indicators/Prices/pre110.html); Federal Statistical Office, Inflation rate at +7.4% in April 2022, press release of May 11, 2022 (https://www.destatis.de/EN/Press/2022/05/PE22_196_611.html).

March 2021	4.0	3.9
April 2021	3.9	3.8
May 2021	3.7	3.7
June 2021	3.6	3.6
July 2021	3.4	3.5
August 2021	3.4	3.5
September 2021	3.3	3.4
October 2021	3.1	3.3
November 2021	3.2	3.2
December 2021	3.0	3.2
January 2022	3.3	3.1
February 2022	3.0	3.0
March 2022	2.9	2.9

(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 2021, the number of employed persons in March 2022 increased by approximately 725,000 or 1.6%. Compared to February 2022, the number of employed persons increased in March 2022 by approximately 85,000 or 0.2% after adjustment for seasonal fluctuations. On a seasonally adjusted basis the number of persons in employment in March 2022 was up by 0.1%, or 41,000 persons, compared to February 2020, the month before the COVID-19 pandemic began in Germany.

In March 2022, the number of unemployed persons declined by approximately 435,000 or 25.7% compared to March 2021. Adjusted for seasonal and irregular effects, the number of unemployed persons in March 2022 stood at 1.28 million, reflecting a decline of 2.0% compared to February 2022.

It should be noted that according to the employment account and labor force survey concepts, workers in short-time work schemes (*Kurzarbeit) are not counted as unemployed persons but as persons in employment.*

Sources: Federal Statistical Office, Employment exceeds pre-crisis level in March 2022, press release of May 3, 2022 (https://www.destatis.de/EN/Press/2022/05/PE22_186_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).

Secondary income	-11.5	-13.8
Current account	**33.3**	**37.1**

(1) Figures may not add up due to rounding; cumulated year-to-date figures computed by KfW on the basis of monthly figures.

Source: Deutsche Bundesbank, Balance of payments statistics, 12-04-2022, I. Major items of the balance of payments (https://www.bundesbank.de/resource/blob/810958/623451630dbc657c8d274cc0ba935348/mL/i-wichtige-posten-data.pdf).

Other Recent Developments

Germany's Response to Russia's Invasion of Ukraine

Relief measures relating to rising energy prices. Uncertainties in the energy markets and the tight supply of natural gas before Russia's invasion of Ukraine have already been contributing to a significant rise of energy prices over the past months. According to the Federal Statistical Office, energy prices, in particular for imported energy (+129.5%), rose strongly at all stages of the economic process, in February 2022 compared to February 2021. Against this background, the Federal Government in February 2022 had already agreed on a package of relief measures benefiting consumers, including particularly vulnerable groups, to be launched in the short term. These measures include the abolition of the Renewable Energy Sources Act levy (*EEG-Umlage*), which had been included on electricity bills to incentivize the use of energy from renewable sources, and instead financing of energy from renewable sources via the federal budget as of July 1, 2022, certain tax-related measures applicable to income tax as of January 1, 2022, and transfer payments to certain vulnerable groups in the German population (e.g., recipients of benefits and children affected by poverty). Furthermore, on April 27, 2022, the Federal Government adopted a proposal for a supplementary budget for the fiscal year 2022, inter alia to finance additional broad measures to mitigate the effects of Russia's invasion of Ukraine on energy prices for consumers. Key elements were agreed by the coalition committee of the governing parties on March 23, 2022, and include the introduction of a one-time energy price allowance as a supplement to salary, a family allowance per child, a one-time supplement for recipients of social benefits, the temporary reduction of the energy tax on fuel to the European minimum rate for three months, and reduced-price use of public transport for 90 days.

*Sources: Federal Statistical Office, Energy prices: high increases at all stages in the economic process, press release of March 29, 2022 (https://www.destatis.de/EN/Press/2022/03/PE22_N016_61.html); Bundesministerium der Finanzen, 10 Entlastungschritte für unser Land, Ergebnis des Koalitionsausausschusses vom 23. Februar 2022 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Oeffentliche-Finanzen/10-entlastungsschritte-fuer-unser-land.pdf?_blob=publicationFile&v=4); Bundesministerium für Wirtschaft und Klimaschutz, Kabinett bringt Abschaffung der EEG-Umlage auf den Weg, press release of March 9, 2022 (https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2022/03/20220309-kabinett-bringt-abschaffung-der-eeg-umlage-auf-den-weg.html); Bundesministerium der Finanzen, Steuerentlastungen unterstützen Bürger:innen, press release of March 16, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/03/2022-03-16-steuerentlastungen-unterstuetzen-buergerinnen.html#:~:text=Arbeitnehmer*innen%20werden%20unmittelbar%20und,Januar%202022); Bundesministerium der Finanzen, Schnelle und spürbare Entlastungen, dated March 16, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Schlaglichter/Entlastungen/schnelle-spuerbare-entlastungen.html); Bundesministerium der Finanzen, Stabilität sichern, Gestaltungsspielraum bewahren, Zweiter Regierungsentwurf für den Bundeshaushalt 2022, Eckwerte 2023 und Finanzplan bis 2026, press release of March 16, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/03/2022-03-16-bundeshaushalte-2022-2023.html); Bundesministerium für Wirtschaft und Klimaschutz, Ergebnis des Koalitionsausschusses vom 23. März 2022, Maßnahmenpaket des Bundes zum Umgang mit den hohen Energiekosten (https://www.bundesfinanzministerium.de/Content/DE/Downloads/2022-03-23-massnahmenpaket-bund-hohe-energiekosten.pdf?__blob=publicationFile&v=6); Bundesministerium der Finanzen, Bundesregierung bringt zweites Entlastungspaket auf den Weg, press release of April 27, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/04/2022-04-27-zweites-entlastungspaket.html?cms_pk_kwd=27.04.2022_Bundesregierung+bringt+zweites+Entlastungspaket+auf+den+Weg&cms_pk_campaign=Newsletter-27.04.2022); Bundesministerium der Finanzen, Ergänzungshaushalt 2022: Auswirkungen des russischen Angriffskrieges wirksam entgegentreten, press release of April 27, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/04/2022-04-27-ergaenzungshaushalt-2022.html?cms_pk_kwd=27.04.2022_Erg%C3%A4nzungshaushalt+2022+Auswirkungen+des+russischen+Angriffskrieges+wirksam+entgegentreten&cms_pk_campaign=Newsletter-27.04.2022).*

that a loss of Russian energy imports, in particular gas, would likely have severe economic and social consequences. Accordingly, the Federal Government is also engaging in precautionary measures to secure the supply of gas to all German gas consumers in order to be ready to cope with a potential deterioration of the supply situation involving Russia. In addition, significant energy policy amendments are currently underway to accelerate the transition to renewable energies. To date, Russia's embargo on gas supply to Poland and Bulgaria imposed at the end of April 2022 has not had any impact on the secure supply of gas to Germany.

For information on KfW's involvement in the Federal Government's efforts, see "—KfW—Other Recent Developments—Impact of Russia's Invasion of Ukraine on KfW—Special mandates of the Federal Government."

Sources: Bundesministerium für Wirtschaft und Klimaschutz, Fortschrittsbericht Energiesicherheit, dated March 25, 2022 (https://www.bmwi.de/Redaktion/DE/Downloads/Energie/0325_fortschrittsbericht_energiesicherheit.pdf?__blob=publicationFile&v=10); Federal Ministry for Economic Affairs and Climate Action, Minister Habeck: „Germany is quickly cutting its dependence on Russian energy. But we still need to act prudently", press release of March 25, 2022 (https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2022/03/20220325-minister-habeck-germany-is-quickly-cutting-its-dependence-on-russian-energy-but-we-still-need-to-act-prudently.html); Council of the EU, EU adopts fifth round of sanctions against Russia over its military aggression against Ukraine, press release of April 8, 2022 (https://www.consilium.europa.eu/en/press/press-releases/2022/04/08/eu-adopts-fifth-round-of-sanctions-against-russia-over-its-military-aggression-against-ukraine/); Federal Ministry for Economic Affairs and Climate Action, Federal Ministry and Climate Action announces early warning level of the Emergency Plan for Gas – security of supply still ensured, press release of March 30, 2022 (https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2022/03/20220330-bmwk-announces-early-warning-level-of-the-emergency-plan-for-gas-security-of-supply-still-ensured.html). Federal Ministry for Economic Affairs and Climate Action appoints Bundesnetzagentur as fiduciary for Gazprom Germania - Acquisition of Gazprom Germania GmbH by JSC Palmary provisionally invalid, press release of April 4, 2022 (https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2022/03/20220404-bmwk-appoints-bundesnetzagentur-as-fiduciary-for-gazprom-germania.html); Bundesministerium für Wirtschaft und Klimaschutz, Habeck: „Das Osterpaket ist der Beschleuniger für die erneuerbaren Energien", press release of April 6, 2022 (https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2022/04/20220406-habeck-das-osterpaket-ist-der-beschleuniger-fur-die-erneuerbaren-energien.html); Bundesministerium für Wirtschaft und Klimaschutz, Habeck legt zweiten Fortschrittsbericht Energiesicherheit vor – Abhängigkeit von russischen Energieimporten weiter reduziert, press release of May 1, 2022 (https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2022/05/20220501-habeck-legt-zweiten-fortschrittsbericht-energiesicherheit-vor.html); Bundesministerium für Wirtschaft und Klimaschutz, Versorgungssicherheit in Deutschland gewährleistet – Lage wird aber genau beobachtet – Enge Abstimmung innerhalb der EU erfolgt, press release of April 27, 2022 (https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2022/04/20220427-versorgungssicherheit-in-deutschland-gewaehrleistet.html).

Support for companies affected by Russia's invasion of Ukraine and related sanctions. On April 8, 2022, the Federal Government adopted a proposal for a comprehensive package of measures to support companies affected by Russia's invasion of Ukraine and related sanctions. The EU's Temporary Crisis Framework, described below under "—EU Response to Russia's Invasion of Ukraine", subject to necessary state aid approvals, offers the necessary basis for state support to assist affected companies. At present, the main goal is to secure affected companies' liquidity in the short term and, accordingly, the Federal Government intends to primarily provide companies with liquidity support measures. These measures include the KfW Special Program UBR 2022 described under "—KfW—Other Recent Developments—Impact of Russia's invasion in Ukraine on KfW—KfW Special Program UBR 2022," which launched on May 9, 2022. In addition, certain expansions of Federal—Federal State—guarantee programs (*Bund-Länder-Bürgschaftsprogramme*) introduced during the COVID-19 pandemic are being continued for companies demonstrably affected by Russia's invasion of the Ukraine. In addition, the Federal Government is preparing supplemental measures, in case the economic situation of the companies deteriorates. Such planned supplemental measures are to include cost allowances limited in time and scope to temporarily alleviate the impact of increases in gas and energy prices for particularly affected companies, a financing program of up to EUR 100 billion for companies at risk due to high margin requirements consisting of credit facilities backed by a guarantee of the Federal Republic to be extended by KfW based on standardized criteria as well as an option to extend targeted equity and hybrid capital support measures to stabilize companies of particular systemic importance, for individual cases in the first instance through special mandates of KfW.

Source: 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).

EU Response to Russia's Invasion of Ukraine

In response to Russia's invasion of Ukraine, the EU has taken comprehensive measures to support Ukraine and the Ukrainian people, including the reception of refugees, humanitarian aid, civil protection support, an agreement to set up a Ukraine Solidarity Trust Fund, support in an amount of EUR 17.0 billion for EU Member States hosting refugees, an emergency macro-financial assistance operation of EUR 1.2 billion to foster stability in Ukraine and support for the Ukrainian armed forces in an amount of EUR 1.0 billion under the European Peace Facility, a new instrument established in March 2021 and financed outside the EU budget with a financial ceiling of EUR 5.0 billion in 2018 prices for the period from 2021 to 2027.

Furthermore, the EU has adopted extensive restrictive measures against Russia in addition to the sanctions which were progressively imposed after the illegal annexation of Crimea in 2014. Individual sanctions have been imposed on specific persons and entities because their actions are considered to have undermined Ukraine's territorial integrity, sovereignty and independence include asset freezes and travel bans. The economic sanctions, which target exchanges with Russia 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 SWIFT ban for a number of Russian and Belarusian banks, a prohibition on the provision of euro-denominated banknotes to Russia and Belarus, a ban on the overflight of EU airspace and on access to EU airports by Russian carriers of all kinds, a ban on exports to Russia of goods and technology in various sectors, a ban on export to Russia of dual-use goods for military use and an export and import ban on arms. On April 8, 2022, the EU adopted further sanctions, including, among others, a ban of coal and other solid fossil fuel imports from Russia as of August 2022, a ban of vessels registered under the flag of Russia from accessing EU ports and the imposition of a full transaction ban on four key Russian banks representing 23% of market share in the Russian banking sector. The EU is currently considering the adoption of a further package of sanctions, including a ban on imports of oil from Russia.

To mitigate the economic impact of the war on EU Member States, the EU Commission also adopted a temporary crisis framework for state aid measures in March 2022 (the "Temporary Crisis Framework") to support the economy in the context of Russia's invasion of Ukraine. Apart from allowing the set-up of schemes for grants for companies affected by the crisis, EU Member States are permitted to provide liquidity support in form of state guarantees and subsidized loans for investments and working capital needs. In addition, EU Member States may partially compensate companies, in particular intensive energy users, for additional costs resulting from the current exceptional gas and electricity price increases, including through direct grants. The measures extended are subject to certain limits. The Temporary Crisis Framework has been put in place until December 31, 2022 and may be extended if deemed necessary by the European Commission.

General Considerations Relating to the COVID-19 Pandemic

According to the European Center for Disease Prevention and Control, at the end of the week ended May 1, 2022 ("week 17"), overall transmission was falling in most countries in the EU and the European Economic Area ("EU/EEA"), as evidenced by both overall case notification rates and case rates among people aged 65 years and older. While decreasing overall, transmission in the 65 years and older age group is still high (64% of the pandemic maximum for the EU/EEA). It is therefore important to continue monitoring the disease burden in older age groups. The 14-day COVID-19 death rate has been decreasing for three weeks. Of the total population in EU/EEA countries, 72.6% had been fully vaccinated, i.e., received a primary course of vaccinations, and 51.6% had received an additional booster dose, whereas 75.4% had received at least one vaccine dose as of the end of week 17.

In Germany, the peak of the current wave of the COVID-19 pandemic has clearly passed, many hospitalization indicators and the number of deaths are declining, but infection pressure remains high. Omicron continues to be the dominant variant, accounting for more than 99% of infections. Compared to previous waves, the number of severe COVID-19 cases during the current wave has been significantly lower. The burden on capacity in the public health care system due to restricted availability of medical personnel associated with infection-related absences is decreasing, in particular in the area of in-patient and intensive care. The number of deaths associated with Omicron in relation to new infections is lower than during previous waves, as a result of increased immunity in the German population, especially due to the very effective vaccine, combined with the basically lower proportion of severe infections associated with Omicron. The vaccination rate in the German population has remained more or less unchanged over the past few weeks, with mainly second booster doses being administered. Of the total German population, 75.8% had been fully vaccinated, 59.5% had received a first booster dose and 5.3% a second booster dose, whereas 77.6% had received at least one vaccine dose as of May 10, 2022. As of April 2, 2022, most containment measures related to the COVID-19 pandemic have been lifted, with basic protective measures such as the wearing of facial masks in hospitals and nursing homes remaining in place. At the same time, stricter, locally restricted rules may be imposed if required by the local infection situation and if resolved by the parliament of the relevant Federal State.

Sources: European Centre for Disease Prevention and Control, Country overview report: week 17 2022, produced on May 6, 2022 (https://www.ecdc.europa.eu/en/covid-19/country-overviews); Robert Koch Institut, Wöchentlicher Lagebericht des RKI zur Coronavirus-Krankheit-2019 (COVID-19), May 5, 2022 (https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Situationsberichte/Wochenbericht/Wochenbericht_2022-05-05.pdf?__blob=publicationFile); Bundesministerium für Gesundheit, Impf-Dashboard, as of May 11, 2022 (https://impfdashboard.de/); Bundesregierung, Mehr Normalität im Alltag, March 30, 2022 (https://www.bundesregierung.de/breg-de/aktuelles/infektionsschutzgesetz-2013038).

With total assets of EUR 551.0 billion as of December 31, 2021, including loans and advances of EUR 440.6 billion, KfW is Germany's flagship promotional bank and ranks among Germany's largest financial institutions. KfW's promotional business volume amounted to EUR 107.0 billion in 2021. 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 GmbH & Co. KG ("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;
- Promotion of Developing Countries and Emerging Economies: KfW Entwicklungsbank ("KfW Development Bank") is responsible for KfW's public sector development cooperation activities, and DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH (German Investment and Development Company, "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.

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 Law Concerning KfW (*Gesetz über die Kreditanstalt für Wiederaufbau*, or 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, however, 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 German Central Bank ("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 EU Capital Requirements Regulation (Regulation (EU) 575/2013, as amended) ("CRR"). However, by operation of the KfW Regulation, considerable portions of the KWG and the CRR, including relevant implementing rules and regulations, apply by analogy to KfW. The analogous application of banking supervisory law to KfW has been phased in gradually, with the majority of the rules, regulations and enforcement powers described above having become applicable as of January 1, 2016. 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 by analogy virtually in its entirety to KfW 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. In line with regulatory requirements, KfW intends to seek additional approval for other sub-portfolio segments and models in the future. KfW's total capital ratio as well as its Tier 1 capital ratio according to article 92 of the CRR amounted to 23.9%, both as of December 31, 2021 (not taking into account the interim profit of the year 2021)[1]. The decrease of the total capital ratio as well as of the Tier 1 capital ratio compared to the figures as of December 31, 2020, which amounted to 24.3% and 24.1%, respectively, was mainly due to the implementation

1 According to article 26(2) CRR.

operational risk management-related findings. This surcharge, resulting in a temporary increase of the TSCR of KfW Group, was imposed by BaFin in 2018 and reduced in 2020 and 2021 against the following background:

In connection with standard audits of KfW conducted by Deutsche Bundesbank and BaFin in 2016, the banking supervisory authorities reported findings related to KfW's IT. As a consequence, in 2017, BaFin imposed an IT-related surcharge. The need for a modernization of KfW's IT architecture had already been identified before the standard audits were conducted and major projects to address the need for IT-related updates and improvements have been underway at KfW for some time. In 2017, the banking supervisory authorities also conducted standard audits related to KfW's outsourcing management and internal audit procedures, which resulted in certain additional findings. In June 2018, BaFin notified KfW that temporary capital requirements would be imposed in relation to these IT-, internal auditing- and operational risk management-related findings. The surcharge of 2.75% imposed at the time was to remain in place until the underlying issues had been resolved. In 2019, the supervisory authorities conducted a follow-up audit of KfW's IT, resulting in the imposition of an updated surcharge of 2.25% in 2020. As a result of a further follow-up audit of KfW's Internal Auditing conducted in 2020, the supervisory authorities imposed an updated surcharge of 1.75% in 2021.

In 2018, BaFin had also notified KfW that it would be required to maintain an OSII Buffer of 1%, which would be phased in over a period of three years, starting with an OSII Buffer of 0.33% for 2019. For 2020 and 2021, the OSII Buffer amounts to 0.66% and 1%, respectively. With respect to the result of an IRBA model change supervisory audit, BaFin imposed risk-weighted asset (RWA) multipliers for specific exposure classes, effective as of December 31, 2021. KfW's capital ratios for 2020 and 2021 already take these multipliers into account.

As of January 1, 2016, KfW became, by analogy, 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 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.

For purposes of supervision, the KfW Regulation subjects KfW by analogy to the reporting and information requirements generally applicable to banks in Germany, with the exception of the automated access to client account details, with effect from January 1, 2016. Until KfW implemented a system to comply with these reporting and information requirements, KfW provided the supervisory authorities with relevant reports and information, the form of which was agreed with the supervisory authorities. As agreed with the supervisory authorities, KfW has implemented a fully-fledged regulatory reporting system as of January 1, 2020.

In addition, the KfW Regulation subjects KfW by analogy to certain enforcement powers of BaFin, which comprise, among other matters, the right to demand, under certain circumstances, increases of regulatory own funds and/or a reduction of regulatory risk, or to demand changes in the senior management of KfW.

Since KfW does not qualify as a regulated entity under national or EU bank regulatory law, KfW did not become subject to the changes 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 European Central Bank ("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. Depending on KfW IPEX-Bank's business growth, KfW IPEX-Bank may qualify as a significant credit institution in the course of the next years, which would lead to direct supervision by the ECB. 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 for subsidizing 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—Promotion of Developing Countries and Emerging Economies—DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH."

objectives, see “Combined Management Report — Basic information on KfW Group — Strategic Objectives 2026” 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, achieve the United Nations’ Agenda 2030 objectives together with its Sustainable Development Goals (“SDGs”) and put the Paris Agreement into practice. In addition, the “Declaration by KfW Bankengruppe on the consideration of human rights in its business operations” reflects the crucial importance of human rights for all of KfW’s activities. Apart from financing investments for a 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 initiatives and to offer its expertise to political decision-makers in Germany, Europe and worldwide.

KfW’s sustainability mission statement, which reflects a holistic approach to addressing the challenge of transitioning to a sustainable society, lays out the framework for KfW’s five sustainability action areas: banking business, bank operation, sustainability management, sustainability communications and employee relations. For more information on KfW’s approach to employee relations, see “Management and Employees—Employees.”

Banking Business

In its financing activities, KfW focuses on the social and economic megatrends of “climate change and the environment”, “globalization”, “social change”, as well as “digitalization and innovation.” Due to the particular importance of the “climate and 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 2021, the environmental ratio was 53% (compared to 33% in 2020), and would have been 58% excluding COVID-19 related loan facilities (compared to 50% in 2020). The main drivers for the increase of the environmental ratio were the decrease of commitments under COVID-19 related loan facilities as well as the high volume of commitments under KfW’s program for Energy-Efficient Construction and Refurbishment, which was succeeded by KfW’s benchmark program Federal Funding for Efficient Buildings (BEG) in July 2021. For more information on these programs see “Business – Domestic Promotional Business – SME Bank & Private Clients.” 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.

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 2021 contributed to all 17 SDGs, the most significant contributions were made to SDG 7 “Affordable and Clean Energy”, SDG 11 “Sustainable Cities and Communities” 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 considerations, can have a significant impact on its credit risk positions, as well as on economic and financial systems in general. As a consequence, KfW strives to continuously improve the assessment of its risk positions with a view to gaining a clear picture of the significance of environmental, climate, governance and social aspects as risk drivers.

KfW's Sustainability Report 2021, which was published in April 2022, 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.

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 bank operations are limited, KfW strives to reduce the ecological footprint of its banking operations, including by aiming to achieve climate-neutral operations. 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 the Chief Sustainability Officer—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, KfW's strategic objectives define KfW's ranking as one of the top five national and international promotional banks in relevant sustainability ratings as one of the key targets. 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.

Financial Statements and Auditors

The consolidated financial statements of KfW included in Exhibit (e) to this annual report have been prepared in accordance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e (1) of the German Commercial Code (*Handelsgesetzbuch*) and supplementary provisions of the KfW Law. IFRS differs in certain significant respects from accounting principles generally accepted and financial reporting practices followed in the United States ("U.S. GAAP"), and, as a result, KfW's consolidated (*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, EY 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 190 of Exhibit (e) to this annual report.

KfW's external auditor for the fiscal year 2022 will be Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Germany.

- Export and Project Finance (KfW IPEX-Bank);
- Promotion of Developing Countries and Emerging Economies (*KfW Entwicklungsbank and 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, 2021	2020	Year-to-Year % change
	(EUR in millions)		(in %)
SME Bank & Private Clients (*Mittelstandsbank & Private Kunden*)	**72,980**	**86,274**	**-15**
Customized Finance & Public Clients (*Individualfinanzierung & Öffentliche Kunden*)	**9,465**	**19,213**	**-51**
KfW Capital	**502**	**871**	**-42**
Export and project finance (KfW IPEX-Bank)	**13,644**	**16,584**	**-18**
Promotion of developing countries and emerging economies	**10,145**	**12,394**	**-18**
of which KfW Entwicklungsbank	*8,611*	*10,983*	*-22*
of which DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	*1,534*	*1,411*	*9*
Financial markets	**527**	**400**	**32**
Total promotional business volume (1) (2)	**107,050**	**135,269**	**-21**

(1) Total promotional business volume for the full year ended December 31, 2021 has been adjusted for commitments of EUR 212 million, compared to EUR 468 million for the corresponding period in 2020, 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 six business sectors in terms of percentage of commitments outstanding and economic capital required at year-end 2021. 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.

and DEG – *Deutsche Investitions- und Entwicklungsgesellschaft mbH*)	8%	7%
Financial Markets	9%	3%
Total (in EUR billions)	**599.4**	**15.3**

(1) The balance of economic capital required relates to group functions. The economic capital required has been calculated 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—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 predominant 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 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, 2021, KfW had extended loans to approximately 160 commercial banks in its domestic business sectors. In 2021, 61 % (2020: 61%) 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 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 its lending programs. Borrowers in general do not apply directly to KfW, but 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.

interest rate payable to KfW. This fixed-rate pricing model is applied to housing investment and some lending programs for start-up financing. Moreover, 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, amongst others, to SME Bank & Private Clients' largest and most important lending program, the KfW *Unternehmerkredit* (Entrepreneurial Loan program). 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.

Moreover, KfW extends global funding facilities exclusively to *Landesförderinstitute* for their own promotional funding purposes, thus offering flexibility with respect to the use of funds extended in their promotional business without a direct link to any of KfW's lending programs.

in accordance with EU state aid rules, the maximum loan amounts available to the various categories of borrowers were increased considerably. At the end of 2021, the Federal Government decided to again extend the deadline for applications to the KfW Special Program until April 30, 2022. From January 1, 2022, onwards, in accordance with EU state aid rules, the maximum loan amounts available to the various categories of borrowers were increased again.

The KfW Special Program was implemented through different loan programs: (1) the KfW Entrepreneurial Loan (*KfW-Unternehmerkredit*) for enterprises established on the market for more than five years, (2) the ERP Loan for Start-ups (*ERP-Gründerkredit – universell*) for enterprises established on the market for less than 5 years, (3) the KfW Syndicated Loan (*Direktbeteiligung für Konsortialfinanzierung*) for larger-scale financings targeted at larger companies, and (4) the KfW Instant Loan 2020 (*KfW-Schnellkredit* 2020). Options (1) and (2) involve commercial banks in the handling of the loans by means of the on-lending principle which applies to the majority of KfW's loan programs. However, the COVID-19 related facilities, which are designated by adding "Corona" to the loan programs' names, include a partial exemption from liability for on-lending banks of 80% to 90%. With option (3), KfW offers a syndicated loan approach, designed as an individually structured direct loan program for larger companies. Financing is provided directly to beneficiaries by KfW together with a consortium of private banks to meet investment and working capital needs of the beneficiaries. KfW's financing share in these syndicated loans is limited to 80%. Loans under option (4), the KfW Instant Loan 2020 program, include a general waiver of the usual risk assessment and a full exemption from liability for on-lending commercial banks or financing partners involved, which means that the entire credit risk of any loans granted under the KfW Instant Loan 2020 program remains with KfW. These modifications are aimed at facilitating and accelerating the granting of loans by the on-lending commercial banks and other financing partners.

Within the KfW Special Program, KfW also facilitates the financing of charitable and social organizations via global loans to Landesförderinstitute.

Pursuant to separate guarantee declarations, the Federal Republic has undertaken to bear all financial risks incurred by KfW in connection with the KfW Special Program.

Additional support measures targeted at particular customer groups. Over the course of 2020, KfW and the Federal Government established additional COVID-19 support measures in order to provide financing to particular customer groups, which are currently still in place.

With respect to start-ups, venture capital is being mobilized via private fund managers, with the associated measures operationalized by KfW Capital. In addition, equity and equity-like capital for start-ups and small SMEs is provided via global loans to *Landesförderinstitute*.

With respect to the KfW Student Loan Program, two temporary measures were implemented in close coordination with the Federal Government. First, the interest rate under this program has been set to 0% for all loans that are in the disbursement phase, including all new applications. The cost incurred in connection with this interest rate subsidy will be covered by the Federal Ministry of Education and Research during the period from May 1, 2020 to September 30, 2022. Second, the group of applicants for the KfW Student Loan Program was temporarily extended to all foreign citizens who met the general eligibility criteria for the period from July 1, 2020 to March 31, 2021.

In 2021, SME Bank & Private Clients committed financing to improve social living conditions and to support the German economy in an amount of EUR 73.0 billion (2020: EUR 86.3 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, 2021	2020	Year-to-Year % change
	(EUR in billions)		(in %)
SME Bank	**29.6**	**48.1**	***-38***
Start-up financing and general investment	16.2	39.7	*-59*
Innovation	1.1	0.8	*38*
Environmental investment	12.3	7.6	*62*
Private Clients	**43.4**	**38.2**	***14***
Housing investment programs	6.1	8.8	*-31*
Education programs	2.0	2.5	*-20*
Environmental investment	35.3	26.9	*31*
Total commitments (1)	**73.0**	**86.3**	***-15***

(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.

In 2021, commitments in SME Bank decreased significantly compared to 2020. This decrease was primarily attributable to lower commitments in the KfW Special Program.

Since July 1, 2021, KfW has been able to pass on negative interest rates to its financing partners in its on-lending promotional business. While interest rates for the ultimate borrowers will remain positive, they nevertheless benefit from significant interest rate reductions. The ability to pass on negative interest rates also increases KfW's ability to differentiate interest rates more strongly by promotional objectives such as digitalization and climate action.

Furthermore, on July 1, 2021 KfW launched the benchmark program Federal Funding for Efficient Buildings (BEG) in cooperation with the Federal Ministry for Economic Affairs and Energy (now named Federal Ministry for Economic Affairs and Climate Action), which was designed to replace the KfW Program for Energy-Efficient Construction and Refurbishment, which was discontinued as of June 30, 2021. For information on the suspension of the program Federal Funding for Efficient Buildings (BEG) in late January 2022 and its re-launch in April 2022, see "Recent Developments — KfW — Other Recent Developments — Domestic Business".

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 2020.

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 2021, commitments in this field amounted to EUR 16.2 billion compared to EUR 39.7 billion in 2020. This was primarily due to a significantly reduced demand for financings extended under the KfW Special Program. Commitments under the KfW Entrepreneurial Loan Corona (*KfW-Unternehmerkredit Corona*) decreased to EUR 5.5 billion (2020: EUR 28.3 billion), commitments under the ERP Loan for Start-ups Corona (*ERP-Gründerkredit – Corona*) decreased to EUR 0.5 billion (2020: EUR 1.4 billion), and commitments under the KfW Instant Loan 2020 (*KfW-Schnellkredit* 2020) decreased to EUR 3.0 billion (2020: EUR 5.9 billion).

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 increased to EUR 1.1 billion in 2021 (2020: EUR 0.8 billion), with the ERP Promotion for Innovation and Digitalization program being the main driver for this increase.

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 in 2021 increased significantly (EUR 12.3 billion in 2021 compared to EUR 7.6 billion in 2020). While the commitment volume under KfW's Renewable Energy Program remained approximately at the prior year level (EUR 3.9 billion in 2021 compared to EUR 3.7 billion in 2020), other programs soared. In particular, the new Federal Funding for Efficient Buildings (BEG) program that was launched on July 1, 2021, started out with high demand: committed volumes in 2021 amounted to EUR 2.8 billion for loans and EUR 2.7 billion for grants.

Commitments under the Federal Funding for Energy and Resource Efficiency program amounted to EUR 380 million in 2021, making it an important program of KfW for reducing CO_2 emissions in the industrial sector.

The SME Climate Protection Facility (*KfW-Klimaschutzoffensive für den Mittelstand*), which was launched in March 2020, further contributed to the overall growth in 2021 (EUR 296 million in 2021 compared to EUR 68.3 million in 2020).

In November 2021, the Federal Ministry for Digital and Transport and KfW launched a new grant program to promote the procurement and construction of new charging points available to charge electric vehicles used on a commercial basis and to charge electric vehicles of employees. The program offers an investment grant in the amount of EUR 900 for each charging point installed. Commitments under this program amounted to EUR 31 million in 2021.

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 2021, commitments decreased to EUR 2.0 billion (2020: EUR 2.5 billion). In 2021, commitments in the KfW Student Loan amounted to EUR 0.8 billion (2020: EUR 1.3 billion). The primary reason for lower new student loan commitments in 2021 compared to 2020 was that the temporary extension of the KfW Student Loan to all foreign citizens expired in March 2021. A second reason for lower demand was that it was easier again for students to find side jobs in 2021 compared to 2020, so their financing needs decreased.

Environmental Investment Programs

The sector of energy-efficient investments registered a significant increase. Commitments under the benchmark program Federal Funding for Efficient Buildings (BEG) for Private Clients that was launched in July 2021 amounted to EUR 10 billion for loans and EUR 5.2 billion for grants. The program supported investments in the construction of energy-efficient new buildings and the energy-efficient refurbishment of existing ones. Its predecessor, the KfW program for Energy-Efficient Construction and Refurbishment, was discontinued on June 30, 2021. In the first six months of 2021, commitments under the program amounted to EUR 19.3 billion compared to EUR 26.8 billion in 2020 (full year). For information on the suspension of the program Federal Funding for Efficient Buildings (BEG) in late January 2022 and its re-launch in April 2022, see "Recent Developments — KfW — Other Recent Developments — Domestic Business".

Commitments under the grant-based program Private Charging Infrastructure (*Private Ladeinfrastruktur*) that was launched in November 2020 to support the purchase and installation of private charging stations for electric cars at residential buildings amounted to EUR 728 million in 2021 (2020: EUR 149 million). The program was discontinued at the end of October 2021.

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
	2021	2020	% change
	(EUR in millions)		(in %)
Municipal infrastructure programs	4,605	4,769	*-3*
Corporate loans and project finance	323	9,323	*-97*
Global funding facilities to *Landesförderinstitute*	2,007	3,177	*-37*
Global loans to support start-ups and small enterprises (1)	243	619	*-61*

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.

Commitments in the business sector Customized Finance & Public Clients decreased to EUR 9.5 billion in 2021 from EUR 19.2 billion in 2020. This decrease was primarily driven by a significantly lower demand for COVID-19 support measures which amounted to EUR 0.4 billion in 2021 compared to EUR 9.5 billion in 2020. In particular, demand for the KfW Syndicated Loan program decreased by EUR 8.3 billion compared to 2020.

Commitments under other programs of the business sector decreased by EUR 0.6 billion in 2021. This decrease was mainly due to reduced credit demand, especially with respect to the global funding facilities to *Landesförderinstitute*, but was to a large extent offset by a strong increase in commitments under the program Global loans to selected financial institutions.

Municipal Infrastructure Programs

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 decreased to EUR 4.6 billion in 2021 from EUR 4.8 billion in 2020. The decrease was due to Global loans to refinance charitable and social organizations as part of the COVID-19 support measures, which recorded commitments of EUR 486 million in 2020 compared to no commitments in 2021. Not taking into account the effects related to the COVID-19 support measures, commitments under the remaining municipal infrastructure programs recorded an increase of more than 8%.

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
	2021	2020	% change
	(EUR in millions)		(in %)
Global funding facilities to *Landesförderinstitute*	2,007	3,177	*-37*
Global loans to support start-ups and small enterprises (1)	243	619	-61
Global loans to refinance charitable and social organizations (1)	0	486	n.a.
Program-based global loans to *Landesförderinstitute*	674	546	*23*
Non program-based global loans to selected financial institutions in Germany and Europe	1,520	250	*508*
Total commitments (2)	**4,444**	**5,078**	***-12***

(1) Global loans to *Landesförderinstitute* as part of the COVID-19 support measures.

(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.

longer-term refinancing operations of the Eurosystem, as defined below) or the expansive money policy of ECB.

Program for the Refinancing of Export Loans

Customized Finance & Public Clients offers commercial banks long-term refinancing of export loans covered by an official export credit guarantee of the Federal Government referred to as "Hermes Cover." These guarantees are managed by Euler Hermes Aktiengesellschaft ("HERMES") on behalf and for the account of the Federal Government. For more information on HERMES, see "Business—Export and Project Finance (KfW IPEX-Bank)—Business." In 2021, KfW made commitments of EUR 0.8 billion (2020: EUR 1.1 billion) under this program. The decrease of commitments in 2021was mainly due to larger export projects having been completed in 2020.

Corporate Loans and Project Finance

Customized Finance & Public Clients provides corporate loans, project financing and some equity financing.

Overall, the commitments in corporate loans and project financing were characterized by a normalized credit demand. Accordingly, the decrease from EUR 9.3 billion in 2020 to EUR 323 million in 2021 was mainly driven by a significant decrease of EUR 8.3 billion in connection with the COVID-19 support programs under the KfW Syndicated Loan program.

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 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 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. 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. Additionally, KfW Capital is also mandated on behalf of the Federal Government to promote future technologies, referred to as the "Future Fund" (*Zukunftsfonds*).

Commitments related to KfW Capital amounted to EUR 502 million in 2021, compared to EUR 871 million in 2020. This decrease was mainly driven by significantly lower commitments under the Corona Matching Facility and no new commitments under the Corona Liquidity Facility in 2021 due to both facilities' discontinuation. The Corona Matching Facility and the Corona Liquidity Facility were part of the Federal Government's COVID-19 support package for start-ups and small enterprises. In 2021, commitments of KfW

	Year ended December 31,		Year-to-Year
	2021	2020	% change
	(EUR in millions)		(in %)
High-Tech Start-up Funds	1	2	*-43*
ERP Venture Capital Fund Investments	187	184	*2*
ERP/Zukunftsfonds Growth Facility	111	0	*n.a.*
Corona Matching Facility / Corona Liquidity Facility	20	685	*-97*
GFF – EIF Growth Facility	183	0	*n.a.*
Total commitments (1)	**502**	**871**	***-42***

* 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 28.9 billion as of December 31, 2021 (December 31, 2020: EUR 29.6 billion). Total outstanding loans and guarantees (including promotional activities) for KfW's business sector Export and Project Finance amounted to EUR 57.1 billion as of December 31, 2021 (December 31, 2020: EUR 58.1 billion). KfW IPEX-Bank is headquartered in Frankfurt am Main, Germany, and maintains a branch office in London, United Kingdom and representative offices in nine locations outside Germany. As of December 31, 2021, KfW IPEX-Bank employed 897 persons, excluding managing directors but including temporary personnel (December 31, 2020: 852).

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 currently 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. Depending on KfW IPEX-Bank's business growth, KfW IPEX-Bank may qualify as a significant credit institution in the course of the next years, which would lead to direct supervision by the ECB. 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."

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 "Chinese 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 of Germany (so-called Hermes cover) are eligible for the Africa CIRR. The Federal Republic of Germany 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.

Traditionally, the bulk of loans extended by KfW IPEX-Bank has been used for export and project financing to buyers of German or European exports. In recent years, KfW IPEX-Bank has increasingly extended loans to finance direct investments by German enterprises and other corporate purposes linked to the internationalization of German companies. In addition, KfW IPEX-Bank co-finances large-scale infrastructure projects and means of transport (e.g., airplanes and vessels) in the German and European transport sector. KfW IPEX-Bank also provides, as part of its core business, financing for environment and climate protection projects. Finally, KfW IPEX-Bank's loans are also used to secure sources of raw materials for the German and European industry.

KfW IPEX-Bank's loans are generally extended directly to the ultimate borrower, and KfW IPEX-Bank grants a significant portion of these loans at its own risk. KfW IPEX-Bank regularly cooperates with other financial institutions by way of consortia and syndications. In some cases, KfW IPEX-Bank may arrange for commercial banks to assume the risk on portions of loans made by KfW IPEX-Bank 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 2021, KfW IPEX-Bank refinanced loan commitments for export and project finance under KfW's promotional programs in an amount of EUR 212 million (2020: EUR 468 million).

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 Federal Government 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, 2021, outstanding loans and guarantees (including promotional activities) outside Germany for KfW's business sector Export and Project Finance amounted to EUR 43.9 billion, of which EUR 9.2 billion, or 21%, 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
	2021		2020		% change
	(EUR in millions)	(in % of total)	(EUR in millions)	(in % of total)	(in %)
Commercial business	11,457	*84*	13,832	*83*	*-17*
Promotional business (conducted on behalf of KfW)	2,186	*16*	2,753	*17*	*-21*
Total commitments (1)	**13,644**	***100***	**16,584**	***100***	***-18***

(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.

In 2021, total commitments of the Export and Project Finance business sector decreased to EUR 13.6 billion from EUR 16.6 billion in 2020, including commitments under the CIRR scheme for bank refinancing, which is supported by the federal budget. With the consent of the Federal Government, KfW has delegated the mandate for the CIRR scheme for bank refinancing to KfW IPEX-Bank.

The decrease in total commitments in 2021 compared to 2020 was driven by lower commitments in almost every sector since new business continued to be impacted by the effects of the ongoing COVID-19 pandemic on the global economy.

Commitments by Sector. The following table shows KfW IPEX-Bank's commitments by sector for each of the years indicated:

CIRR scheme for bank refinancing (ship + Africa + ERP finance) (1)	603	701	*-14*
Total commitments	**13,644**	**16,584**	***-18***

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

Commitments in export and project finance decreased compared to 2020 due to the impact of the ongoing COVID-19 pandemic on global trade. Commitments (excluding those under the CIRR scheme for bank refinancing) amounted to EUR 13.0 billion in 2021 (2020: EUR 15.9 billion). The highest commitment volumes were achieved in the power, renewables and water sector with EUR 2.7 billion (2020: EUR 2.8 billion), followed by the maritime industries sector with commitments of EUR 2.4 billion (2020: EUR 1.5 billion).

In 2021, commitments under the CIRR scheme for bank refinancing decreased slightly to EUR 0.6 billion from EUR 0.7 billion in 2020, driven by the continued impact of the ongoing COVID-19 pandemic on global trade.

Commitments by Geographic Area. KfW IPEX-Bank's commitments were reported for the following three regions in 2021: Germany; Europe (excluding Germany, but including Russia and Turkey); and the rest of the world. In 2021, KfW IPEX-Bank's commitments for project and export financing (excluding the CIRR scheme for bank refinancing) within Germany decreased to EUR 3.9 billion from EUR 5.2 billion in 2020. In 2021, commitments in Europe (excluding Germany, but including Russia and Turkey) decreased to EUR 5.6 billion from EUR 6.1 billion in 2020. KfW IPEX-Bank's commitments in the rest of the world in 2021 decreased to EUR 3.5. billion compared to commitments of EUR 4.6 billion in 2020. Commitments under the CIRR scheme for bank refinancing (2021: EUR 0.6 billion; 2020: EUR 0.7 billion) are trans-regional.

Commitments by Product. The following table shows KfW IPEX-Bank's commitments by product for each of the years indicated:

	Year ended December 31,		Year-to-Year
	2021	2020	% change
	(EUR in millions)		(in %)
Corporate transactions (for German or European export companies)	9,475	12,460	*-24*
Thereof			
Loans (term loans and bullet)	*4,934*	*7,049*	*-30*
Trade finance	*1,760*	*2,016*	*-13*
Revolving credit facilities for cash drawings	*1,651*	*1,713*	*-4*
Guarantees	*969*	*1,477*	*-34*
Lease finance	*162*	*205*	*-21*
Project finance (1)	2,103	2,565	*-18*
Asset finance (1)	952	275	*246*
Acquisition finance (1)	511	487	*5*
Loans to funds	—	95	*-100*
CIRR scheme for bank refinancing (ship + ERP finance)	603	701	*-14*
Total commitments	**13,644**	**16,584**	**-18**

(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.

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.

Promotion of Developing Countries and Emerging Economies

In the Promotion of Developing Countries and Emerging Economies business sector, KfW, on behalf of the Federal Republic, provides financial assistance to developing countries and emerging economies, either through KfW Entwicklungsbank (KfW Development Bank), which promotes mainly public sector development cooperation activities, or through DEG, which promotes private sector investments in developing countries.

The following table sets forth KfW's commitments for the Promotion of Developing Countries and Emerging Economies business sector for each of the years indicated:

PROMOTION OF DEVELOPING COUNTRIES AND EMERGING ECONOMIES COMMITMENTS

	Year ended December 31, 2021	2020	Year-to-Year % change
	(EUR in millions)		(in %)
KfW Entwicklungsbank	8,611	10,983	*-22*
DEG	1,534	1,411	*9*
Total commitments (1)	**10,145**	**12,394**	***-18***

(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.

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 2021, approximately 42% 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 ("Mandates"), 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:

- Traditional Financial Cooperation Loans (*FZ-Standardkredite*), extended for the account of the Federal Republic;
- Financial Cooperation Development Loans (*FZ-Entwicklungskredite*), in which KfW offers its own funds as an additional source of financing. For these loans, federal budget funds at low

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
	2021	2020	% change
	(EUR in millions)		(in %)
Loan commitments	4,777	6,677	*-28*
of which federal funds	*218*	*218*	*0*
of which KfW's funds refinanced in the capital markets	*4,559*	*6,459*	*-29*
Grant commitments	3,408	3,835	*-11*
Mandates	426	471	*-9*
Total commitments	**8,611**	**10,983**	***-22***

Total commitments of KfW Entwicklungsbank decreased by 22% to EUR 8.6 billion in 2021 from EUR 11.0 billion in 2020, mainly due to the reduced contribution made to the Federal Ministry for Economic Cooperation and Development's Emergency COVID-19 Support Program and delayed projects due to the ongoing COVID-19 pandemic. The relative share of loan commitments that were refinanced in the capital markets decreased slightly to 95% in 2021, from 97% in 2020.

In 2021, Asia accounted for 24% of KfW Entwicklungsbank's commitments (2020: 26%); Sub-Saharan Africa accounted for 25% (2020: 19%); Middle East/North Africa accounted for 13% (2020: 29%); Europe/Caucasus accounted for 11% (2020: 10%); Latin America accounted for 18% (2020: 12%); and trans-regional commitments accounted for 10% (2020: 5%).

The following table shows KfW Entwicklungsbank's commitments by sector for each of the years indicated and as a percentage of its total commitments:

(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, 2021, DEG maintained 13 representative offices in developing countries or emerging economies. In 2021, DEG employed an average of 718 persons (2020: 640). At year-end 2021, DEG's total assets (IFRS, before consolidation) amounted to EUR 7.3 billion (2020: EUR 6.3 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 and measures within the framework of COVID Response). 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:

DEG COMMITMENTS

	Year ended December 31,		Year-to-Year
	2021	2020	% change
	(EUR in millions)		(in %)
Loans	1,035	944	*10*
Equity participations	467	275	*70*
Mezzanine financing	32	192	*-83*
Total commitments	**1,534**	**1,411**	**9**

sectors being financed from funds raised by KfW in the international financial markets. KfW Group's consolidated balance sheet total assets at year-end 2021 were EUR 551.0 billion. EUR 506.1 billion, or 91.9% of this amount, was financed through borrowings (i.e., from financial market funds or public funds). In addition, at year-end 2021, KfW had EUR 19.1 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, 2021, 69% 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, 2021, the percentage of capital-market funding outstanding out of total financial-market funds outstanding was 90%.

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 with a clear environmental benefit financed by KfW, currently in the sectors of renewable energies and energy efficiency. In 2021, benchmark bonds accounted for a funding volume of EUR 50.4 billion, or 61%, of KfW's total capital-market funding, while bonds placed publicly outside the benchmark programs accounted for EUR 9.9 billion, or 12%. The volume of bonds sold in private placements and of green bonds amounted to EUR 6.0 billion, or 7%, and EUR 16.2 billion, or 20%, respectively. Total capital-market funding in 2021 amounted to EUR 82.6 billion (2020: EUR 66.4 billion).

With respect to refinancing its funding requirements resulting from the KfW Special Program, KfW, as previously disclosed, has had access since July 1, 2020, to a new source of financing of up to a total amount of EUR 100 billion through the German Economic Stabilization Fund (*Wirtschaftsstabilisierungsfonds* – "WSF"). Refinancing through the WSF in 2021 totaled EUR 3.0 billion (2020: EUR 39.0 billion).

In 2021, KfW also participated in the targeted longer-term refinancing operations ("TLTROs") of the Eurosystem via the third series of TLTROs, known as "TLTRO III." The conditions for TLTRO III had been eased by the Governing Council of the ECB in the course of 2020 in response to the COVID-19 pandemic in

KFW'S BENCHMARK BOND ISSUANCES IN 2021

	Aggregate principal amount in billions	Maturity at issuance (in years)	Interest rate in % per annum
KfW U.S. $-Benchmark I/2021	USD 5.0	5	0.625
KfW U.S. $-Benchmark II/2021	USD 5.0	3	0.250
KfW U.S. $-Benchmark III/2021	USD 5.0	2	0.250
KfW U.S. $-Benchmark IV/2021	USD 5.0	3	0.500
KfW Euro-Benchmark I/2021	EUR 5.0	10	0.000
KfW Euro-Benchmark II/2021	EUR 5.0	5	0.000
KfW Euro-Benchmark III/2021	EUR 3.0	15	0.375
KfW Euro-Benchmark IV/2021	EUR 5.0	7	0.000
KfW Euro-Benchmark V/2021	EUR 3.0	3	0.000
KfW Euro-Benchmark IV/2017 (re-opening)	EUR 1.0	7	0.125
KfW Euro-Benchmark III/2020 (re-opening)	EUR 1.0	5	0.010
KfW Euro-Benchmark IV/2020 (re-opening)	EUR 1.0	7	0.000
KfW Euro-Benchmark IV/2016 (re-opening)	EUR 1.0	7	0.000
KfW Euro-Benchmark V/2020 (re-opening)	EUR 1.0	10	0.000
KfW Euro-Benchmark I/2017 (re-opening)	EUR 1.0	7	0.125
KfW Euro-Benchmark II/2021 (re-opening)	EUR 1.0	5	0.000
KfW Euro-Benchmark I/2015 (re-opening)	EUR 1.0	10	0.625
KfW Euro-Benchmark VI/2018 (re-opening)	EUR 1.0	10	0.750
KfW Euro-Benchmark VII/2018 (re-opening)	EUR 1.0	5	0.125
KfW Euro-Benchmark V/2020 (re-opening)	EUR 1.0	10	0.000
KfW Euro-Benchmark V/2019 (re-opening)	EUR 1.0	7	0.000

In 2021, KfW's total new capital-market funding was raised in 15 different currencies and 211 separate capital markets transactions. KfW's core currencies are the euro and the U.S. dollar, which together accounted for 81% of KfW's total new capital-market funding in 2021 (2020: 88%). The percentage of new funds raised in euros decreased from 64% in 2020 to 55% in 2021, making it still the most significant funding currency, whereas the percentage of new funds raised in U.S. dollars increased from 24% to 26% over the same period. The percentage of new funds raised in pounds sterling increased from 5% in 2020 to 8% in 2021, which made it KfW's third most significant funding currency in 2021.

KFW'S TOTAL NEW CAPITAL-MARKET FUNDING VOLUME 2021 BY CURRENCIES*

	EUR in billions	In % of total
Euro (EUR)	45.6	*55*
U.S. dollar (USD)	21.3	*26*
Pound sterling (GBP)	6.9	*8*
Australian dollar (AUD)	2.8	*3*
Norwegian krone (NOK)	1.7	*2*
Japanese Yen (JPN)	0.4	*0.5*
Other currencies (1)	4.0	*5*
Total	**82.6**	***100***

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 2021, KfW conducted 22 new green bond issuances in 13 currencies as well as 15 re-openings. In total, green bonds accounted for a funding volume of EUR 16.2 billion, or 19.6%, of KfW's total capital-market funding. One USD green bond with an aggregate principal amount of USD 3.0 billion as well as one CAD green bond with an aggregate principal amount of CAD 1.0 billion were issued as SEC-registered global bonds.

The most important sources of capital-market funding for KfW are bond and note issuances followed by promissory note loans. At year-end 2021, the amount of outstanding bonds and notes issued by KfW totaled EUR 397.6 billion, representing a EUR 13.6 billion increase from EUR 384.0 billion outstanding at year-end 2020.

Of outstanding borrowings, promissory note loans continue to be KfW's second most important capital-market funding instrument, with a book value of EUR 40.8 billion at year-end 2021. Of this amount, EUR 39.6 billion was recognized as financial liabilities at amortized cost (of which EUR 1.2 billion as liabilities to banks and EUR 38.4 billion as liabilities to customers) and EUR 1.3 billion was recognized as financial liabilities at fair value (of which EUR 0.3 billion as liabilities to banks and EUR 1.0 billion as liabilities to customers). 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.

DEM	1	FIXED	7.00	1993	2023	1.25	105,985,000.00	54,189,270.03
EUR	297	FIXED	0.40	1999-2021	2022-2051	4.69	281,083,491,510.42	281,083,491,510.42
EUR	21	FLOATING	1.14	2003-2019	2022-2052	2.73	2,908,812,262.33	2,908,812,262.33
GBP	20	FIXED	2.05	2000-2021	2022-2037	3.90	22,426,803,000.06	26,689,678,440.59
GBP	1	FLOATING	1.05	2021	2024	2.45	500,000,000.00	595,039,748.66
HKD	6	FIXED	0.43	2020-2021	2022-2024	1.11	1,599,999,999.99	181,132,758.99
HUF	2	FIXED	1.44	2020-2021	2022-2023	1.30	7,750,000,000.34	20,991,901.19
JPY	10	FIXED	2.31	2002-2021	2022-2038	7.35	146,943,000,000.10	1,127,036,355.27
JPY	209	FLOATING	1.87	2002-2021	2022-2049	12.18	148,315,999,988.24	1,137,567,111.43
MXN	3	FIXED	6.26	2017-2021	2022-2025	2.01	3,249,999,999.98	140,426,377.69
NOK	14	FIXED	1.81	2002-2021	2022-2036	2.30	40,349,999,999.91	4,039,524,267.17
NOK	2	FLOATING	2.24	2019	2022	0.15	5,499,999,999.96	550,616,690.69
NZD	3	FIXED	2.80	2018-2021	2023-2028	2.36	840,000,000.01	506,665,058.21
PLN	5	FIXED	1.55	2006-2021	2022-2025	1.90	1,546,764,122.16	336,479,828.18
SEK	11	FIXED	0.85	2011-2021	2022-2031	2.35	30,900,000,000.11	3,014,545,915.74
TRY	2	FIXED	12.52	2020	2023	1.18	201,999,999.94	13,260,248.79
USD	56	FIXED	1.70	2002-2021	2022-2046	2.83	102,617,274,115.07	90,603,279,282.24
USD	1	FLOATING	1.05	2021	2024	2.12	1,500,000,000.00	1,324,386,367.65
ZAR	20	FIXED	6.80	2017-2021	2022-2031	4.17	8,435,000,000.05	466,989,619.38
Total	**718**					**4.13**		**429,784,875,204.59**

(1) Interest rate of floating rate note means the applicable interest rate as of December 31, 2021. 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, 2021.

Money-Market Funding. KfW issues commercial paper under two commercial paper programs: the EUR 70 billion multicurrency commercial paper program and the USD 30 billion commercial paper program. The program volume of the USD commercial paper program was increased from USD 20 billion to USD 30 billion as of March 17, 2022. As of December 31, 2021, KfW Group's commercial paper outstanding totaled EUR 50.0 billion (December 31, 2020: EUR 41.3billion).

Public Funds. As of December 31, 2021, the proportion of public funds in KfW Group's borrowings was 8%. 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 39.9 billion as of December 31, 2021 (December 31, 2020: EUR 43.3 billion). KfW Group's long-term and short-term borrowings from the ERP Special Fund amounted to EUR 138 million as of December 31, 2021 (December 31, 2020: EUR 216 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 42% of the derivatives for trading purposes and does not facilitate the purchase of derivatives on behalf of any entities outside the group through brokerage or similar agency activities.

The following tables provide detailed information on the group's derivatives exposures:

KFW GROUP'S DERIVATIVES EXPOSURE*

	Notional value As of December 31, 2021	Notional value As of December 31, 2020	Fair value As of December 31, 2021 Positive	Fair value As of December 31, 2021 Negative	Fair value As of December 31, 2020 Positive	Fair value As of December 31, 2020 Negative
	(EUR in millions)		(EUR in millions)		(EUR in millions)	
Interest-related derivatives	584,335	540,913	6,111	4,040	10,126	5,584
Currency-related derivatives (1)	165,569	156,986	7,727	2,311	3,180	8,047
Credit derivatives as protection buyer	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Total derivatives (2) (3)	**749,904**	**697,898**	**13,838**	**6,351**	**13,306**	**13,631**
Embedded derivatives accounted for separately	—	—	21	12	11	20
Total balance sheet items "derivatives designated for hedge accounting" and "financial assets/liabilities at FV - other derivatives"	**749,904**	**697,898**	**13,859**	**6,363**	**13,317**	**13,651**

* 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 pursuant to special mandates by the Federal Government in accordance with article 2 paragraph 4 of the KfW Law.

	As of December 31, 2021	As of December 31, 2020
	(EUR in millions)	
Total positive fair value before netting	**13,838**	**13,306**
Total positive fair value after netting (1)	**8,733**	**4,960**
Collateral received	7,882	3,419
of which cash collateral	*7,882*	*3,419*
Total positive fair value after netting and collaterals	**851**	**1,541**

(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.

KfW Group's derivatives activities are reflected in its consolidated statement of financial position in the line items "financial assets – Fair Value", "financial liabilities – Fair Value" and "derivatives designated for hedge accounting." For additional information on KfW Group's derivatives exposure, see notes 8, 37, 39, 47, 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 32.0 billion as of December 31, 2021 (December 31, 2020: EUR 31.3 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. Since the beginning of 2020, the portfolio includes 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, 2021. In addition to these securities, as of December 31, 2021, KfW held money-market assets (overnight and term loans as well as reverse repurchase transactions) for liquidity management purposes in an amount of EUR 5.5 billion (December 31, 2020: EUR 3.5 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 environmental, social and governance ("ESG") criteria in its investment approach. In 2021, 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 are eligible for such investments, provided that the relevant issuing country has reached "prime" status with regard to its sustainability rating. In addition, KfW uses exclusion criteria for its liquidity portfolio that are based on the International Finance Corporation exclusion list and the exclusion list of KfW Group. KfW also engages in regular dialogues with issuers on sustainability matters.

ABS Portfolio. As of December 31, 2021, the promotional ABS portfolio volume amounted to EUR 364 million (December 31, 2020: EUR 770 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.

Green Bond Portfolio. Under its green bond portfolio, KfW seeks to support climate and environmental protection by investing in green bonds of public sector issuers, supranational institutions and agencies, and banks as well as in green covered bonds and ABS. All of KfW's green bond investments are aligned with the ICMA "Green Bond Principles." In 2021, KfW provided EUR 527 million (2020: EUR 400 million) as part of its promotional activities for financing climate and environmental protection measures by investing in green bonds. As of December 31, 2021, the volume of the portfolio amounted to EUR 2.2 billion. KfW's green bond portfolio was launched in 2015 under a mandate of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (now named Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection) and the portfolio's targeted volume was EUR 2.0 billion. This former target volume of the green bond portfolio was reached in February 2021. Going forward, KfW will continue to invest in green bonds and plans to maintain the portfolio volume in a range of EUR 2.0 to EUR 2.5 billion. The mandate of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection was extended accordingly.

At year-end 2021, KfW's total ownership interest in Deutsche Telekom remained unchanged compared to year-end 2020 with approximately 829.2 million ordinary shares. This represented a stake of approximately 16.6% in Deutsche Telekom (December 31, 2020: 17.4%). To KfW's knowledge, the stake of the Federal Republic amounted to approximately 13.8% as of December 31, 2021.

At year-end 2021, KfW's total ownership interest in Deutsche Post remained unchanged compared to year-end 2020 with approximately 253.9 million ordinary shares. This represented a stake of approximately 20.5% in Deutsche Post (December 31, 2020: 20.5%). To KfW's knowledge, the Federal Republic does not directly hold any shares in Deutsche Post.

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."

The Federal Government may sell further stakes in Deutsche Telekom to KfW in the future. KfW expects its holdings in Deutsche Telekom and Deutsche Post shares to be reduced in the medium term.

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, 2021, the total amount outstanding of this loan to Greece amounted to EUR 14.4 billion (December 31, 2020: EUR 15.0 billion).

Strategic Shareholdings

KfW's most important strategic shareholdings are DEG (100%) and KfW Capital (100%), which are both directly held by KfW, and KfW IPEX-Bank GmbH (100%), which is held indirectly via KfW Beteiligungsholding GmbH. The stakes in Finanzierungs- und Beratungsgesellschaft mbH (100%), tbg Technologie-Beteiligungs-Gesellschaft mbH (100%), Deutsche Energieagentur GmbH (26%), Berliner Energieagentur GmbH (25%), CureVac N.V. (16%) and HENSOLDT AG (25.1%) are held directly by KfW. KfW's shareholding in Airbus SE (9.19%) is held indirectly via various entities. KfW's shareholding in Eurogrid GmbH (20%) is held indirectly via a subsidiary of KfW. In addition, KfW directly holds stakes in True Sale International GmbH (7.7%) and the European Investment Fund (2.3%).

KfW's investments in Airbus SE, Eurogrid GmbH, CureVac N.V. and HENSOLDT AG, as well as its investments in Deutsche Telekom and Deutsche Post (see "Business—Financial Markets—Privatization Initiatives"), were made pursuant to a special mandate of 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.

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, 2021, KfW held, through GZBV, an equity stake of approximately 9.19% in Airbus SE. Together with the other investors' interests in GZBV, GZBV held a total equity stake of 10.90% in Airbus SE.

Eurogrid International CVBA/SCRL and Eurogrid 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"). 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.

In June 2019, KfW swapped its 20% equity stake in Eurogrid International for a 20% equity stake in Eurogrid GmbH in accordance with its mandate by the Federal Government. This share swap was executed to simplify the holding structure. KfW's stake in Eurogrid GmbH is now held via Selent Netzbetreiber GmbH, a wholly-owned subsidiary of KfW. The German transmission system operator 50Hertz Transmission GmbH is a wholly-owned subsidiary of Eurogrid GmbH, incorporated in Berlin, Germany.

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. Under the mandate, KfW is fully covered by the Federal Republic against any economic risks resulting from its investment.

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 AG ("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

Total borrowings	506,059
Equity	
Paid-in subscribed capital (2)	3,300
Capital reserve	8,447
Reserve from the ERP Special Fund	1,191
Retained earnings	22,026
Fund for general banking risks	200
Revaluation reserve	-957
Total equity	34,207
Total capitalization	**540,266**

(1) Includes long-term and short-term borrowings from the ERP Special Fund of EUR 138 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 2021, 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 ages as of April 8, 2022, 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

Age: 55

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, Internal Auditing, Financial Markets, Group Development and Economics, Legal Affairs, Domestic Promotional Business, Sales Digital Development, New Business Credit Service as well as KfW Capital. 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 2nd 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.

Melanie Kehr

Age: 47

Melanie Kehr became a member of KfW's Executive Board in March 2019. She is in charge of Information Technology, Central Services and Transaction Management. Ms. Kehr joined KfW as General Manager in September 2018. Ms. Kehr was appointed until August 2022.

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.

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.

Bernd Loewen

Age: 56

Bernd Loewen joined KfW as a member of KfW's Executive Board in July 2009. He is in charge of Finance, Human Resources, Portfolio Credit Service 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 2024.

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.

Mr. Loewen is also a member of the supervisory boards of The Currency Exchange Fund (TCX), Amsterdam, Netherlands and of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany.

Dr Stefan Peiß

Age: 52

Dr Stefan Peiß became a member of KfW's Executive Board in January 2016. He is in charge of Credit Risk Management, Risk Controlling and Compliance, and he acts as Chief Risk Officer of KfW. Dr Peiß was appointed until December 2024.

Dr Peiß studied business administration at the Ludwig-Maximilians-Universität in Munich, Germany, where he also obtained a 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.

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 2022. 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.

KfW's Board of Supervisory Directors' committee structure comprises a Presidial and Nomination Committee (*Präsidial- und Nominierungsausschuss*), a Remuneration Committee (*Vergütungskontrollausschuss*), a Risk and Credit Committee (*Risiko- und Kreditausschuss*) and an Audit Committee (*Prüfungsausschuss*). The Presidial and Nomination Committee is responsible for dealing with legal and administrative matters as well as fundamental business and corporate policy issues. It may make decisions on the Board of Supervisory Directors' behalf in urgent matters (*Eilentscheidung*). Additionally, it regularly assesses the Executive Board and the Board of Supervisory Directors, provides recommendations for suitable candidates to the Executive Board and may assist the responsible federal agencies in appointing members to the Board of Supervisory Directors. The Remuneration Committee is responsible for dealing with the systems of remuneration for the Executive Board and KfW employees and their consequences for KfW's risk, capital and liquidity management and advises the Presidial and Nomination Committee with respect to the remuneration paid to the members of the Executive 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 April 8, 2022, the members of the Board of Supervisory Directors were:

Ingeborg Esser	Managing Director of the Federal Association of German Housing and Real Estate Companies (GdW); representative of the housing sector
Robert Feiger	Chair of the German Trade Union Construction-Agriculture-Environment (IG Bau); representative of the trade unions
Albert Füracker	State Minister at the Bavarian State Ministry of Finance and for Regional Identity; appointed by the Bundesrat
Dr Robert Habeck	Federal Minister for Economic Affairs and Climate Action; Chair in 2022
Dr Louis Hagen	CEO of Muenchener Hypothekenbank eG; representative of the mortgage banks
Prof Dr Hans-Günter Henneke	Managing Member of the Executive Committee of the Federation of German Districts (DLT), Representative of the municipalitie
Reinhold Hilbers	Minister of Finance of the State of Lower Saxony; appointed by the Bundesrat
Reiner Hoffmann	Chair of the Confederation of German Trade Unions (DGB); representative of the trade unions
Dr Bruno Hollnagel	Member of Parliament; appointed by the Bundestag
Verena Hubertz	Member of Parliament; appointed by the Bundestag
Dr Dirk Jandura	President of the Federation of German Wholesale, Foreign Trade and Services (BGA); representative of the wholesale and foreign trade sector
Alois Karl	Member of Parliament (retired); appointed by the Bundestag
Andrea Kocsis	Deputy Chair of ver.di - United Services Trade Union; representative of the trade unions
Stefan Körzell	Member of the Executive Board of the Confederation of German Trade Unions (DGB); representative of the trade unions
Dr Joachim Lang	CEO and Director General of the Federation of German Industries (BDI); representative of the industry
Steffi Lemke	Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection
Christian Lindner	Federal Minister of Finance; Deputy Chair in 2022

Michael Richter	Minister of Finance of the State of Saxony-Anhalt; appointed by the Bundesrat
Joachim Rukwied	President of the German Farmers' Association (DBV); representative of the agricultural sector
Frank Schäffler	Member of Parliament; appointed by the Bundestag
Helmut Schleweis	President of the German Savings Banks Association (DSGV); representative of the savings banks
Svenja Schulze	Federal Minister for Economic Cooperation and Development
Holger Schwannecke	Secretary General of the German Confederation of Skilled Crafts and Small Business (ZDH); representative of the skilled crafts sector
Dietmar Strehl	Senator for finance in the city state of Bremen; appointed by the Bundesrat
Dr Martin Wansleben	Chief Executive of the Association of German Chambers of Commerce and Industry (DIHK); representative of the industry
Dr Volker Wissing	Federal Minister for Digital and Transport

Of KfW Group's staff, approximately 20% is engaged in KfW's domestic business activities, 28% in Promotion of Developing Countries and Emerging Economies (KfW Entwicklungsbank and DEG), 11% 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, 83.2 million people were living in Germany at the end of 2021, which was roughly the same number as at the end of both 2020 and 2019. In 2021, the population was stagnating due to the increased number of deaths, which clearly exceeded the number of births. The gap between births and deaths, however, was filled by higher net immigration. Based on provisional results for 2021, the Federal Statistical Office estimates that the number of births amounted to between 775,000 and 795,000 (2020: 773,144), the number of deaths to around 1.02 million (2020: 985,572), and net immigration to between 270,000 and 320,000 persons (2020: 220,251). In 2020, approximately 16.9% 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 31.12.2020 (September 2021) (https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/02-bundeslaender.html); Statistisches Bundesamt, Once again no population growth expected for 2021, press release of January 20, 2022 (https://www.destatis.de/EN/Press/2022/01/PE22_027_124.html; German version: https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/01/PD22_027_124.html); Statistisches Bundesamt, Daten aus dem Gemeindeverzeichnis, Städte nach Fläche, Bevölkerung und Bevölkerungsdichte am 31.12.2020 (September 2021) (https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/05-staedte.html).

20-40	24.5	24.6	24.6	24.6	24.5
40-60	28.1	28.4	28.8	29.1	29.4
60-80	21.8	21.7	21.7	21.7	21.6
80 and more	7.1	6.8	6.5	6.2	6.0
Growth rate		(percent change on the previous year)			
Total population	0.0	0.2	0.3	0.3	0.4
Under 20	0.0	0.2	0.3	0.2	1.0
20-40	-0.5	0.1	0.5	0.7	0.6
40-60	-1.1	-1.1	-0.8	-0.8	-0.9
60-80	0.5	0.4	0.3	0.5	0.4
80 and more	4.5	5.4	4.6	4.2	4.5

(1) Due to methodological changes and further technical developments, the results for the 2017 and 2016 reporting years are only comparable with the previous years' figures to a certain extent. The accuracy of the results for 2016 in particular is limited due to inconsistencies, among other things, in connection with the increased immigration and the resulting problems in the registration of persons seeking protection under reporting law.

Source: Statisches 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 1972 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 14th coordinated population projection of the Federal Statistical Office published in June 2019 and covering the period until 2060, even a rising birth rate and sustained high net immigration can only slow down aging, but not reverse the trend. The number of people of working age between 20 and 66 is expected to decline by 4 to 6 million by 2035, which may result in a downward pressure on Germany's growth potential in the long term. In its first medium-term population projection published in September 2021, which explicitly takes demographic changes related to the COVID-19 pandemic into account and covers the period until 2035, the Federal Statistical Office materially confirms the expected significant decline in the working-age population and the ongoing trend towards aging. For the total population, however, a wider range of possible future developments is projected. While it is expected to increase until at least 2024, assuming a moderate development in birth rates and life expectancy, the total population is expected to decline from 2040 onwards at the latest, even if net immigration remains permanently high. However, assuming that, in addition to permanently high net immigration, birth rates were to continue to rise, the total population would stabilize after the increase projected until at least 2024. In 2060, Germany is therefore projected to have a total population ranging from 74 to 84 million people, depending on the development of the aforementioned demographic factors.

Sources: Statisches Bundesamt, Once again no population growth expected for 2021, press release of January 20, 2022 (https://www.destatis.de/EN/Press/2022/01/PE22_027_124.html; German version: https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/01/PD22_027_124.html); Statisches Bundesamt, Working-age population expected to decrease by 4 to 6 million by 2035, press release of June 27, 2019 (https://www.destatis.de/EN/Press/2019/06/PE19_242_12411.html); Statisches Bundesamt, Bevökerungsvorausberechnung, 14. koordinierte Bevölkerungsvorausberechnung – Basis 2018 (https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsvorausberechnung/aktualisierung-bevoelkerungsvorausberechnung.html); Statisches Bundesamt, Number of people aged 67 or over will grow 22% by 2035, press release of September 30, 2021 (https://www.destatis.de/EN/Press/2021/09/PE21_459_12411.html; German version: https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/09/PD21_459_12411.html).

General elections for the Bundestag are generally held every four years on the basis of an electoral system of proportional representation. The last general election was held on September 26, 2021.

A political party is not entitled to party representation in the Bundestag unless it receives at least 5% of the votes cast or three direct mandates, awarded to the candidate with the most votes in a given electoral district, in a general election. Upon proposal by the *Bundespräsident*, the Chancellor is elected by and is responsible to the Bundestag.

Political Parties

The political parties currently represented in the Bundestag are: the Social Democratic Party (SPD); the Christian Democratic Union (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.bundeswahlleiter.de/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/news/federal-chancellor-election-1989862); Bundesregierung, Koalitionsvertrag (https://www.bundesregierung.de/resource/blob/974430/1990812/04221173eef9a6720059cc353d759a2b/2021-12-10-koav2021-data.pdf?download=1).

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

ELECTION RESULTS TO THE GERMAN 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-Hollstein, is exempt from the five percent of the votes cast or three direct mandates threshold for representation in the Bundestag.

North Atlantic Treaty Organization. Furthermore, the Federal Republic is a signatory to the General Agreement on Tariffs and Trade and a member of the World Trade Organization ("WTO"). It is also a shareholder of, among others, the European Investment Bank ("EIB"), the European Bank for Reconstruction and Development, the Asian Infrastructure Investment Bank and the European Atomic Energy Community.

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 447 million as of January 1, 2021. Formal accession negotiations are currently being conducted with Montenegro, Serbia and Turkey. While Turkey is a key strategic partner of the EU on issues including migration, security, counter-terrorism, and the economy, accession negotiations with Turkey have not progressed in recent years. In March 2020, the EU decided to initiate accession negotiations with Albania and North Macedonia but negotiations have not yet commenced. Bosnia and Herzegovina and Kosovo are potential candidates, but both countries still have to address EU-related reforms before the EU can decide to initiate accession negotiations. Following the invasion of Ukraine by the Russian Federation ("Russia") in February 2022, Ukraine, Georgia and the Republic of Moldova have formally applied for EU membership.

Sources: European Union, The history of the European Union (https://europa.eu/about-eu/eu-history/index_en.htm); European Union, The history of the European Union: 1945-1959 (https://europa.eu/european-union/about-eu/history/1945-1959_en); European Union, About the EU (https://europa.eu/european-union/about-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, Countries, Check current status (https://ec.europa.eu/neighbourhood-enlargement/countries/check-current-status_en); European Council, Versailles Declaration, March 11, 2022 (https://www.consilium.europa.eu/media/54773/20220311-versailles-declaration-en.pdf).

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 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, EU institutions can adopt legislation, which, depending on the subject matter, becomes directly applicable law or requires further implementation by the EU Member States.

withdraw to the European Council. The EU treaties cease to apply to a 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.

Sources: European Commission, Europe in 12 lessons by Pascal Fontaine (https://publications.europa.eu/en/publication-detail/-/publication/a5ba73c6-3c6a-11e8-b5fe-01aa75ed71a1); Europa.eu, 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/); Europa.eu, Consolidated versions of the Treaty on European Union, Article 50 (https://eur-lex.europa.eu/eli/treaty/teu_2016/art_50/oj).

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.

EU Budget. 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. The regulation provides for a long-term EU budget of EUR 1,210.9 billion (in current prices, including the integration of the European Development Fund) 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), in which is specifically aimed at addressing the socioeconomic consequences of the COVID-19 pandemic, this will allow the EU to provide an unprecedented amount of approximately EUR 2 trillion to support recovery from the COVID-19 pandemic in Europe and further the EU's long-term priorities across different policy areas with new and reinforced priorities, including green and digital transitions. For more information on the EU's response to the COVID-19 pandemic, see "—Monetary Integration—EU Response to the COVID-19 Pandemic." The 2022 EU budget, which was adopted by the Council and the European Parliament in November 2021, amounts to EUR 169.5 billion in commitment appropriations and EUR 170.6 billion in payment appropriations.

competence. Furthermore, the EU's responsibilities also cover trade in services, the commercial aspects of intellectual property (such as patents), public procurement and foreign direct investment, whereas in the case of portfolio investments, investment protection and investment dispute settlement, the competence is shared between the EU and the EU Member States. In particular, the EU is responsible for negotiating and concluding international trade agreements as well as identifying trade barriers and unfair trade practices by trading partners and adopting appropriate countermeasures. Trade agreements are negotiated by the European Commission upon authorization of the Council. Once the European Commission completes negotiations, the Council and the European Parliament examine the final negotiated agreement and decide whether or not to approve it. Trade agreements regulating areas of mixed responsibility between the EU and the EU Member States can only be concluded after ratification by all EU Member States. As part of the EU's response to Russia's Invasion of Ukraine the EU has imposed comprehensive economic sanctions, including trade restrictions. For more information on the EU's response to Russia's invasion of Ukraine, see "Recent Developments—Federal Republic of Germany—Other Recent Developments—EU Response to Russia's Invasion of Ukraine."

Sources: European Commission, Business, Economy, Euro, Trade with non-EU countries, EU trade policy-making (https://ec.europa.eu/trade/policy/policy-making); Federal Ministry for Economic Affairs and Energy, Topics, Trade Policy, European Trade Policy (https://www.bmwi.de/Redaktion/EN/Dossier/trade-policy.html).

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 and Lithuania subsequently joined the euro area.

The European Central Bank ("ECB") was established on June 1, 1998, as part of the European System of Central Banks ("ESCB"). According to the Maastricht Treaty, the primary objective of the ESCB is to maintain price stability. Without prejudice to the objective of price stability, the ESCB supports the general economic policies of the EU. See "—Monetary and Financial System" for more information on the ECB and ESCB as well as on the European financial system. The Eurosystem, consisting of the ECB and the national central banks of those EU Member States whose currency is the euro ("Euro Area Member States"), assumed sole responsibility for the monetary policy in the euro area on January 1, 1999.

Sources: European Union, Founding agreements, Treaty on European Union – Maastricht Treaty (https://europa.eu/european-union/law/treaties_en); European Central Bank, Economic and Monetary Union (EMU) (https://www.ecb.int/ecb/history/emu/html/index.en.html); European Central Bank, Use of the euro (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.

("EDP"). The EDP ensures the correction of excessive budget deficits (defined as a deficit in excess of 3% of gross domestic product ("GDP")) or excessive public debt levels (defined as a debt ratio greater than 60% of GDP without an adequate diminishing trend). Countries 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 the 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."

Upon proposal of the European Commission, the "general escape clause" under the SGP was activated in March 2020 as part of the EU's response to the COVID-19 pandemic. The use of the clause has allowed EU Member States to deal adequately with the effects of the pandemic and has provided them with the required flexibility to take the measures necessary to support their health and civil protection systems and to protect the European economies. The general escape clause continues to apply in 2022. A final decision on the possible deactivation of the clause for 2023 has not yet been taken. In light of the high uncertainty and downside risks to economic activity from Russia's invasion of Ukraine, the European Commission has announced a reassessment based on its spring forecast, which is expected in May. See also "—Public Finance—Germany's General Government Deficit/Surplus and General Government Gross Debt." For more information on the EU's response to the COVID-19 pandemic, see "—EU Response to the COVID-19 Pandemic." For more information on the EU's response to Russia's invasion of Ukraine, see "Recent Developments—Federal Republic of Germany—Other Recent Developments—EU Response to Russia's Invasion of Ukraine."

Sources: European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU economic governance: monitoring, prevention, correction (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction_en); European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU economic governance, Stability and Growth Pact, Annual draft budgetary plans (DBPs) of euro area countries (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/stability-and-growth-pact/annual-draft-budgetary-plans-dbps-euro-area-countries_en); European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU economic governance, Stability and Growth Pact (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/stability-and-growth-pact_en); European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU economic governance, Stability and Growth Pact, Stability and convergence programmes (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/stability-and-growth-pact/stability-and-convergence-programmes_en); European Commission, Vade Mecum on the Stability & Growth Pact 2019 edition, page 25 (https://ec.europa.eu/info/sites/info/files/economy-finance/ip101_en.pdf); 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 2023, Communication from the Commission to the Council of March 2, 2022 (https://ec.europa.eu/info/sites/default/files/economy-finance/com_2022_85_1_en_act_en.pdf).

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. 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 cases of an EU Member State with excessive macroeconomic imbalances, the corrective arm may open an *finance/2022_european_semester_alert_mechanism_report.pdf).*

Treaty on Stability, Coordination and Governance in the EMU. The Treaty on Stability, Coordination and Governance in the EMU ("TSCG"), which was signed in March 2012 and entered into force on January 1, 2013, is intended to promote budgetary discipline in the participating EU Member States through a fiscal pact. The fiscal pact's provisions are binding for Euro Area Member States, while the other participating EU Member States will only be bound if they adopt the euro, unless they declare their intention to be bound by certain provisions of the treaty at an earlier date. The TSCG requires the participating parties to ensure convergence towards the country-specific, medium-term budgetary objectives as defined in the SGP, with a lower limit of a structural deficit of 0.5% of such participating EU Member State's GDP (or of 1% of GDP, if their debt-to-GDP ratio is well below 60%). In the event of a deviation from this requirement, an automatic correction mechanism will be triggered with escape clauses for exceptional circumstances. These budget rules were to be transposed into national law through provisions of "binding force and permanent character, preferably constitutional" one year after the entry into force of the treaty, i.e., by January 1, 2014 at the latest.

Sources: European Council, Fiscal compact signed: Strengthened fiscal discipline and convergence in the euro area, press release of March 2, 2012 (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, The EU's economic governance explained, press release of November 26, 2015 (https://europa.eu/rapid/press-release_MEMO-15-6071_en.htm).

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 December 2021, the EFSF had outstanding loans to Ireland, Portugal and Greece of approximately EUR 173 billion backed by effective guarantees extended by the Euro Area Member States totaling EUR 307 billion. The Federal Republic has committed guarantees of approximately EUR 89 billion to the EFSF as of December 31, 2021, in accordance with its share in the paid-up capital of the ECB at that time, which amounts to approximately 29% of the total effective guarantees. 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, Business, Economy, Euro, Economic and fiscal policy coordination, EU financial assistance, How is financial assistance given to EU countries? (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance/how-financial-assistance-given-eu-countries_en); European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU financial assistance, Loan programmes, European Financial Stabilisation Mechanism (EFSM) (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance/loan-programmes/european-financial-stabilisation-mechanism-efsm_en#support); European Stability Mechanism, Publications, Investor Presentation (https://www.esm.europa.eu/system/files/document/2022-01/20220126_EFSF_ESM_InvestorPresentation.pdf).

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.

Financial assistance from the ESM is activated upon a request from a Euro Area Member State to the chairperson of the ESM's board of governors and is provided subject to strict conditions appropriate to the instrument chosen. The initial instruments available to the ESM have been modeled upon those available to the EFSF and include the extension of loans to a Euro Area Member State in financial difficulties, interventions in the primary and secondary debt markets, action based on a precautionary program, and the extension of loans to governments, or since December 2014 directly to affected financial institutions, for the purposes of recapitalizing financial institutions. Each instrument is to be linked to a memorandum of understanding which sets forth the conditions for financial support that the Euro Area Member State has negotiated with the European Commission in liaison with the ECB, as well as the monitoring and surveillance procedures established to ensure the Euro Area Member State is progressing towards financial stability. In principle, decisions under the ESM are taken by mutual agreement. However, in the event that the European Commission and the ECB conclude that an urgent decision related to financial assistance is needed because the financial and economic sustainability of the euro area 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 January 2022, the ESM had loans in an aggregate amount of approximately EUR 90 billion outstanding to Spain, Cyprus and Greece.

Sources: European Stability Mechanism, History (https://www.esm.europa.eu/about-us/history); European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU financial assistance, How is financial assistance given to EU countries? (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance/how-financial-assistance-given-eu-countries_en); European Stability Mechanism, How we decide (https://www.esm.europa.eu/esm-governance#anc_shareholders); European Stability Mechanism, How we work (https://www.esm.europa.eu/about-us/how-we-work#overview); European Stability Mechanism, Financial Assistance, Lending toolkit (https://www.esm.europa.eu/financial-assistance/lending-toolkit#headline-lending__toolkit); European Stability Mechanism, Explainers, The ESM, ESM decision making (https://www.esm.europa.eu/explainers); European Stability Mechanism, Publications, Investor Presentation (https://www.esm.europa.eu/system/files/document/2022-01/20220126_EFSF_ESM_InvestorPresentation.pdf).

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

For information on the role of the ESM in connection with the EU's response to the COVID-19 pandemic, see "—General—Monetary Integration—EU Response to the COVID-19 Pandemic—Safety Nets for Workers, Businesses and Sovereigns."

Sources: ESM, ESM Reform (https://www.esm.europa.eu/about-esm/esm-reform); 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, Collective Action Clauses in the Euro area, "Single-limb" CAC (the "2022 CAC") (https://europa.eu/efc/efc-sub-committee-eu-sovereign-debt-markets/collective-action-clauses-euro-area_de); Terms of Reference of the 2022 CAC (https://europa.eu/efc/system/files/2021-04/EA%20Model%20CAC%20-%20Draft%20Terms%20of%20Reference.pdf); Council of the European Union, Infographic - Reform of the European Stability Mechanism (ESM) (https://www.consilium.europa.eu/en/infographics/reform-of-the-european-stability-mechanism-esm/).

EU Response to the COVID-19 Pandemic

In reaction to the COVID-19 pandemic, the EU has taken numerous measures to support the EU Member States, focusing not only on reducing its detrimental economic impacts and supporting jobs through extensive economic measures also aimed at post-pandemic recovery, but also by developing an EU vaccination strategy, coordinating emergency resources, national measures and travel restrictions, and making testing and quarantine recommendations. For information on the measures taken by the ECB in response to the COVID-19 pandemic, see "—Monetary and Financial System—Monetary Policy—Monetary Policy Response to the COVID-19 Pandemic." For recent developments related to the epidemiological situation, see "Recent Developments—Federal Republic of Germany—Other Recent Developments—General Considerations Relating to the COVID-19 Pandemic."

Measures to increase EU Member States' flexibility. In order to provide EU Member States with the maximum flexibility to extend the necessary financial support to their populations and companies in connection with the COVID-19 pandemic, including by incurring further indebtedness, in March 2020, the EU activated the general escape clause under the SGP as discussed under "—EU Economic Governance—Stability and Growth Pact" and "—Public Finance—Germany's General Government Deficit/Surplus and General Government Gross Debt." In addition, since EU Member States may generally grant state aid only within the narrow framework of EU state aid regulations and procedures, the European Commission adopted a temporary framework for state aid measures to support the economy in connection with the COVID-19 pandemic (the "Temporary Framework") in March 2020, permitting EU Member States to provide certain types of direct support to companies and small enterprises affected by the COVID-19 pandemic subject to less stringent conditions than would normally apply. The types of aid covered by the Temporary Framework include direct grants (or tax advantages), subsidized state guarantees on bank loans, public and private loans with subsidized interest rates, the use of banks' existing lending capacities as a channel for support for businesses (in particular to SMEs), additional flexibility to enable short-term export credit insurance to be provided by governments where needed as well as aid in the form of equity and hybrid capital instruments. The aim of these measures is to ensure that businesses retain the means to keep operating, or to temporarily freeze activity without impairing long-term growth prospects. Currently, the Temporary Framework, which has been amended and extended several times, has been prolonged until June 30, 2022. With respect to state aid rules and regulations, the Temporary Framework provides the basis for a number of German governmental support measures at federal and regional (*Länder*) level in connection with the COVID-19 pandemic, including for example the bridging support measures and various KfW loans.

Safety Nets for Workers, Businesses and Sovereigns. On April 9, 2020, finance ministers of the Euro Area Member States, referred to as the "Eurogroup", adopted a comprehensive economic policy response to the COVID-19 pandemic, which included three important safety nets for workers, businesses and sovereigns, amounting to a combined package up to EUR 540 billion. The safety net for workers is represented by the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency ("SURE"), throughout the EU with an emergency support package for investments of up to EUR 200 billion, based on a pan-European guarantee fund of EUR 25 billion. The ESM represents the safety net for sovereigns by providing a credit line to Euro Area Member States referred to as Pandemic Crisis Support ("PCS"). Under the PCS, which came into operation in mid-May 2020, an aggregate amount of up to EUR 240 billion could be made available to Euro Area Member States. Preliminary assessments by the European Commission, regarding financial stability risks, bank solvency, debt sustainability, and on the eligibility criteria for accessing the PCS have confirmed that all Euro Area Member States are eligible to receive support. To date, there have been no requests for support. The credit line will be available until the end of 2022. This period could be adjusted if required, depending on the further development of the COVID-19 pandemic.

EU Recovery Instrument. To help repair the economic and social damage caused by the COVID-19 pandemic, in December 2020, the EU adopted legislative acts regarding a recovery instrument to mitigate the impact of the COVID-19 pandemic and lay the foundations for a modern and more sustainable Europe that is better prepared for the challenges and opportunities of the green and digital transitions. The EU's long-term budget, the MFF, and the EU Recovery Instrument with an amount of up to EUR 807 billion (in current prices), also referred to as "Next Generation EU," together are designed to boost recovery in a total amount of approximately EUR 2 trillion (in current prices). For additional information on the MFF, see also "—General—The European Union and European Integration—Economic Integration—EU Budget." The most important component of the EU Recovery Instrument is the Recovery and Resilience Facility ("RRF"), with up to EUR 724 billion (in current prices) in loans and grants available to support reforms and investments undertaken by the EU Member States. 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 are 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 December 31, 2021, the European Commission had disbursed EUR 64.3 billion to 20 Member States under the RRF, thereof EUR 46.4 billion in the form of grants and EUR 18.0 billion in the form of loans. The balance of the funds under the EU Recovery Instrument are being employed through existing EU instruments and assistance programs.

To implement the EU Recovery Instrument, the EU's Own Resources Decision, which defines how the EU budget is financed and which was adopted by the Council on December 14, 2020 pursuant to the special legislative procedure applicable thereto, was ratified by all EU Member States in accordance with their own constitutional requirements. Under the Own Resources Decision, the European Commission is authorized, on an exceptional basis, to temporarily borrow up to EUR 806.9 billion (in current prices) on the capital markets for the EU Recovery Instrument to support the recovery from the economic fallout caused by the COVID-19 pandemic. From June to December 2021, the Commission raised EUR 71 billion for Next Generation EU via long-term EU bonds, of which EUR 12 billion were raised through green bonds. In addition, around EUR 20 billion short-term debt in EU bills was outstanding at December 31, 2021. The European Commission has announced plans to issue long-term EU bonds in an amount of EUR 50 billion between January and June 2022, to be complemented by short-term EU bills.

Sources: European Commission, Overview of the Commission's response, accessed on March 23, 2022 (https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/overview-commissions-response_en); European Commission, State Aid Cases – State Aid Actions, accessed on March 23, 2022 (https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic/state-aid-cases_en); Council of the European Union, COVID-19: the EU's response to the Economic Fallout, accessed on March 23, 2022 (https://www.consilium.europa.eu/en/policies/coronavirus/covid-19-economy/); European Commission, SURE, accessed on March 23, 2021 (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/financial-assistance-eu/funding-mechanisms-and-facilities/sure_en); European Stability Mechanism, ESM Pandemic Crisis Support – Explainer, Timeline and Documents, accessed on March 23, 2022 (https://www.esm.europa.eu/content/europe-response-corona-crisis); European Commission, Recovery Plan for Europe, accessed on March 23, 2022 (https://ec.europa.eu/info/strategy/recovery-plan-europe_en);

Since August 2014, the Federal Statistical Office calculates 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. Recalculations have been conducted for all time series since 1991.

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, Methodological notes (https://www.bundesbank.de/en/statistics/external-sector/balance-of-payments/methodological-notes-794532).

Statistical Disclosure Standards of the International Monetary Fund

Since February 2015, the Federal Republic meets the Special Data Dissemination Standard Plus ("SDDS Plus") of the IMF relating to coverage, periodicity and timeliness of economic data. The SDDS Plus was created in 2012 as an extension of the existing Special Data Dissemination Standard. By providing comparable economic and financial data, it is designed to improve the transparency of the financial sector and its international interdependencies, and thus contributes to the identification of risks at an early stage. Although adherence by member countries to the SDDS Plus is voluntary, it carries a commitment requiring members to observe the standard and to provide certain information to the IMF about their practices in disseminating economic and financial data.

Source: Bundesbank, Statistics, IMF related Data, SDDS Plus (Special Data Dissemination Standard) (https://www.bundesbank.de/en/statistics/sets-of-indicators/sdds-plus/sdds-plus-795798).

The German economy is one of the world's largest economies, with an annual GDP of EUR 3,570.62 billion in 2021. After a COVID-19 pandemic-induced decrease by 4.6% in 2020, the price-adjusted GDP increased by 2.9% in 2021. While the German economy managed to recover from the sharp decline during the first year of the pandemic, economic performance has not yet reached its pre-crisis level again and was still 1.8% lower than in 2019, the year before the start of the COVID-19 pandemic. Compared to the level of 1991, which represents the first full year after German reunification on October 3, 1990, the price-adjusted GDP increased by 43.6%. The growth in GDP since 1991 has been largely driven by productivity gains, as the price-adjusted GDP per employee has risen by 24.3% since 1991. In calculating the price-adjusted GDP, the Federal Statistical Office (*Statistisches Bundesamt*) uses a chain index based on the previous year's prices. In 2021, the GDP per capita at current prices was EUR 42,918 while the GDP per employee at current prices was EUR 79,488.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 2.1.4.

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 2021, services accounted for 69.7% 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 16.1% in 2021, compared to 16.1% in 1991, and "public services, education, health," accounting for 19.2% of gross value added in 2021, compared to 15.9% in 1991. The production sector (excluding construction) generated 23.5% of gross value added compared to 30.8% in 1991. Construction contributed 5.9% to gross value added in 2021, compared to 6.0% in 1991, and agriculture, forestry and fishing accounted for 0.9% of gross value added in 2021, compared to 1.2% in 1991.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 2.2.1.

In 2021, private final consumption expenditure totaled 49.4% of GDP in current prices, gross capital formation amounted to 22.0% and government final consumption expenditure equaled 22.4%. Exports and imports of goods and services accounted for 47.5% and 41.9% of GDP at current prices, respectively. The trade balance (according to national accounts) thus showed a surplus equal to 5.5% of GDP in 2021 (2020: 5.7% of GDP).

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 2.3.1.

The economic situation in Germany in 2021 continued to be affected by the COVID-19 pandemic and related containment measures as well as by disruptions to global supply chains. Nevertheless, over the summer of 2021 Germany continued its recovery that had started in the third quarter of 2020. However, this development was slowed down again in the last quarter of 2021 by another wave of infections, which in particular restricted certain areas of the services sector. Overall, the annual price-adjusted GDP in 2021 was 2.9% higher than in 2020. The GDP adjusted for both price and calendar effects also increased by 2.9%. Household final consumption expenditure increased by a price-adjusted 0.1% year on year. Exports increased by 9.9%, while imports rose by 9.3%, all on a price-adjusted basis. The growth contribution of net exports was 0.8%. Gross fixed capital formation increased by 1.5%, in price-adjusted terms. Government final consumption expenditure increased by 3.1% on a price-adjusted basis.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Tables 2.1.1 and 2.3.2.

and 1.2; Deutsche Bundesbank, 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

	2021	2020	2019	2018	2017
	(EUR in billions, unless otherwise indicated)				
GDP - at current prices	3,570.6	3,367.6	3,473.4	3,367.9	3,267.2
(change from previous year in %)	6.0	-3.0	3.1	3.1	4.2
GDP - price-adjusted, chain-linked index (2015=100), not adjusted for calendar effects	105.3	102.3	107.2	106.1	105.0
(change from previous year in %)	2.9	-4.6	1.1	1.1	2.7
GDP - price-adjusted, chain-linked index (2015=100), adjusted for calendar effects	105.1	102.1	107.4	106.3	105.1
(change from previous year in %)	2.9	-4.9	1.1	1.1	3.0
Unemployment rate (ILO definition) (in %) (1)	3.3	3.6	3.0	3.2	3.5
Rate of inflation (year-to-year change in consumer price index (CPI) in %)	3.1	0.5	1.4	1.8	1.5
Balance of payments - current account	265.3	238.7	262.9	267.7	255.8
General government gross debt (2)	2,475.8	2,314.1	2,045.7	2,062.6	2,111.4

(1) Unemployed persons, available and seeking work.

(2) Definition according to Maastricht Treaty.

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2—4. Vierteljahr 2021 (February 2022), Tables 1.1 and 1.11; Statistisches Bundesamt, Preise, Verbraucherpreisindizes, Gesamtindex und 12 Abteilungen, Jahresdurchschnitte, Veränderung zum Vorjahr (https://www.destatis.de/DE/Themen/Wirtschaft/Preise/Verbraucherpreisindex/Tabellen/Verbraucherpreise-12Kategorien.html); Deutsche Bundesbank, Monatsbericht März 2022, Table XII.2; Deutsche Bundesbank, Time series BBK01.BJ9059: General government debt as defined in the Maastricht Treaty—Germany—overall (https://www.bundesbank.de/Navigation/EN/Statistics/Time_series_databases/Macro_economic_time_series/its_details_value_node.html?tsId=BBK01.BJ9059&listId=www_v27_web001_02a).

Economic Outlook

In its forecast published on April 27, 2022, the Federal Government projects German price-adjusted GDP to rise by 2.2% in 2022. The German economy is on an ongoing post-pandemic recovery trajectory, while Russia's invasion of Ukraine is causing additional supply chain disruptions and a sharp rise in energy prices, which weigh on economic output. In the second half of 2022, economic activity is expected to pick up again and the recovery is expected to continue in 2023 with a real GDP growth rate of 2.5%.

Since Russia's invasion of Ukraine began on February 24, 2022, prices on the energy markets have risen sharply. Against this background, the inflation rate is projected to be 6.1% in 2022. The Federal Government expects the inflation rate to drop to 2.8% in 2023. Despite high inflation, private consumption is expected to recover in real terms with an increase of 3.7% in 2022 due to rising disposable income and the removal of measures to curb the COVID-19 pandemic (2023: +2.3%). Bolstered by a sharp increase in public-sector investment in machinery and equipment, total gross fixed capital formation is expected to grow by 3.4% in 2022 and by 4.6% in 2023. For investment in construction, growth rates of 1.7% in 2022 and 2.2% in 2023 are expected, encouraged by continuing high demand for housing. Imports are expected to increase significantly by 5.5% in 2022 supported by the resumption of travel and tourism (2023: +5.3%). Once supply bottlenecks in the industry ease, there should also be a significant strengthening of export momentum in the course of 2022 and 2023 in view of full order books (2022: +4.2%, 2023:+5.9%). The current account surplus is expected to decline to 5.7% of GDP in 2022 and to increase to 6.6% in 2023.

economic development was significantly impacted by the COVID-19 pandemic and related containment measures. In the face of shut-downs in several areas of the services sector, the Federal Government provided its citizens and companies with rapid and targeted support. Various support and loan programs have been set up to help companies that have suffered losses as a result of the COVID-19 pandemic. To strengthen liquidity, loans have been granted via the KfW Special Program (*KfW-Sonderprogramm*). For more information, see "KfW—Business—Domestic Promotional Business—KfW measures to mitigate the economic impact of the COVID-19 pandemic in Germany." The guarantee programs of the guarantee banks (*Bürgschaftsbanken*) and the Federal Government's large-scale guarantee program (*Großbürgschaften*) were also expanded to facilitate corporate borrowing and to strengthen the equity base of SMEs. With the German Economic Stabilization Fund (*Wirtschaftsstabilisierungsfonds*, "WSF") the Federal Government has created an instrument to counter liquidity bottlenecks and strengthen the capital base of larger companies. Companies and self-employed persons particularly affected by the pandemic were also supported with various grants, in particular the bridging support measures (*Überbrückungshilfe*). Further measures adopted by the Federal Government to support companies' liquidity and increase their resilience include the reimbursement of social security contributions for employees on short-time work, and also the temporary option of simplified deferral of taxes and social security contributions. A temporary suspension of the obligation to file for insolvency for companies over-indebted due to the COVID-19 pandemic until the end of April 2021, has given companies time to respond to the crisis and aimed to create a window of opportunity for government relief measures to take effect.

In some cases, the COVID-19 pandemic has led to significant losses in profits and labor income. Among other measures, the Federal Government has temporarily simplified access to basic benefits in order to compensate for these losses. Self-employed persons may also benefit from these measures, provided that their livelihood is not otherwise secured, e.g., through rental income. Furthermore, in order to reduce losses for employees and prevent a massive rise in unemployment, the Federal Government has facilitated the access to short-time work compensation (*Kurzarbeitergeld*).

The bridging support measures (*Überbrückungshilfe*), the restart assistance (*Neustarthilfe*), the assistance in case of hardship (*Härtefallhilfen*) as well as most of the pandemic related regulations regarding facilitated access to short-time work compensation (*Kurzarbeitergeld*) were extended until the end of June 2022. The KfW Special Program as well as the WSF and the guarantee programs were open for applications until April 30, 2022. In addition, numerous tax-related COVID 19-measures were extended in favor of companies and taxpayers. These measures include the extension of tax deferrals in a simplified procedure, an extended tax allowance for home office work, extended tax filing deadlines for 2020, 2021 and 2022, extended options to offset losses, the extension of degressive depreciation options for movable fixed assets, extended investment deadlines for tax-deductible investments and tax-free grants for short-time work compensation.

Sources: Bundesministerium der Finanzen, Viertes Gesetz zur Umsetzung steuerlicher Hilfsmaßnahmen zur Bewältigung der Corona-Krise (Viertes Corona-Steuerhilfegesetz) (https://www.bundesfinanzministerium.de/Content/DE/Gesetzestexte/Gesetze_Gesetzesvorhaben/Abteilungen/Abteilung_IV/20_Legislaturperiode/2022-02-25-Viertes-Corona-Steuerhilfegesetz/0-Gesetz.html); Bundesministerium der Finanzen, BMF-Schreiben vom 31. Januar 2022, (https://www.bundesfinanzministerium.de/Content/DE/Downloads/BMF_Schreiben/Weitere_Steuerthemen/Abgabenordnung/2022-01-31-steuerliche-massnahmen-zur-beruecksichtigung-der-auswirkungen-des-coronavirus.pdf?__blob=publicationFile&v=1).

households. In addition, the stimulus package also included measures to strengthen investments in the future with a view to addressing upcoming challenges such as climate change, digitization and demographic change. As part of the stimulus package, the "package for the future", with a volume of approximately EUR 50 billion, provides financial incentives in the areas of climate protection, energy transition, mobility and digitization, which are expected to present the key challenges in the near future. In addition, the Federal Government is making funds available for greater infrastructure expansion. With the package for the future, the Federal Government is largely building on existing measures and continuing its course of specifically addressing the challenges associated with digitization and climate protection.

As an industrialized nation that is fully integrated in global value chains, Germany has assumed responsibility in protecting the environment. Recognizing climate protection as a fundamental global challenge, at the World Climate Conference in Paris in 2015, 197 states, including Germany, 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) sets the central legal framework for climate protection policy in Germany. The KSG amendment in August 2021 in particular takes into account a highly noted decision of the Federal Constitutional Court of March 24, 2021, which clarified the government's constitutional obligations with respect to addressing climate change, and also serves as the first implementation of the European Union's new 2030 climate target. The amended KSG prescribes a reduction target for 2030 of at least 65% (previously 55%) compared to 1990 levels, a new interim reduction target of at least 88% for 2040 and the goal of greenhouse gas neutrality by 2045 (previously by 2050); 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 ("Climate Protection Program 2030"). The program provides for measures in all sectors and consists of four elements: a more comprehensive pricing of CO2, support programs and further incentives for CO2 savings, relief for citizens and the economy, and regulatory measures that will demonstrate their effectiveness by 2030 at the latest. Under the Climate Protection Program 2030, in 2019, the Federal Government made funds available for climate protection-related measures amounting to approximately EUR 54 billion for the period from 2020 to 2023. The package for the future included in the stimulus package provides for an additional EUR 15 billion for this same purpose. Among others, additional funds have been made available for the implementation of the National Hydrogen Strategy and the amounts available for the CO2 building renovation program were increased. On December 13, 2021, the Federal Government approved the draft of a second supplementary budget for 2021. It re-allocates EUR 60 billion from already budgeted and unused credit appropriations to deal with the consequences of the COVID-19 pandemic to the Energy and Climate Fund. Among others, the funds are intended to support investment in buildings, CO2-neutral mobility, new production facilities in industries with emission-intensive processes and the expansion of infrastructure for CO2-neutral energy supply.

In view of the ambitious climate policy goals and rapid technological changes, the Federal Government intends to improve the framework conditions for private investment and refine them with a view to digitization and sustainability requirements. To this end, the Federal Government is striving to accelerate administrative, planning and approval procedures as well as administrative court proceedings, reduce unnecessary bureaucracy and provide targeted tax policy impetus. Competition law is intended to be further adapted to the requirements of the data and platform economy, while the rules on public procurement are to be optimized and modernized in line with sustainability goals. Furthermore, the German government is pursuing a rules- and values-based foreign trade policy that builds on multilateralism and is based on fair social and ecological criteria to strengthen economic resilience and eliminate protectionism.

independent Minimum Wage Commission will again decide on any further increases. The Federal Government expects to continue to develop its skilled labor strategy and the National Continuing Education Strategy. This involves increasing the labor force participation of women and older workers, giving a new boost to vocational training, continuing education and professional development, increasing labor force immigration and creating more attractive working conditions in areas where there is or is likely to be a shortage of skilled workers. The Federal Government also intends to work with the federal states to significantly increase public spending on education and, while recognizing the states' sovereignty over education and the arts, is striving for a closer, more targeted and binding cooperation between all federal levels (cooperation requirement).

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." For information on current and pending fiscal measures adopted in 2022 to date, including in response to the Russia's invasion of the Ukraine, see "Recent Developments—Federal Republic of Germany—Other Recent Developments—Germany's Response to Russia's Invasion of Ukraine."

Sources: Bundesministerium für Wirtschaft und Energie, Jahreswirtschaftsbericht 2021 (https://www.bmwk.de/Redaktion/DE/Publikationen/Wirtschaft/jahreswirtschaftsbericht-2021.pdf?__blob=publicationFile&v=16); Bundesministerium für Wirtschaft und Klima, Jahreswirtschaftsbericht 2022 (https://www.bmwk.de/Redaktion/DE/Publikationen/Wirtschaft/jahreswirtschaftsbericht-2022.pdf?__blob=publicationFile&v=18); Bundesministerium für Arbeit und Soziales, Mit Kurzarbeit weiter Arbeitsplätze sichern, press release of February 9, 2022 (https://www.bmas.de/DE/Service/Presse/Pressemitteilungen/2022/mit-kurzarbeit-weiter-arbeitsplaetze-sichern.html).

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

	2021	2020	2019	2018	2017	2021	2020	2019	2018
	(EUR in billions)					(change in %)			
Domestic uses	3,373.1	3,174.8	3,277.1	3,160.1	3,035.6	6.2	-3.1	3.7	4.1
Final private consumption	1,763.0	1,708.0	1,802.9	1,752.1	1,702.5	3.2	-5.3	2.9	2.9
Final government consumption	801.3	754.6	705.2	670.4	648.2	6.2	7.0	5.2	3.4
Gross fixed capital formation	783.9	735.9	742.2	709.2	666.9	6.5	-0.9	4.7	6.3
Machinery and equipment	228.2	216.9	241.1	235.5	224.4	5.2	-10.0	2.4	4.9
Construction	414.3	380.1	364.1	345.5	321.7	9.0	4.4	5.4	7.4
Other products	141.5	138.9	137.0	128.2	120.7	1.8	1.4	6.9	6.2
Changes in inventories (1)	24.9	-23.7	26.8	28.5	18.0	—	—	—	—
Net exports (1)	197.5	192.8	196.2	207.7	231.6	—	—	—	—
Exports	1,694.6	1,462.1	1,619.4	1,593.0	1,540.9	15.9	-9.7	1.7	3.4
Imports	1,497.0	1,269.3	1,423.2	1,385.3	1,309.3	17.9	-10.8	2.7	5.8
Gross domestic product	**3,570.6**	**3,367.6**	**3,473.4**	**3,367.9**	**3,267.2**	**6.0**	**-3.0**	**3.1**	**3.1**

(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 2021 (February 2022), Tables 3.1 and 3.9.

Financial and insurance services	122.1	122.8	121.4	118.4	118.4	0.3	0.3	2.6	0.0
Real estate activities	346.3	336.7	329.2	320.5	313.2	2.8	2.3	2.7	2.3
Business services	366.8	337.1	358.5	353.6	336.8	8.8	-6.0	1.4	5.0
Public services, education, health	620.2	592.5	583.4	555.2	534.0	4.7	1.6	5.1	4.0
Other services	114.6	111.0	120.3	115.6	112.0	3.2	-7.7	4.1	3.2
Taxes on products offset against subsidies on products	341.7	317.2	342.7	332.7	323.1	7.7	-7.4	3.0	3.0
Gross domestic product	**3,570.6**	**3,367.6**	**3,473.1**	**3,367.9**	**3,267.2**	**6.0**	**-3.0**	**3.1**	**3.1**

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2021 (February 2022), 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 59% 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 2021, the production sector's aggregate contribution to gross value added at current prices was 23.5% (excluding construction) and 29.4% (including construction), respectively. Its price-adjusted gross value added (excluding construction) increased by 4.1% year-on-year in 2021.

Sources: Volkswirtschaftliche Gesamtrechnungen der Länder, Reihe 1, Ländererergebnisse Band 1 (March 2022), Table 2.3; Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Tables 2.2.1 and 2.2.2.

OUTPUT IN THE PRODUCTION SECTOR (1)
(2015 = 100)

	2021	2020	2019	2018
Production sector, total	**97.0**	**94.1**	**102.5**	**105.8**
Industry (2)	94.8	91.0	101.6	106.0
of which:				
Intermediate goods (3)	102.2	94.9	101.8	105.5
Capital goods (4)	87.2	85.7	101.4	106.0
Durable goods (5)	103.7	97.6	106.2	106.2
Nondurable goods (6)	99.0	97.2	101.0	106.9
Energy (7)	86.9	84.4	90.4	97.4
Construction (8)	114.2	116.1	112.8	109.1

(1) Adjusted for working-day variations.

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

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 2021, the services sector's aggregate contribution to gross value added at current prices was 69.7%, compared to only 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 19.2% in 2021 after 15.9% in 1991.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 2.2.1.

Employment and Labor

As economic output increased in 2021, labor market conditions improved. In 2021, the average unemployment rate according to the national definition was 5.7%, compared to 5.9% in 2020. Under the ILO definition, the average unemployment rate was 3.3% in 2021 compared to 3.6% in 2020. The number of persons resident in Germany who were either employed or self-employed in 2021 was 44.8 million, approximately unchanged compared to 2020.

Sources: Bundesagentur für Arbeit, Monatsbericht Februar 2022, Table 6.1 (https://www.arbeitsagentur.de/datei/arbeitsmarktbericht-februar-2022_ba147381.pdf); Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 2.1.13.

The following table presents data with respect to employment and unemployment for each of the years indicated. The ILO definition and the national definition of unemployment differ in various ways. Further, the national definition of unemployment is applied to administrative data whereas unemployment according to the ILO is measured using surveys.

EMPLOYMENT AND UNEMPLOYMENT

	2021	2020	2019	2018	2017
Employed (in thousands)–ILO definition	44,804	44,803	45,125	44,719	44,131
Unemployed (in thousands)–ILO definition (1)	1,506	1,664	1,374	1,468	1,621
Unemployment rate (in %)–ILO definition	3.3	3.6	3.0	3.2	3.5
Unemployed (in thousands)–national definition (2)	2,613	2,695	2,267	2,340	2,533
Unemployment rate (in %)–national definition (3)	5.7	5.9	5.0	5.2	5.7

(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, Monatsbericht zum Arbeits- und Ausbildungsmarkt: Dezember und das Jahr 2021, Table 10.1; Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2021 (February 2022), Table 1.11.

35 to 39	84.4	89.8	78.9
40 to 44	85.8	89.6	82.0
45 to 49	86.5	89.7	83.3
50 to 54	85.7	89.0	82.4
55 to 59	81.1	84.8	77.5
60 to 64	61.4	65.8	57.2
65 to 69	17.2	20.7	14.1
15 to 64	75.8	79.4	72.1
65 and older	7.5	10.0	5.4
Total	**58.9**	**63.7**	**54.2**

Source: Statistisches Bundesamt, Erwerbsbeteiligung, Erwerbstätige und Erwerbstätigenquote nach Geschlecht und Alter, Ergebnis des Mikrozensus 2021 (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 2021 and 2011.

Structure of Employment – Economic Sectors

	2021	2011
	(Percent of total)	
Agriculture, forestry and fishing	1.3	1.6
Production sector (excluding construction)	18.0	18.9
of which: manufacturing	*16.6*	*17.5*
Construction	5.8	5.7
Trade, transport, accommodation and food services	22.0	23.1
Information and communication	3.2	2.8
Financial and insurance services	2.4	2.9
Real estate activities	1.1	1.1
Business services	13.6	13.0
Public services, education, health	26.1	23.8
Other services	6.6	7.1
Total (1)	**100.0**	**100.0**

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

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 2.2.9.

The following table shows changes in the annual wage level per employee and unit labor costs per hour worked for each of the years indicated.

Wage Trends and Labor Costs

	2021	2020	2019	2018	2017
Gross wages and salaries per employee in EUR	38,241	36,951	36,995	35,929	34,822
Change from previous year in %	3.5	-0.1	3.0	3.2	2.6
Unit labor costs per hour worked					
Index (2015=100)	113.1	112.2	108.5	105.3	102.2
Change from previous year in %	0.8	3.4	3.1	3.0	1.0

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2021 (February 2022), Tables 2.17 and 2.20.

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, DGB-Mitgliederzahlen ab 2010 (https://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen/2010); Deutscher Gewerkschaftsbund, Mitgliederzahlen 1950-1993 (https://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen/1950-1993); 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, Tarifautonomie (https://www.bpb.de/nachschlagen/lexika/handwoerterbuch-politisches-system/202193/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.

The Federal Republic's statutory pension insurance system operates on a pay-as-you-go basis, with contributions from current employers and employees funding payments to current retired persons. Generally, most employed and some self-employed and other persons are subject to mandatory insurance in the statutory retirement system. Certain persons, including employed members of particular professions (including some freelance professions) may apply for exemption, while others, as in the case of civil servants, are automatically exempt from mandatory participation in the statutory pension insurance system. Instead, exempted persons have to contribute to professional or public pension schemes or, in the case of civil servants and similar groups, they will benefit from special pension schemes for civil servants. Furthermore, the Retirement Funds Act (*Altersvermögensgesetz*) aims to ensure the long-term viability of the statutory pension insurance system by decreasing payments from the statutory pension insurance while encouraging insured persons to also sign up for designated privately funded or occupational pension schemes, for which certain bonus payments and tax incentives are 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

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 3.4.3.7; Statistisches Bundesamt, Negative government finance in 2020: deficit of 139.6 billion euros, press release of February 24, 2021 (https://www.destatis.de/EN/Press/2021/02/PE21_082_81.html).

In light of a changing population structure, the Federal Government has already implemented structural reforms of the statutory pension system in order to safeguard the sustainability of the pension system in the long term. In addition, the Federal Republic has implemented reforms of the statutory pension insurance which gradually raise the regular retirement age by two years to the age of 67 since 2012. 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, 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 [ec.europa.eu]).

International Economic Relations

International economic relations are of major importance to the German economy. In 2021, exports and imports of goods and services amounted to 47.5% and 41.9% 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 1.4 – 2021 (March 2022), Table 2.3.1.

Because of the openness of the Federal Republic's economy, German growth and employment depend particularly on open markets and foreign trade. Accordingly, the Federal Government supports efforts to reduce trade barriers. The strengthening of the multilateral trading system with the WTO at its center is a priority both for Germany and the EU. Bilaterally, the Federal Government and the European Commission champion ambitious, balanced and comprehensive free trade agreements in order to strengthen the international competitiveness of the European economy and thus growth and employment in Europe, while also contributing to sustainable development. An example of these agreements is the Comprehensive Economic and Trade Agreement (CETA) between the EU and Canada, which was approved by the European Parliament in February 2017. On September 21, 2017, CETA entered into force provisionally, i.e., most of the agreement, with the exception of investment protection, investment market access for portfolio investment and the Investment Court System, is already in force. CETA will take full effect after ratification by all EU Member States. Similarly, in 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: Bundesministerium für Wirtschaft und Energie, Current free trade agreements (https://www.bmwi.de/Redaktion/EN/Artikel/Foreign-Trade/ongoing-negotiations-on-free-trade-agreements.html); Bundesministerium für Wirtschaft und Energie, WTO-Welthandelsrunde "Doha Development Agenda" (https://www.bmwi.de/Redaktion/DE/Artikel/Aussenwirtschaft/wto-doha.html); Bundesministerium für Wirtschaft und Energie, CETA – Das europäisch-kanadische Wirtschafts- und Handelsabkommen (https://www.bmwi.de/Redaktion/DE/Dossier/ceta.html); Bundesministerium für Wirtschaft und Energie, Europäisches Parlament stimmt CETA zu, press release of February 15, 2017 (https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2017/20170215-europaeisches-parlament-stimmt-ceta-zu.html); European Commission, EU-Canada agreement (https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/canada/eu-canada-agreement_en); Bundesministerium für Wirtschaft und Energie, EU-Japan Free Trade Agreement (https://www.bmwi.de/Redaktion/EN/Artikel/Foreign-Trade/free-trade-agreement-japan.html).

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 2020. In 2020, price competitiveness deteriorated by 1.0% compared to 2019, mainly due to the appreciation of the euro relative to several currencies, including the U.S. dollar, the Pound sterling, and the Chinese yuan. 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 (36.6% in 2020).

In 2020, the euro appreciated against the U.S. dollar by 1.8% mainly due to a comparatively larger decline in U.S. interest rates. While the euro depreciated against the U.S. dollar during the second half of 2021, the average euro exchange rate in 2021 was 3.5% higher than in 2020. The depreciation of the euro against the U.S. dollar continued in the first four months of 2022 against the backdrop of Russia's invasion of Ukraine.

Source: Deutsche Bundesbank, Monatsbericht März 2022, 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)

	2021	2020	2019	2018	2017
	(EUR in millions)				
Current account					
Trade in goods (1)	192,442	189,963	215,456	221,983	255,077
Services (2)	314	2,725	-18,100	-15,806	-23,994
Primary income	126,606	98,780	115,359	111,890	76,404
Secondary income	-54,090	-52,727	-49,811	-50,338	-51,673
Total current account	**265,272**	**238,741**	**262,903**	**267,729**	**255,814**
Capital account (3)	-1,376	-5,829	-887	580	-2,936
Financial account					
Net German investment abroad (increase: +)	844,810	739,081	251,072	411,358	397,038
Net foreign investment in Germany (increase: +)	530,060	522,566	64,756	164,430	120,341
Net financial account (net lending: + / net borrowing: -)	**314,750**	**216,515**	**186,317**	**246,928**	**276,697**
Net errors and omissions (4)	50,854	-16,397	-75,700	-21,381	23,819

(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 15.3.2022, Table I. Wichtige Posten der Zahlungsbilanz (https://www.bundesbank.de/resource/blob/805258/8a20015437a2b74e29df58f1cfcc4bd9/mL/i-wichtige-posten-data.pdf); Deutsche Bundesbank, Zahlungsbilanzstatistik, Stand vom 15.3.2022, Table IV. Kapitalbilanz 1. Übersicht a) Insgesamt (https://www.bundesbank.de/resource/blob/805274/4e758d080ea205b7f4ed1d4683563459/mL/iv-kapitalbilanz-data.pdf).

Trade balance	**192,442**	**189,963**	**215,456**	**221,983**	**255,077**

(1) Including supplementary trade items.

Source: Deutsche Bundesbank, Zahlungsbilanzstatistik, Stand vom 15.3.2022, Table I. Wichtige Posten der Zahlungsbilanz (https://www.bundesbank.de/resource/blob/805258/8a20015437a2b74e29df58f1cfcc4bd9/mL/i-wichtige-posten-data.pdf).

The Federal Republic's principal export goods are motor vehicles, machinery of all kinds, and chemical products. The principal import goods are computer, electronic and optical products, motor vehicles, and chemical products. 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 currently imports about 72% of its energy requirements, including 98% of its oil and 95% of its natural gas requirements as well as all enriched uranium needed for nuclear energy.

Sources: Statistisches Bundesamt, Genesis Online, Tabelle 51000-0005, Werte nach Güterabteilungen des Güterverzeichnisses für Produktionsstatistiken (GP 2019), 2021, database evaluation by 21.3.2022; Bundesanstalt für Geowissenschaften und Rohstoffe, Deutschland – Rohstoffsituation 2020 (https://www.deutsche-rohstoffagentur.de/DE/Themen/Min_rohstoffe/Downloads/rohsit-2020.pdf;jsessionid=2162F810D51140AE17E58660F0BF6F76.2_cid292?__blob=publicationFile&v=4).

Germany's Current Account Surplus and the Macroeconomic Imbalance Procedure

Within the framework of the MIP, on November 24, 2021, the European Commission published the Alert Mechanism Report 2022, which, similar to the previous year's report, noted the current account surplus observed in Germany. The Federal Republic entered the COVID-19 pandemic with a large domestic savings surplus, underpinned primarily by net private and governmental savings. The current account surplus has gradually narrowed since 2015 but remains at a high level, as private investment remains muted despite policy support in the COVID-19 context, and public investment has not yet filled longstanding investment gaps. House prices have increased strongly. Due to the exceptional situation during the COVID-19 pandemic, the European Commission will further assess the persistence of imbalances or their unwinding in mid-2022, also taking into account the identification of imbalances within the forthcoming in-depth review.

The Federal Government supports the European Commission in the implementation of the MIP. Together with the 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. The Federal Government has taken a wide range of measures to strengthen domestic demand and increase public and private investment activity, which are expected to have an indirect dampening effect on the current account balance. These measures include the comprehensive stimulus package, including a "package for the future" of around EUR 50 billion for investments in the green and digital transformation, launched to strengthen the domestic economy and combat the economic and social consequences of the COVID-19 pandemic as well as further projects by the Federal Government launched under the EU Recovery Instrument. While respecting the autonomy of collective bargaining, the Federal Government is also creating framework conditions for greater collective bargaining coverage and striving to improve the conditions for taking up employment. Furthermore, a one-off increase in the minimum wage from EUR 9.82 to EUR 12.00 is planned. These measures are anticipated to have positive

Sources: European Commission, Report from the Commission to the European Parliament, the Council, the European Central Bank and the European Economic and Social Committee, Alert Mechanism Report 2022, dated November 24, 2021 (https://ec.europa.eu/info/sites/default/files/economy-finance/2022_european_semester_alert_mechanism_report.pdf); European Commission, Economic and Financial Affairs, EU Economic governance: monitoring, prevention, correction, Macroeconomic imbalance procedure (https://ec.europa.eu/economy_finance/economic_governance/macroeconomic_imbalance_procedure/mip_reports/index_en.htm); Bundesministerium für Wirtschaft und Klimaschutz, Nationales Reformprogramm 2022 (https://www.bmwi.de/Redaktion/DE/Publikationen/Europa/nationales-reformprogramm-2022.pdf?__blob=publicationFile&v=10); Bundesministerium der Finanzen, Monatsbericht des BMF März 2017, Analysen und Berichte, Der deutsche Leistungsbilanzsaldo – Entwicklung und wirtschaftspolitische Implikationen (https://www.bundesfinanzministerium.de/Monatsberichte/2017/03/Inhalte/Kapitel-3-Analysen/3-2-Der-deutsche-Leistungsbilanzsaldo.html).

COMPOSITION OF EXPORTED AND IMPORTED GOODS

	2021 (1)	
	Imports	Exports
	(Percent of total)	
Products of agriculture and hunting	2.6	0.7
Products of forestry	0.1	0.1
Fish and products of fishing	0.1	0.0
Coal and lignite	0.4	0.0
Crude petroleum and natural gas	6.1	0.9
Metal ores	1.0	0.0
Other mining and quarrying products	0.1	0.1
Food products	4.3	4.3
Beverages	0.6	0.4
Tobacco products	0.2	0.2
Textiles	1.1	0.9
Wearing apparel	2.9	1.6
Leather and related products	1.2	0.7
Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	0.8	0.7
Paper and paper products	1.2	1.5
Coke and refined petroleum products	1.8	1.1
Chemicals and chemical products	7.8	9.9
Basic pharmaceutical products and pharmaceutical preparations	6.0	7.4
Rubber and plastic products	3.0	3.7
Other non-metallic mineral products	1.0	1.2
Basic metals	6.3	4.9
Fabricated metal products, except machinery and equipment	2.8	3.4
Computer, electronic and optical products	10.6	8.7
Electrical equipment	6.8	7.1
Machinery and equipment not elsewhere classified	7.5	14.1
Motor vehicles, trailers and semi-trailers	9.5	15.2
Other transport equipment	2.5	3.1
Furniture	1.2	0.8
Energy	0.2	0.5
Other goods	10.4	6.7
Total	**100.0**	**100.0**

(1) Preliminary data.

Source: Statistische Ämter des Bundes und der Länder, Statistische Bibliothek, Statistischer Bericht Außenhandel – Dezember 2021 (February 2022), Tables 51000-05 and 51000-06 (https://www.statistischebibliothek.de/mir/receive/DEHeft_mods_00139248); calculation of percentages by KfW based on import and export values in EUR thousands, respectively; figures may not add up to total due to rounding.

The Netherlands	100,360	84,579	91,528
Italy	75,361	60,634	67,887
Austria	71,914	60,118	66,076
United Kingdom	65,363	67,086	79,166
Switzerland	60,621	56,265	56,345
Belgium/Luxembourg	57,298	48,824	52,006
New industrial countries and emerging markets of Asia (3)	55,233	50,590	54,164
Spain	43,607	37,618	44,218
Japan	18,238	17,396	20,662
Imports from:			
Total	**1,202,640**	**1,026,502**	**1,104,141**
of which:			
China (2)	141,794	117,373	110,054
The Netherlands	105,916	87,024	97,816
United States	72,011	67,694	71,334
Italy	65,298	53,906	57,100
France	62,225	56,364	66,199
New industrial countries and emerging markets of Asia (3)	55,372	48,222	51,748
Belgium/Luxembourg	54,956	39,584	46,322
Switzerland	48,842	45,556	45,824
Austria	47,642	40,454	44,059
Spain	34,343	31,281	33,126
United Kingdom	32,061	35,018	38,397
Japan	23,460	21,427	23,904

(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 2022, Table XII.3.

European Union	578.3	384.8
of which: European Monetary Union	*310.1*	*330.1*
of which: United Kingdom (4)	*136.4*	*35.5*
Switzerland	44.5	47.0
Russia	23.7	2.6
United States	391.2	56.7
Canada	21.1	1.6
Central America	27.7	2.0
South America	32.7	1.6
Asia	192.3	43.5
of which: China	*89.5*	*3.7*
of which: India	*18.6*	*0.4*
of which: Japan	*15.7*	*24.8*
Australia	18.6	2.6
Africa	12.1	0.7
Selected economic sectors of investment object		
Manufacturing	450.2	134.5
of which: Chemicals and chemical products	*94.3*	*21.4*
of which: Pharmaceutical products	*37.0*	*17.1*
of which: Machinery and equipment	*45.5*	*16.8*
of which: Motor vehicles, trailers and semi-trailers	*108.2*	*2.5*
Electricity, gas, steam and air conditioning supply	34.5	25.2
Wholesale and retail trade; repair of motor vehicles and motor cycles	215.6	62.8
Information and communication	85.9	36.4
Financial and insurance activities	361.3	188.5
Real estate activities	51.4	30.6
Professional, scientific and technical activities	73.9	38.0

(1) German foreign direct investment abroad.

(2) Foreign direct investment in Germany.

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

(4) The United Kingdom exited the European Union on January 31, 2020.

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, 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 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. Furthermore, the ESCB has employed a variety of non- standard policy instruments in response to the global economic and financial crisis, the European sovereign debt crisis and the COVID-19 Pandemic. For further information, see "—Financial System—European Financial System—Policy Responses to the Global Financial and Economic Crisis and the COVID-19 Pandemic." It is also making use of such instruments in connection with the COVID-19 pandemic, see "—Monetary Policy Response to the COVID-19 Pandemic."

Source: European Central Bank, Monetary Policy: The Eurosystem's instruments (https://www.ecb.europa.eu/mopo/implement/html/index.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: Strategy (https://www.ecb.europa.eu/mopo/strategy/html/index.en.html).

(1) Results in 2020 and 2021 influenced by the temporary reduction of the value-added tax rate in the second half of 2020.

(2) Excluding value-added tax.

Sources: Statistisches Bundesamt, Preise, Verbraucherpreisindizes, 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, Verbraucherindizes, Gesamtindex und 12 Abteilungen (https://www.destatis.de/DE/Themen/Wirtschaft/Preise/Verbraucherpreisindex/Tabellen/Verbraucherpreise-12Kategorien.html); Deutsche Bundesbank, Monatsbericht Dezember 2021, Table XI.7; Deutsche Bundesbank, Monatsbericht Februar 2022, Table XI.7.

Monetary Policy Response to the COVID-19 Pandemic

The ECB's monetary policy response to the COVID-19 pandemic consists of three parts: (1) a further increase in monetary expansion through existing and pandemic-specific purchases of sovereign and corporate bonds via its Asset Purchasing Program ("APP") and Pandemic-Emergency Asset Purchasing Program ("PEPP"), (2) a continuation of measures that assist financial institutions in providing favorable liquidity conditions to especially small and medium enterprises in the euro area through targeted longer-term refinancing operations ("TLTROs") and specific pandemic emergency longer-term refinancing operations (PELTROs), (3) a package of temporary collateral easing measures to facilitate the availability of eligible collateral for Eurosystem counterparties to participate in liquidity providing operations, such as TLTROs. Since the start of the COVID-19 pandemic, the parameters that define the ECB's monetary policy response have been adjusted or extended several times and are now scheduled to end over the course of 2022 and 2023. For additional information, see "—Financial System—European Financial System—Policy Responses to the Global Financial and Economic Crisis and the COVID-19 Pandemic."

Source: European Central Bank, Our response to the coronavirus pandemic (https://www.ecb.europa.eu/home/search/coronavirus/html/index.en.html).

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				
	2021	2020	2019	2018	2017
	(EUR in millions)				
Gold	173,821	166,904	146,562	121,445	117,347
Special drawing rights	46,491	14,014	14,642	14,378	13,987
Foreign currency balances	32,649	30,066	32,039	31,796	31,215
Reserve position in the IMF	8,426	8,143	6,051	5,518	4,294
Total	**261,387**	**219,127**	**199,295**	**173,138**	**166,842**

(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 2022, Table XII.7.

External Positions of Banks

The following table shows the external assets and liabilities of the Deutsche Bundesbank and the banks (monetary financial institutions) of the Federal Republic as of the end of each of the years indicated.

EXTERNAL FINANCIAL ASSETS AND LIABILITIES BY SECTOR

	2021	2020	2019	2018	2017
			(EUR in billions)		
Deutsche Bundesbank					
Assets	1,592.8	1,429.2	1,161.0	1,210.0	1,142.8
of which: clearing accounts within ESCB (1)	*1,260.7*	*1,136.0*	*895.2*	*966.2*	*906.9*
Liabilities (2)	1,009.5	781.3	663.3	770.5	668.5
Net position	583.3	647.9	497.7	439.5	474.3
Banks					
Loans to foreign banks	1,100.7	1,024.3	1,064.2	1,014.1	963.8
Loans to foreign non-banks	871.2	822.8	795.3	762.0	723.9
Loans from foreign banks	914.6	761.2	680.6	643.1	659.0
Loans from foreign non-banks	288.2	258.5	229.8	231.5	241.2

(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 2022, Tables IV.4 and XII.7.

Foreign Exchange Rates and Controls

The euro is a freely convertible currency. Since its introduction in 1999, the euro has become the second most widely used currency internationally. Currency transactions do not require licenses or other permissions. Capital market transactions are not subject to any license or similar requirements. 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-First Issue - Freely Usable Currencies, Prepared by the Legal Department of the IMF, as updated July 31, 2020 (https://www.imf.org/external/pubs/ft/sd/2021/41st_Sel_Dec_EN_Web_FINAL.pdf); Bank for International Settlements, Triennial Central Bank Survey, Foreign exchange turnover in April 2019, September 2019, Table "Currency distribution of OTC foreign exchange turnover", p. 10 (https://www.bis.org/statistics/rpfx19_fx.pdf).

Chinese yuan per euro	7.6282	7.8747	7.7355	7.8081	7.6290

(1) Calculated from daily values.

Source: Deutsche Bundesbank, Monatsbericht Februar 2022, Table XII.9.

Financial System

German Financial System

Overview. As of January 31, 2022, 1,442 monetary financial institutions in Germany reported an aggregate balance sheet total of EUR 9,779.4 billion to the Deutsche Bundesbank. According to the Deutsche Bundesbank's classification, these institutions included:

- 250 commercial banks, with an aggregate balance sheet total of EUR 4,241.0 billion;
- 368 savings banks, with an aggregate balance sheet total of EUR 1,546.4 billion;
- 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 880.7 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 1,486.8 billion;
- 773 credit cooperatives, with an aggregate balance sheet total of EUR 1,139.1 billion;
- 9 mortgage banks, with an aggregate balance sheet total of EUR 231.9 billion;
- 18 building and loan associations, with an aggregate balance sheet total of EUR 253.4 billion; and
- 141 subsidiaries and branches of foreign banks located in the Federal Republic with an aggregate balance sheet total of EUR 1,911.0 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 März 2022, Table IV.2.

The German Banking Act (*Kreditwesengesetz*, or "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 Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, or "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 helps to ensure the ability of banks, financial services institutions and insurance companies to meet their payment obligations (solvency supervision), and it also enforces standards of professional conduct aimed at preserving investors' trust in the financial 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.

In order to facilitate the timely identification of risks to financial stability, the Financial Stability Committee (*Ausschuss für Finanzstabilität*), which consists of representatives of the Federal Ministry of Finance, the Deutsche Bundesbank and BaFin, was established in March 2013 based on the Financial Stability Act (*Gesetz zur Überwachung der Finanzstabilität, Finanzstabilitätsgesetz*). On basis of the Financial Stability Act and due to its macroeconomic and financial market expertise, the Deutsche Bundesbank is responsible for contributing towards safeguarding financial stability and tasked with analyzing all relevant factors in order to identify threats to financial stability. If appropriate, the Deutsche Bundesbank may propose and submit warnings or recommendations for corrective measures to the Financial Stability Committee, which may pass resolutions with respect thereto and publish them if appropriate. The recipients of such warnings or recommendations are required to report on the implementation of corrective measures. In addition, the Financial Stability Committee is tasked with discussing issues relevant for financial stability, coordinating and strengthening the cooperation of its members during times of crisis, discussing how to deal with warnings or recommendations issued by the European Systemic Risk Board ("ESRB") and reporting to the German Bundestag on a yearly basis.

Sources: Bundesministerium der Justiz, Gesetz über das Kreditwesen (https://www.gesetze-im-internet.de/kredwg/index.html); Bundesanstalt für Finanzdienstleistungsaufsicht, 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); Bundesanstalt für Finanzdienstleistungsaufsicht, 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); Bundesanstalt für Finanzmarktstabilisierung (FMSA): Federal Agency for Financial Market Stabilisation (https://www.fmsa.de/en/); Portigon AG: Unternehmensinformationen (https://www.portigon-ag.de/acm/cm/content/portigon/i/de/portigon-ag/unternehmensinformationen.html); Deutsche Bundesbank, 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: Single supervisory mechanism (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union/single-supervisory-mechanism_en).

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.

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.

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, 2021, the combined asset portfolios had been reduced to approximately EUR 18.1 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 February 2021, FMS Wertmanagement announced that it is selling wholly-owned DEPFA to BAWAG P.S.K. AG. The transaction was closed in November 2021. As of December 31, 2021, FMS Wertmanagement's portfolio had a nominal value of EUR 54.1 billion.

Sources: Erste Abwicklungsanstalt, Annual Report 2021 (https://www.aa1.de/wp-content/uploads/2022/04/GB-2021_de.pdf); FMS Wertmanagement AöR, Investor Präsentation Nov. 2021 (https://www.fms-wm.de/de/downloadcenter-de/investoren/praesentationen/149-investorenpraesentation/file); FMS Wertmanagement AöR, Geschäftsbericht 2020 (https://www.fms-wm.de/de/downloadcenter-de/investoren/berichte/210-geschaeftsbericht-2020-1/file); FMS Wertmanagement AöR, FMS Wertmanagement sells DEPFA Bank plc to Autria's BAWAG P.S.K. AG (https://www.fms-wm.de/en/press/514-fms-wertmanagement-sells-depfa-bank-plc-to-austria-s-bawag-p-s-k-ag); FMS Wertmanagement sells all of its shares in DEPFA BANK plc (https://www.fms-wm.de/en/press/531-fms-wertmanagement-sells-all-of-its-shares-in-depfa-bank-plc); Bundesanstalt für Finanzmarktstabilisierung, Gemeinsame Pressemitteilung von FMSA und HRE, press release of May 13, 2014 (https://www.fmsa.de/fileadmin/user_upload_fmsa/Pressemitteilungen/deutsch/20140513_FMS-WM.pdf); FMS Wertmanagement, Joint Press Release of FMS-WM and HRE: FMS Wertmanagement closes acquisition of DEPFA Bank plc from HRE, press release of December 19, 2014 (https://www.fms-wm.de/en/press/245-joint-press-release-of-fms-wm-and-hre-fms-wertmanagement-closes-acquisition-of-depfa-bank-plc-from-hre); European Commission, Commission Decision of 18 July 2011 on State Aid C 15/2009 (ex N 196/2009), which Germany implemented and is planning to implement for Hypo Real Estate (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1490275422217&uri=CELEX:32012D0118); FMS Wertmanagement, FMS Wertmanagement fulfils wind-up task for the DEPFA Group and meets wind-up target for 2021, press release of April 26, 2022 (https://www.fms-wm.de/en/press/538-fms-wertmanagement-fulfils-wind-up-task-for-the-depfa-group-and-meets-wind-up-target-for-2021).

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 ("EBA");
- the European Insurance and Occupational Pensions Authority; and
- the European Securities and Markets Authority.

The SSM became operational in November 2014. In its role within the SSM, the ECB directly supervises 115 significant banks and banking groups, which represent almost 82% of the total assets on the aggregated balance sheets of all credit institutions under its supervision. For the remaining banks, the ECB is responsible for setting and monitoring the supervisory standards and for working closely with the national competent authorities in the supervision of these banks.

Another key element of the Banking Union is the SRM which was established by a regulation adopted in July 2014 and has become fully operational starting January 1, 2016 with the purpose of ensuring the orderly resolution of failing banks. The SRM consists of a single resolution board ("SRB"), which has broad powers in cases of bank resolution, and the SRF. The SRB is responsible for the planning and resolution phases of cross-border banks and those directly supervised by the ECB, while since January 1, 2015 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 is being built up over a period of eight years from 2016 to 2023 to reach a target level of at least 1% of the amount of covered deposits of all credit institutions authorized in all the participating EU Member States. Banks will have to make 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. During the transitional period each participating Member State is providing an individual national credit line to the SRB to back its banks' contributions to the SRF in the event of possible funding shortfalls following resolution cases of its banks. By now all 19 participating EU Member States have signed the Loan Facility Agreements with the SRB which are the basis for the bridge financing in the form of national credit lines to the SRB. The maximum aggregate amount of the credit lines of the participating EU Member States will amount to just over EUR 60 billion. The repartition key among EU Member States corresponds to the contributions to the SRF, which will be made by banks in each Member State by 2023. In July 2021, the SRF had grown to approximately EUR 52 billion and its target size for 2023 is expected to be in the range of EUR 70 billion to EUR 75 billion. In 2021, the aggregate contribution of German banks amounted to 26.2% of total contributions.

In November 2015, and as amended on October 11, 2017, the European Commission proposed a European Deposit Insurance Scheme ("EDIS") as an additional element of the Banking Union. Since then, work on a technical level has been ongoing. In December 2018, the Euro Summit, the meeting format of the heads of state or government of the Euro Area Member States, created a high-level working group to work on a roadmap for beginning political negotiations on EDIS. In December 2020, the Euro Summit invited the Eurogroup in inclusive format to prepare, on a consensual basis, a stepwise and time-bound work plan on all outstanding elements needed to complete the Banking Union, including deposit insurance and reaffirmed its statement in December 2021. The EU has agreed on common rules to harmonize the national deposit insurance schemes.

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 to strengthen the banking sector and to address outstanding challenges to financial stability. Among the core measures agreed to reduce risk in the banking system, the package enhances the framework for bank resolution. It requires global-systemically important institutions (G-SIIs) to have more loss-absorbing and recapitalization capacity by setting the minimum requirements with respect to the amount and quality of own funds and eligible liabilities (MREL) to ensure an effective and orderly "bail-in" process. It also provides provisional safeguards and possible additional actions for resolution authorities. Additionally, the package strengthens bank 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. Moreover, the package includes measures to improve banks' lending capacity and to facilitate a greater role for banks in the capital markets, such as reducing the administrative burden for smaller and less complex banks, linked in particular to reporting and disclosure requirements and enhancing the capacity of banks to lend to SMEs and to fund infrastructure projects. It also comprises a framework for cooperation and information sharing among the various authorities involved in the supervision and resolution of cross-border banking groups. The agreed measures aim to preserve the balance achieved by the Council between the powers of home and host supervisors in order to facilitate cross-border flows of capital and liquidity, while ensuring an adequate level of protection for depositors and creditors as well as financial stability in all EU Member States. Furthermore, the amendments improve cooperation between competent authorities on matters related to the supervision of anti-money laundering activities.

In the spring of 2020, due to the COVID-19 pandemic, the ECB announced a temporary change within its framework for market risk, by allowing banks to adjust the supervisory component of these requirements. Following a recommendation of the EBA, the BaFin extended these relief measures to smaller German banks which are not directly supervised by the ECB. In addition, the ECB announced in September 2020 that euro area banks under its direct supervision may exclude certain central bank exposures from the leverage ratio. This measure was extended to smaller German banks by BaFin as well. On February 10, 2022, the ECB announced that it will not extend capital and leverage relief measures for banks beyond December 2022. Further, the ECB announced that it will not extend the ability of banks to exclude certain central bank exposures from their leverage ratios beyond March 2022.

Based on their assessment of the risk situation in German credit markets as well as the development of supporting indicators like the credit/GDP gap, BaFin decided to increase the ratio of the national anticyclical capital buffer to 0.75% from February 1, 2022 onwards. The associated requirement for hard equity must therefore be met from February 1, 2023 onwards.

Sources: European Commission, European system of financial supervision (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-supervision-and-risk-management/european-system-financial-supervision_en); European Commission, Banking Union (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union_en); Council of the European Union, 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 - Banking Supervision, 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.listofsupervisedentities202102.en.pdf?f532b1d8606bfdbb1cc4a5adcd66934f); European Commission, Single Resolution Mechanism to come into effect for the Banking Union, press release of December 31, 2015 (https://europa.eu/rapid/press-release_IP-15-6397_en.htm); Single Resolution Board, Single Resolution Fund (https://www.srb.europa.eu/en/content/single-resolution-fund#:~:text=The%20SRF%20is%20being%20built,at%20approximately%20%E2%82%AC52%20billion.); Single Resolution Board, Annual SRF levies (ex-ante contributions), National Compartment Table 2021 (https://www.srb.europa.eu/system/files/media/document/National%20Compartment%20Table%202021.pdf); Single Resolution Board, The Single Resolution Fund (https://srb.europa.eu/en/content/single-resolution-fund); Single Resolution Board, Banking Union – Single Resolution Board completes signature of Loan Facility Agreements with all 19 participating Member States, February 8, 2017 (https://srb.europa.eu/en/file/pr-banking-union-single-resolution-board-completes-signature-loan-facility-agreements-all-19); Single Resolution Fund (SRF) Fact Sheet (https://www.srb.europa.eu/en/system/files?file=media/document/2020_fact_sheet.pdf); European Banking Authority, Implementing Basel III in Europe: CRD IV Package (https://www.eba.europa.eu/regulation-and-policy/implementing-basel-iii-europe); Bank for International Settlements, Basel Committee on Banking Supervision, Basel III: Finalising Post-Crisis Reforms (https://www.bis.org/bcbs/publ/d424.htm); European Commission, Communication from the Commission: Completing

Supervision, ECB will not extend capital and leverage relief for banks, press release of February 10, 2022 (https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr220210_1~ea3dd0cd51.en.html).

Policy Responses to the Global Financial and Economic Crisis and the COVID-19 Pandemic. In response to the tensions in the financial markets and the loss of confidence in the financial sector in the wake of the global financial and economic crisis, a number of measures were taken at the EU level in recent years to restore confidence in the financial sector and prevent market disruptions. These measures were, or continue to be, mainly directed at preserving adequate capitalization of financial institutions, at enhancing credit support measures to improve bank lending and liquidity in the euro area money market, at safeguarding the flow of credit from financial institutions to the real economy and at addressing the risk of a prolonged period of low inflation. A central role was, and continues to be, played by the ECB, which introduced a number of non-standard monetary policy measures, including, among others, asset purchase programs, long-term refinancing operations and measures aimed at increasing collateral availability. These measures are unprecedented in nature, scope and magnitude and aim to safeguard the primary objective of price stability and to ensure an appropriate monetary policy transmission mechanism.

In September 2012, the ECB announced Outright Monetary Transactions in secondary markets for euro-denominated sovereign bonds in the euro area aimed at enabling the ECB to address severe distortions in government bond markets. In June 2014, the ECB announced several measures designed to enhance the functioning of the monetary policy transmission mechanism by supporting lending to the real economy. In particular, the ECB decided to conduct a series of eight TLTROs between September 2014 and June 2016. All of these TLTROs matured in September 2018. Furthermore, the ECB conducted four additional TLTROs with four-year maturities ("TLTROs II") on a quarterly basis from June 2016 to March 2017. Counterparties exceeding an ECB-defined lending benchmark until January 2018 were entitled to borrow at an interest rate as low as the interest rate on the deposit facility prevailing at the time of allotment. Since the interest rate on the deposit facility stood below zero at the time of the allotments of all TLTROs II, counterparties were, in fact, paid for their lending efforts if they exceeded their benchmarks. Like the previous TLTROs, the TLTROs II were aimed at improving bank lending to the euro-area non-financial private sector (defined as euro-area households and non-financial corporations), excluding loans to households for house purchases. Banks were able to borrow larger amounts through the TLTROs II compared to the previous TLTROs. The last operation of the TLTROs II series matured in March 2021. In March 2019, the ECB announced the launch of a further series of quarterly targeted longer-term refinancing operations ("TLTROs III"), which started in September 2019 and were initially set to continue until March 2021. The ECB amended the originally planned conditions for the TLTROs III in September 2019, reducing the interest rate on the operations and extending their maturity from two to three years. Moreover, in reaction to the COVID-19 Pandemic, the ECB eased the conditions of the TLTRO III to 50 basis points below the deposit facility rate and announced in December 2020 that it will extend the TLTROs III until June 2022, with three additional operations being conducted between June 2021 and December 2021. Furthermore, to ensure sufficient liquidity and smooth money market conditions during the pandemic, the ECB introduced pandemic emergency longer-term refinancing operations (PELTROs), which served as liquidity backstop until the end of 2021.

In addition, over the past years the ECB has sought to provide monetary stimulus to the economy through its APP, which was launched in October 2014 and significantly expanded in March 2015. The APP was conducted to further ease monetary and financial conditions in a context where key ECB interest rates were at their effective lower bound. Since mid-2016, it had consisted of four elements: a covered bond purchase program, an asset-backed securities purchase program, a public sector purchase program (including, among others, debt securities of KfW) and a corporate sector purchase program. Monthly purchases varied over time. In total, the ECB has bought securities for an amount of approximately EUR 2.57 trillion via the APP between

EUR 20 billion at the end of October 2022. As inflation remained well above the ECB's target of 2 % in the first two months of 2022, and incoming data is confirming the ECB's view that inflation in the Euro area will be significantly higher than 2 % in 2022, the ECB in March 2022 decided to reduce APP monthly net purchases to EUR 20 billion already by the end of June 2022. In addition, the ECB intends to end net asset purchases at the beginning of the third quarter of 2022, provided that then available data on inflation does not require a different stance.

In September 2019, the ECB decided to decrease the interest rate on its deposit facility by 10 basis points to -0.50% while leaving the interest rates on the main refinancing operations and the rate on the marginal lending facility unchanged at 0.00% and 0.25%, respectively. At the same time the Governing Council of the ECB introduced a two-tier system for reserve remuneration, which exempts part of credit institutions' excess liquidity holdings (i.e., reserve holdings in excess of minimum reserve requirements) from negative remuneration at the rate applicable to the deposit facility. This measure aims at supporting the bank-based transmission of monetary policy. The interest rate on the ECB's deposit facility has been negative since June 2014. The ECB has stressed repeatedly that it will increase interest rates only after the end of its net asset purchases.

Sources: European Central Bank, The Eurosystem's instruments (https://www.ecb.europa.eu/mopo/implement/html/index.en.html); European Central Bank, Monetary policy decisions (https://www.ecb.europa.eu/mopo/decisions/html/index.en.html); European Central Bank, Technical features of Outright Monetary Transactions, press release of September 6, 2012 (https://www.ecb.int/press/pr/date/2012/html/pr120906_1.en.html); European Central Bank, ECB introduces a negative deposit facility interest rate, press release of June 5, 2014 (https://www.ecb.europa.eu/press/pr/date/2014/html/pr140605_3.en.html); European Central Bank, ECB announces further details of the targeted long-term refinancing operations, press release of July 3, 2014 (https://www.ecb.europa.eu/press/pr/date/2014/html/pr140703_2.en.html); European Central Bank, ECB announces new series of targeted longer-term refinancing operations (TLTRO II), press release of March 10, 2016 (https://www.ecb.europa.eu/press/pr/date/2016/html/pr160310_1.en.html); European Central Bank, Asset purchase programmes (https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html); European Central Bank, ECB announces expanded asset purchase programme, press release of January 22, 2015 (https://www.ecb.europa.eu/press/pr/date/2015/html/pr150122_1.en.html); European Central Bank, ECB adds corporate sector purchase programme (CSPP) to the asset purchase programme (APP) and announces changes to APP, press release of March 10, 2016 (https://www.ecb.europa.eu/press/pr/date/2016/html/pr160310_2.en.html); European Central Bank, Monetary policy decisions, press release of March 7, 2019 (https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.mp190307~7d8a9d2665.en.html); European Central Bank, Monetary policy decisions, press release of September 12, 2019 (https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.mp190912~08de50b4d2.en.html); European Central Bank, ECB announces changes to new targeted longer-term refinancing operations (TLTRO III), press release of September 12, 2019 (https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190912~19ac2682ff.en.html); European Central Bank, ECB introduces two-tier system for remunerating excess liquidity holdings, press release of September 12, 2019 (https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190912_2~a0b47cd62a.en.html); European Central Bank, Pandemic emergency purchase programme (PEPP) (https://www.ecb.europa.eu/mopo/implement/pepp/html/index.en.html); European Central Bank – Banking Supervision, ECB Banking Supervision provides temporary capital and operational relief in reaction to coronavirus, press release of March 12, 2020 (https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200312~43351ac3ac.en.html); European Central Bank, Monetary policy decisions, press release of March 10, 2022 (https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220310~2d19f8ba60.en.html).

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.

Highly developed secondary markets, combined with the distribution capabilities of an extensive network of financial institutions, provide the basis for the Federal Republic's position in the world's capital

In January 2013, the Heads of State or Government of the European Union adopted a decision authorizing a number of EU Member States to proceed with the introduction of a financial transaction tax through "enhanced cooperation." Negotiations are currently not being conducted.

Sources: Bundesanstalt für Finanzdienstleistungsaufsicht, Notice on the granting of authorization to provide financial services pursuant to section 32 (1) of the German Banking Act (https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/WA/dl_fidierlaubnis_buba_en.html); Bundesanstalt für Finanzdienstleistungsaufsicht, Issuer Guidelines published by the Federal Financial Supervisory Authority (https://www.bafin.de/SharedDocs/Downloads/EN/Leitfaden/WA/dl_emittentenleitfaden_einleitung_en.html?nn=12655158); Bundesanstalt für Finanzdienstleistungsaufsicht, Stock exchanges & markets (https://www.bafin.de/EN/Aufsicht/BoersenMaerkte/boersenmaerkte_node_en.html); Deutsche Börse Group, The Frankfurt Stock Exchange (https://www.deutsche-boerse.com/dbg-en/our-company/frankfurt-stock-exchange); Council of the European Union, Financial transaction tax: Council agrees to enhanced cooperation, press release of January 22, 2013 (https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/134949.pdf).

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 of these different levels of government activity.

In 2021, public finances continued to be under significant pressure due to the COVID-19 pandemic. Total consolidated general government revenue, as presented in the national accounts, amounted to EUR 1,705.8 billion in 2021, with tax revenue of EUR 872.9 billion and net social contributions of EUR 632.8 billion.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 3.4.3.2.

In 2021, VAT and the taxes on income and wealth, as presented in the national accounts, amounted to EUR 258.0 billion and EUR 481.2 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 – 2021 (March 2022), Table 3.4.3.16.

Consolidated general government expenditure in 2021, as presented in the national accounts, amounted to a total of EUR 1,838.2 billion. The most significant consolidated general government expenditures were monetary social benefits (EUR 609.0 billion), social benefits in kind (EUR 327.5 billion) and employee compensation (EUR 294.1 billion). Other significant consolidated general government expenditures included intermediate consumption (EUR 232.5 billion), gross capital formation (EUR 91.7 billion), subsidies (EUR 105.0 billion) and interest on public debt (EUR 21.0 billion).

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2021 (March 2022), Table 3.4.3.2.

GENERAL GOVERNMENT ACCOUNTS (1)

	2021	2020	2019	2018	2017
			(EUR in billions)		
Federal Government, *Länder* governments and municipalities					
Revenue	1,110.9	1,001.9	1,047.0	1,014.8	966.4
of which: Current taxes (2)	*872.9*	*773.4*	*827.4*	*801.4*	*767.2*
Expenditure	1,247.8	1,112.1	1,005.0	966.3	933.9
Balance	**-136.9**	**-110.2**	**42.0**	**48.4**	**32.5**
Social security funds					
Revenue	782.7	717.8	690.7	662.0	636.9
Expenditure	778.3	752.8	681.6	646.0	625.8
Balance	**4.4**	**-35.0**	**9.1**	**16.0**	**11.1**
General government					
Revenue	1,705.8	1,566.9	1,613.8	1,557.3	1,486.9
Expenditure	1,838.2	1,712.1	1,562.7	1,492.8	1,443.3
Balance	**-132.5**	**-145.2**	**51.1**	**64.4**	**43.7**

(1) Definition according to the national accounts.

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

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2021 (March 2022), 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 - 2021 (March 2022), Table 3.4.3.4.

GENERAL GOVERNMENT EXPENDITURE: BREAKDOWN BY FUNCTIONS (1)

	2021	2020	2019	2018	2017
			(EUR in billions)		
General public services	222.1	205.3	200.5	191.7	187.4
Defense	38.7	37.2	36.7	35.2	33.2
Public order and safety	60.3	57.8	55.4	53.2	50.9
Economic affairs	211.0	155.8	112.9	111.1	103.7
Environmental protection	21.0	23.0	20.9	19.4	17.9
Housing and community amenities	16.3	16.2	14.7	13.2	12.2
Health	311.6	286.7	253.7	241.6	232.7
Recreation, culture and religion	39.2	38.3	35.8	34.9	33.5
Education	162.8	157.1	150.7	143.6	136.6
Social protection	755.2	734.8	681.5	648.8	635.0
Total expenditure	**1,838.2**	**1,712.1**	**1,562.7**	**1,492.8**	**1,443.3**

(1) Definition according to the national accounts.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2021 (March 2022), 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, the German general government deficit amounted to EUR 132.5 billion or 3.7% of nominal GDP in 2021, which continues to be above the EU's 3% reference value. The German general government gross debt- to-GDP ratio increased from 68.7% in 2020 to 69.3% in 2021, which is also above the EU's respective reference value of 60%.

However, on March 23, 2020, the respective Ministers of Finance of the EU Member States agreed with the assessment of the European Commission that the condition for the use of the general escape clause under the SGP – a severe economic downturn in the euro area or the EU as a whole – had been fulfilled. The activated general escape clause allows Germany and the other EU Member States to depart from the budgetary requirements that would normally apply under the European fiscal framework in order to tackle the economic

According to the second government draft of the 2022 federal budget (*Zweiter Regierungsentwurf für den Bundeshaushalt 2022*), the suspension of the "debt brake" is expected to be renewed for the fiscal year 2022, while targeting to return to compliance with the regular debt ceiling starting in 2023, as reflected in the benchmark figures (*Eckwerte*) for the fiscal years 2023 to 2026.

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2021 (February 2022), Table 1.10; EUR-lex, Consolidated Version of the Treaty on the 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 percentage 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); 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/); 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); 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 [bundesfinanzministerium.de]); European Commission, Commission presents fiscal policy guidance for 2023, press release of March 2, 2022 (https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1476); European Commission, Questions and answers: Commission Communication on fiscal policy guidance for 2023, March 2, 2022 (https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_1477); Bundesministerium der Finanzen, Stabilität sichern, Gestaltungsspielraum bewahren, Zweiter Regierungsentwurf für den Bundeshaushalt 2022, Eckwerte 2023 und Finanzplan bis 2026, press release of March 16, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/03/2022-03-16-bundeshaushalte-2022-2023.html).

The following table shows historical information on the Federal Republic's general government deficit/surplus and debt as a percentage of GDP.

THE FEDERAL REPUBLIC'S FISCAL MAASTRICHT CRITERIA

	2021	2020	2019	2018	2017
			(% of GDP)		
General government deficit (-) / surplus (+)	-3.7	-4.3	1.5	1.9	1.3
General government gross debt	69.3	68.7	58.9	61.2	64.6

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2021 (February 2022), Table 1.10; Deutsche Bundesbank, General government debt as defined in the Maastricht Treaty as a percentage 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).

Fiscal Outlook

On April 27, 2022, the Federal Government published the German Stability Program 2022, in accordance with the rules of the Stability and Growth Pact. The German Stability Program 2022 contains budgetary projections for the years 2022 to 2026 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 January 26, 2022, (ii) the results of the Working Party on Tax Revenue Estimates of November 11, 2021, as subsequently updated to take account of the Federal Government's annual projection, (iii) the second government draft of the federal budget for 2022 prepared on this basis and adopted by the Federal Government on March 16, 2022, and (d) the benchmark figures for the government draft of the federal budget for 2023 and the fiscal plan until 2026. The planned special fund for the Bundeswehr and the governing parties' decision of March 23, 2022 on a "Package of federal government measures to manage high energy costs" were also taken into account.

Property income	1/2	1/2	1/2	1/2	1/2	0.4
Other	4	4 1/4	4 1/4	4 1/4	4 1/2	4.9
Expenditure (2)	47 3/4	47 3/4	48	47 3/4	49 1/4	51.5
Compensation of employees and intermediate consumption	13 1/4	13 1/4	13 1/4	13 1/2	14 1/2	14.7
Social payments	25 1/2	25 1/2	25 1/4	25	25 1/4	26.2
Interest expenditure	1/2	1/2	1/2	1/2	1/2	0.6
Subsidies	1 3/4	1 3/4	1 3/4	1 1/2	2	2.9
Gross fixed capital formation	2 3/4	2 3/4	3	3	3	2.5
Capital transfers	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1.9
Other	2 1/4	2 1/4	2 1/4	2 1/2	2 1/2	2.5
General government deficit (-) / surplus (+)	**-1/2**	**-1**	**-1 3/4**	**-2**	**-3 3/4**	**-3.7**
Federal Government	-1	-1	-1 1/2	-1 1/2	-3	-4.0
Länder governments	1/4	1/4	0	0	-1/4	0.1
Municipalities	1/4	0	0	0	0	0.0
Social security funds	-1/4	-1/4	-1/2	-1/2	-1/4	0.1
General government gross debt	**64 1/2**	**65**	**65 3/4**	**65 3/4**	**66 3/4**	**69.3**

(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 2022, Tables 10 and 15 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/stabilitaetsprogramm-2022.pdf?__blob=publicationFile&v=5).

For information on current and pending fiscal measures adopted in 2022 to date, including in response to the Russia's invasion of the Ukraine, see "Recent Developments—Federal Republic of Germany—Other Recent Developments—Germany's Response to Russia's Invasion of Ukraine."

Tax Structure

Income Tax

Significant sources of revenue for the general government are the various types of income taxes. Income taxation for employees and self-employed persons is based on a progressive tax scale with marginal tax rates ranging from 14% to 45% subject to the amount of taxable income. Employees pay taxes on their income from employment in the form of wage taxes. Self-employed persons typically pay estimated taxes during the year before filing their annual income tax return. Income generated by partnerships (*Personengesellschaften*) is not subject to tax at the partnership level, but at the level of the partners. The partners pay tax on this income according to their individual income tax brackets.

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

Justiz und für Verbraucherschutz, Körperschaftsteuergesetz (https://www.gesetze-im-internet.de/kstg_1977/index.html); Bundesministerium der Finanzen, Fragen und Antworten zur weitgehenden Abschaffung des Solidaritätszuschlags, Was ist ab 2021 neu? (https://www.bundesfinanzministerium.de/Content/DE/FAQ/2019-08-21-faq-solidaritaetszuschlag.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%.

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 und für Verbraucherschutz, Umsatzsteuergesetz (https://www.gesetze-im-internet.de/ustg_1980/index.html); Bundesministerium der Justiz und für Verbraucherschutz, Umsatzsteuergesetz, § 12 Steuersätze (https://www.gesetze-im-internet.de/ustg_1980/__12.html); Bundesministerium der Justiz und für Verbraucherschutz, Energiesteuergesetz (https://www.gesetze-im-internet.de/energiestg/); Bundesministerium der Justiz und für Verbraucherschutz, Tabaksteuergesetz (https://www.gesetze-im-internet.de/tabstg_2009/index.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 energy tax are assessed in accordance with certain environmental criteria.

In addition to the EU's Emissions Trading System (ETS) for carbon emissions applied to the manufacturing and energy industries, Germany has introduced a national ETS for carbon emissions of the transportation and buildings sector from 2021 onwards, starting with a price on carbon emissions initially set at EUR 25 per ton in 2021, EUR 30 per ton in 2022 and rising incrementally to EUR 55 per ton in 2025. In 2026, allowances will be auctioned within a price range of EUR 55 (minimum) to EUR 65 (maximum) per ton of carbon emissions.

Sources: Bundesministerium der Justiz und für Verbraucherschutz, Stromsteuergesetz (https://www.gesetze-im-internet.de/stromstg/index.html); Bundesministerium der Justiz und für Verbraucherschutz, Stromsteuergesetz, § 3 Steuertarif (https://www.gesetze-im-internet.de/stromstg/__3.html); The Federal Government, Incentives for fewer CO2—carbon dioxide emissions (https://www.bundesregierung.de/breg-en/issues/climate-action/fewer-co2-emissions-1797122).

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 400.2% in 2020 the average trade tax rate in 2021 amounted to 14.01%.

	2021	2020	2019	2018	2017
			(EUR in billions)		
Current taxes	872.9	773.4	827.4	801.4	767.2
Taxes on production and imports	391.7	345.9	369.7	356.6	345.8
of which: VAT	*258.0*	*221.6*	*244.1*	*235.1*	*226.6*
Current taxes on income and wealth	481.2	427.6	457.7	444.8	421.4
of which: Wage tax	*256.4*	*254.0*	*260.5*	*248.2*	*234.7*
Assessed income tax	*69.4*	*57.3*	*61.9*	*58.8*	*57.7*
Non-assessed taxes on earnings	*39.3*	*29.8*	*30.5*	*31.0*	*29.8*
Corporate tax	*44.3*	*25.8*	*34.1*	*36.0*	*31.6*
Trade tax (Gewerbesteuer)	*56.5*	*45.4*	*55.6*	*56.0*	*52.9*
Capital taxes	9.8	8.7	7.0	6.8	6.1
Tax revenue of general government	**882.6**	**782.1**	**834.4**	**808.2**	**773.3**
Taxes of domestic sectors to EU	4.9	4.7	5.1	5.0	5.1
Taxes	**887.6**	**786.8**	**839.5**	**813.2**	**778.3**

(1) Definition according to the national accounts.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4—2021 (March 2022), Table 3.4.3.16.

Tax Relief Measures Relating to the COVID-19 Pandemic

From July 1, 2020, to December 31, 2020, the standard VAT rate was temporarily lowered to 16% and the reduced rate to 5% as part of mitigation measures to the adverse economic impact of the COVID-19 pandemic. Under the tax relief measures, food services in restaurants, which are normally taxed at the standard VAT rate, are to be taxed at the reduced VAT rate from July 1, 2020, to December 31, 2022.

Companies, self-employed persons and employees continue to benefit from a broad range of tax-related measures relating to the COVID-19 pandemic. They include, for example, a tax allowance for working from home up to December 31, 2022, extended tax return filing deadlines, extended options to offset losses, accelerated depreciation options for movable assets, and extended investment deadlines for tax-deductible investments.

Sources: Bundesministerium der Finanzen, FAQ „Anstehende Umsatzsteuersenkung“ (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Steuern/2020-06-25-FAQ_Corona_Umsatzsteuer.html); Bundesministerium der Finanzen, Entlastungen für Bürgerinnen und Bürger sowie Unternehmen: Weitere steuerliche Erleichterungen zur Bekämpfung der Corona-Pandemie, February 16, 2022 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2022/02/2022-02-16-weitere-steuerliche-erleichterungen-corona-pandemie.html); Das Parlament Nr. 9 (March 1, 2021), Drittes Steuer-Paket – Hilfe für Familien, Gastronomen und Firmen (https://www.das-parlament.de/2021/9/wirtschaft_und_finanzen/825228-825228).

Enterprises	Total nominal capital of enterprise (EUR in millions)	Participation of the Federal Republic (%)
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 2021 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/beteiligungsbericht-des-bundes-2021.pdf?__blob=publicationFile&v=3).

Direct Debt of the Federal Government

As of December 31, 2021, the principal amount of the Federal Government's direct debt totaled EUR 1,437.4 billion. For further information on the principal amount of the outstanding direct debt, see "Tables and Supplementary Information—I. 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.

In addition to its own direct debt obligations, the Federal Government and its special funds had outstanding guarantees in an aggregate amount of EUR 667.6 billion as of December 31, 2020. Of this amount, EUR 125.3 billion were outstanding in the form of export credit insurance, which is handled by Euler Hermes Aktiengesellschaft ("HERMES") on behalf of and for the account of the Federal Government. Furthermore, EUR 22.4 billion of the aggregate amount were outstanding in the form of a guarantee for a loan to Greece according to the German Financial Stability Act, and EUR 91.5 billion of the aggregate amount were outstanding in the form of a guarantee for the European Financial Stability Facility.

Source: Bundesministerium der Finanzen, Finanzbericht 2022, Overview 3, page 294 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/finanzbericht-2022.pdf?__blob=publicationFile&v=5).

For more detailed information regarding the Federal Government's debt and guarantees, see "—Tables and Supplementary Information."

For information on the Federal Government's liability as of December 31, 2021 for capital subscriptions to various international financial organizations, see the table entitled "—Tables and Supplementary Information—III. Liabilities to International Financial Organizations."

Federal Notes (*Bundesobligationen*)	217,000
Federal Treasury Notes (*Bundesschatzanweisungen*)	116,000
Treasury Discount Paper (*Unverzinsliche Schatzanweisungen*)	154,500
Inflation-linked Securities (*Inflationsindexierte Bundeswertpapiere*)	69,900
Green Federal Bonds (*Grüne Bundesanleihen*)	19,000
Green Five-year Federal Notes (*Grüne Bundesobligationen*)	5,000
Borrowers' note loans (*Schuldscheindarlehen*)	5,695
Old debt (1)	4,474
Repurchased debt	-162,662
Total (2)	**1,437,407**

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

(2) Compared to the published Monthly Report of the Federal Ministry of Finance, January 2022, from which the information above is derived, Treasury Discount Papers are presented with their outstanding volume (as opposed in the amount owed).

Source: Monthly Report of the Federal Ministry of Finance, January 2022, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2021", page 74, and table "Entwicklung von Umlaufvolumen und Eigenbestände an Bundeswertpapieren im Dezember 2021", page 76 (https://www.bundesfinanzministerium.de/Monatsberichte/2022/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen_pdf.pdf?__blob=publicationFile&v=6).

DEBT TABLES

1. FEDERAL BONDS (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2021 (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	27,500
4.25% Bonds of the Federal Republic of 2007	4.25	2007	2039	18,500
4.75% Bonds of the Federal Republic of 2008	4.75	2008	2040	20,500
3.25% Bonds of the Federal Republic of 2010	3.25	2010	2042	19,500
2% Bonds of the Federal Republic of 2011	2.00	2011	2022	22,500
1.75% Bonds of the Federal Republic of 2012	1.75	2012	2022	26,500
1.5% Bonds of the Federal Republic of 2012	1.50	2012	2022	20,500
2.5% Bonds of the Federal Republic of 2012	2.50	2012	2044	28,500
1.5% Bonds of the Federal Republic of 2013	1.50	2013	2023	20,500
1.5% Bonds of the Federal Republic of 2013	1.50	2013	2023	22,500
2% Bonds of the Federal Republic of 2013	2.00	2013	2023	22,500
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	30,500

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	29,500
1.25% Bonds of the Federal Republic of 2017	1.25	2017	2048	30,000
0.5% Bonds of the Federal Republic of 2018	0.50	2018	2028	25,500
0.25% Bonds of the Federal Republic of 2018	0.25	2018	2028	25,500
0.25% Bonds of the Federal Republic of 2019	0.25	2019	2029	26,500
0.00% Bonds of the Federal Republic of 2019	0.00	2019	2029	26,500
0.00% Bonds of the Federal Republic of 2019	0.00	2019	2050	29,000
0.00% Bonds of the Federal Republic of 2020	0.00	2020	2030	25,000
0.00% Bonds of the Federal Republic of 2020	0.00	2020	2035	22,500
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	30,500
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2028	24,000
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2031	25,000
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2031	29,500
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2036	22,000
0.00% Bonds of the Federal Republic of 2021	0.00	2021	2052	7,500
Total Federal Bonds				**1,008,500**

(1) Federal Bonds (*Bundesanleihen*) are evidenced by book entry, and no certificates are issued. Maturities are 10 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, 2021 (EUR in millions)
0.00% Green Bonds of the Federal Republic of 2020	0.00	2020	2030	6,500
0.00% Green Bonds of the Federal Republic of 2021	0.00	2021	2031	6,500
0.00% Green Bonds of the Federal Republic of 2021	0.00	2021	2050	6,000
Total Green Federal Bonds				**19,000**

(1) Federal Bonds (*Bundesanleihen*) are evidenced by book entry, and no certificates are issued. Maturities are 10 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, 2021 (EUR in millions)
0.10% Inflation-linked Bonds of the Federal Republic of 2012	0.10	2012	2023	16,500
0.50% Inflation-linked Bonds of the Federal Republic of 2014	0.50	2014	2030	21,300
0.10% Inflation-linked Bonds of the Federal Republic of 2015	0.10	2015	2026	17,300

4. Federal Notes (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2021 (EUR in millions)
0.00% Bonds of 2017-Series 175	0.00	2017	2022	20,500
0.00% Bonds of 2017-Series 176	0.00	2017	2022	19,500
0.00% Bonds of 2018-Series 177	0.00	2018	2023	18,500
0.00% Bonds of 2018-Series 178	0.00	2018	2023	18,500
0.00% Bonds of 2019-Series 179	0.00	2019	2024	23,500
0.00% Bonds of 2019-Series 180	0.00	2019	2024	22,500
0.00% Bonds of 2020-Series 181	0.00	2020	2025	20,000
0.00% Bonds of 2020-Series 182	0.00	2020	2025	25,000
0.00% Bonds of 2021-Series 183	0.00	2021	2026	25,000
0.00% Bonds of 2021-Series 184	0.00	2021	2026	24,000
Total Federal Notes				**217,000**

(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, 2021 (EUR in millions)
0.00% Green Bonds of 2020	0.00	2020	2025	5,000
Total Federal Notes				**5,000**

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

6. Federal Treasury Notes (1)

Title	Interest Rate (% per annum)	Year of Issue	Maturity	Aggregate principal amount outstanding as of December 31, 2021 (EUR in millions)
0.00% Notes of 2020	0.00	2020	2022	14,000
0.00% Notes of 2020 (II)	0.00	2020	2022	15,000
0.00% Notes of 2020 (III)	0.00	2020	2022	15,000
0.00% Notes of 2020 (IV)	0.00	2020	2022	14,000
0.00% Notes of 2021	0.00	2021	2023	16,000
0.00% Notes of 2021 (II)	0.00	2021	2023	16,000
0.00% Notes of 2021 (III)	0.00	2021	2023	16,000
0.00% Notes of 2021 (IV)	0.00	2021	2023	10,000

	Interest Rate(2) (% per annum)	Year of Issue	Maturity	principal amount outstanding as of December 31, 2021 (EUR in millions)
Treasury Discount Paper	-0.76 to -0.63	2020 to 2021	2021 to 2022	154,500

8. Borrowers' Note Loans (3)

	Interest Rate (% per annum)	Year of Issue	Maturity	Aggregate principal amount outstanding as of December 31, 2021 (EUR in millions)
Borrower's note loans (*Schuldscheindarlehen*)	3.46 to 5.05	2003 to 2007	2021 to 2037	5,695

(1) Treasury Discount Papers (*Unverzinsliche Schatzanweisungen*) are issued at a discount and repaid at par value on the maturity date. No interest payments are made during the term of the paper. The papers are auctioned and intended for institutional investors. Maturities range from six months to twelve months. No redemption is 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.

(3) 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 der ausstehenden Bundeswertpapiere und Kreditmarktmittel" (https://www.deutsche-finanzagentur.de/fileadmin/user_upload/institutionelle-investoren/pdf/Einzelaufstellung_Bundeswertpapiere_dt.pdf).

9. Other Liabilities

Title	Interest Rate (% per annum)	Year of incurrence	Maturity	Aggregate principal amount outstanding as of December 31, 2021 (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: Monthly Report of the Federal Ministry of Finance, January 2022, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2021", page 74, (https://www.bundesfinanzministerium.de/Monatsberichte/2022/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen_pdf.pdf?__blob=publicationFile&v=6).

Loans in connection market organization and stocking measures	0	0
Loans to domestic corporations and for projects in areas of agriculture, fishing and housing construction	269,036	110,588
Contributions to international financing institutions	68,637	60,067
Co-financing of bilateral projects of German financial co-operation	29,977	25,555
Successor agencies to Treuhandanstalt	1,009	1,009
Interest compensation guarantees	15,000	15,000
Total guarantees pursuant to the 2020 German Budget Act	**546,014**	**380,210**
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	91,526	93,341
Warranties in connection with the SURE-Warranty Act as of July 10, 2020	6,384	0
Total guarantees	**666,324**	**495,950**

(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 2022, Overview 3, page 294 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/finanzbericht-2022.pdf?__blob=publicationFile&v=5).

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 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 October 1, 2016, the SDR basket consists of five currencies with the following weights: U.S. dollar (42%), euro (31%), Chinese yuan (11%), Japanese yen (8%) and Pound sterling (8%).

International Finance Corporation (IFC) (3)(4)	1,094.4	1,094.4
European Investment Bank (EIB) (5)	52,917.8	4,719.9
African Development Bank (AfDB) (3)	8,269.1	348.8
African Development Fund (AfDF) (3)	4,980.3	4,753,6
Asian Development Bank (AsDB) (3)	6,429.9	321.4
Asian Development Fund (AsDF) (3)	2,002.0	1,859.0
Inter-American Development Bank (IDB) (3)	3,368.7	242.3
Inter-American Investment Corporation (IIC) (3)	20.2	20.2
Fund for Special Operations (FSO) (3)	—	—
International Fund for Agricultural Development (IFAD) (3)	714.1	621.9
Caribbean Development Bank (CDB) (3)	106.6	23.6
Special Development Fund of the Caribbean Development Bank (SDF) (3)	126.1	114.0
European Bank for Reconstruction and Development (EBRD) (5)	2,895.5	603.9
Council of Europe Development Bank (CEB) (5)	1,037.2	115.1
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: IFC and IDA: World Bank Corporate Secretariat, April 2022.

(5) Source: computation provided by the Ministry of Finance based on euro exchange rate of the European Central Bank at December 31, 2021 of EUR 1 per USD 1.1326.

Combined Management Report

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 operator of the electronic Federal Gazette (*Bundesanzeiger*) and disclosed in the *Bundesanzeiger*.

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

The presentation in the group management report was modified in connection with the transition to a combined management report in order to improve clarity and provide a better overview. 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.

Overview

KfW Group consists of KfW and five consolidated subsidiaries. KfW is a promotional bank of the Federal Republic of Germany – which owns 80% of KfW while the German Federal States own 20%. The institutional framework for the promotional mandate including the Federal Republic of Germany's liability for KfW's obligations is defined in the Law Concerning KfW (KfW Law).

KfW promotes sustainable improvement of economic, environmental and social conditions around the world, with an emphasis on the German economy. The focus of KfW's promotional activities is on the megatrends anchored in KfW's strategic objectives. A variety of different financing products and services address in particular the areas of climate change and the environment, globalisation, social change, digitalisation and innovation, and financing of small and medium-sized German enterprises (SMEs). The domestic promotional lending business with enterprises and private individuals is characterised by the on-lending strategy, pursuant to which KfW extends loans to commercial banks, which, in turn, lend the funds to the ultimate borrowers. KfW thus does not have its own network of branch offices. It funds its business activities via the national and international money and capital markets. The group's main operating subsidiaries are (i) KfW IPEX-Bank, which provides export and project finance, and (ii) DEG, which is active in promoting the private sector in developing countries and emerging economies. KfW Capital invests in German and European venture capital and venture debt funds, in order to strengthen venture and early growth financing in Germany.

In accordance with the business sector structure for KfW Group, the sectors and their main products and services can be presented as follows:

Mittelstandsbank & Private Kunden (*SME Bank & Private Clients*)	– 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
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
Promotion of developing countries and emerging economies	– Promotion of developing countries and emerging economies on behalf of the Federal Government with budget funds and complementary market funds raised by KfW – Financing provided by DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH (private sector promotion)
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

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

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
KfW, Frankfurt am Main, Germany	546,648	543,099
Subsidiaries		
KfW IPEX-Bank GmbH, Frankfurt am Main (KfW IPEX-Bank), Germany	28,860	29,617
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne (DEG), Germany	7,310	6,286
KfW Beteiligungsholding GmbH, Bonn, Germany	3,129	3,209
KfW Capital GmbH & Co. KG, Frankfurt am Main, Germany	754	413
Interkonnektor GmbH, Frankfurt am Main, Germany	357	376
Investments accounted for using the equity method		
Microfinance Enhancement Facility S.A., Luxembourg (16.5%), Luxembourg	641	575
DC Nordseekabel GmbH & Co. KG, Bayreuth (50.0%), Germany	895	996
Green for Growth Fund, Southeast Europe S.A., Luxembourg (10.2%), Luxembourg	689	639
coparion GmbH & Co. KG, Cologne (16.4%), Germany	294	126

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

maintain high-quality promotional activities. KfW also aims to increase the volume of new commitments in line with the growth of Germany's nominal gross domestic product. However, this principle may be overridden in exceptional situations such as the COVID-19 pandemic, to allow KfW as a promotional bank to take countercyclical action.

With regard to the principle of sustainability, KfW aims to achieve a ranking among the top five national and international promotional banks in the relevant sustainability ratings (Sustainalytics, imug, ISS ESG). In addition, the contributions of KfW's financing activities to compatibility with the UN's Sustainable Development Goals ("SDGs") and the Paris climate agreement are monitored as a part of achieving the climate goals.

Within the framework of these promotional principles, KfW finances projects relating to the following megatrends of our time: climate change and the environment (environmental share of financing > 38%), globalisation, social change, and digitalisation and innovation. In domestic promotion, KfW aims to achieve an SME ratio of > 40% in financing small and medium-sized German enterprises.

The primary objective is complemented by **secondary objectives** in the areas of profitability and efficiency, risk and capital, regulation, digitalisation and process efficiency, and customer and employee centricity. Agility is considered a fundamental prerequisite for achieving these objectives.

Internal management system

KfW 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 group-wide strategic objectives set by the Executive Board form the basis. This system of objectives serves KfW Group as a roadmap, indicating the direction in which KfW would like to develop over the next five years. It defines KfW Group's medium-term targeted positioning, and sets top-level objectives for the entire bank. The objectives are reviewed annually for relevance, completeness and aspiration level and 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. Within this strategic framework, major medium-term strategic initiatives are developed in a base case scenario by the business sectors and subsidiaries, taking into account their statutory requirements. Promised benefits (such as project efficiencies and cost reduction measures) are also considered in business sector planning. Assumptions regarding the future development of determinant factors are made based on a risks and opportunities assessment. This analysis takes into account both external factors (including market development, regulatory requirements, the competitive situation and customer behaviour) and internal factors and resources (including human and technical and organisational resources, promotional expense, primary cost planning and tied-up capital) as well as targeted earnings levels. It involves evaluation of the key business and revenue drivers for the business sectors and the group. The business sectors are also called upon to address the environmental, social and governance risks ("ESG" risks) resulting from their business model and new (strategic) initiatives. The central departments (e.g. information technology, human resources and central services) play important roles in achieving the strategic objectives.

Implementation and quality assurance: The business sectors plan their new business, risks and earnings, and each department its budgets and full time equivalents (“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 Accounting. 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’s earnings position. Thus, a high and a low interest rate scenario are also 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. KfW Group has defined strategic risk objectives for factors including risk-bearing capacity and liquidity. The main risk management approaches and risk tolerance are also incorporated into the risk strategy as a basis for operational risk management. There is regular consultation with the Risk Controlling department to ensure consistency between the business and risk strategies. 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 appropriately communicated to the staff.

The adoption of the group business sector planning serves as a foundation for the group’s qualitative and quantitative objectives. The Executive Board reviews target achievement both on a regular and on an ad hoc basis during the current financial year. The assumptions concerning external and internal factors made when determining the business strategy are also subject to regular checks. The development of relevant control variables, their attainment, and the reasons for any shortfalls are analysed as part of strategic management. Strategic assumptions are reviewed, and a systematic variance analysis of early objectives and forecasts is performed at the beginning of every year. At mid-year, the integrated forecasting process serves as a comprehensive basis for interim management input on quantitative group variables of strategic importance in line with the strategic objectives (new business, risk, costs and earnings in respect of funding opportunities), while providing a well-founded guide to achieving planned objectives. Ad hoc issues of strategic relevance are also addressed in consultation with the group’s departments. Recommendations for action concerning potential strategy adjustments or optimising the use of resources are made as necessary to the Executive Board by means of the strategic performance report. Results of the analysis are included in further strategy discussions and the planning process. 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 operational controlling. These comprehensive detailed analyses at group, business sector and/or control portfolio level comprise earnings, cost and FTE developments and are reported to specific departments. Additionally, analyses of significant relevance to overall group performance are also presented directly to the Executive Board. The risk controlling function 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 global loans to the promotional institutions of the federal states (*Landesförderinstitute – "LFI"*) and BAföG government loans is based on 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 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 from the two business sectors Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*) and Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*) to achieve KfW's promotional objectives.

Interest rate reductions accounted for at present value are the key component of KfW's promotional expenses. KfW grants these reductions for certain domestic promotional loans for new business during the first fixed interest rate period in addition to passing on KfW's favourable funding conditions (obtained on the strength of its triple-A rating). The difference between the fair value of these promotional loans and the transaction value during the first fixed interest rate period, due to the interest rate being below the market rate, is recognised in profit or loss as an interest expense and accounted for as an adjustment to the carrying amount under the item Financial assets at amortised cost. In addition, the accumulated interest rate reductions over the fixed interest rate period are recognised through profit or loss in Net interest income (see the relevant notes on KfW's promotional lending business, financial assets at amortised cost, and provisions).

An additional promotional component (in commission expense) comprises the expense paid in the form of upfront fees to sales partners for processing microloans. Promotional expense also contains disposable and product-related marketing and sales expenses (administrative expense), expenses for innovative digital promotional approaches (commission and administrative expense), and promotional grants awarded as a supplement to the lending business (other operating expense).

Derivative financial instruments are entered into for hedging purposes. Under IFRS, the requirements for the recognition and valuation of derivatives and hedges give rise to temporary net gains or losses that are offset over the term as a whole. In KfW's opinion, such temporary effects on results are not representative as they are caused solely by economically effective hedging relationships.

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.

Global real domestic product ("GDP") increased by 5.9% year on year in 2021 according to estimates by the International Monetary Fund ("IMF"). Although this marked a rise compared to the 2019 level after the decline due to the economic effects of the coronavirus pandemic in 2020, GDP nonetheless registered below the IMF forecast for 2021 issued prior to the pandemic (see table on gross domestic product at constant prices). According to the IMF's World Economic Outlook of October 2021, global real GDP grew at a positive rate in 2021 despite recurring waves of coronavirus infections in various countries and supply chain bottlenecks. However, according to the OECD Economic Outlook of December 2021, the gap between real GDP in 2021 and that of pre-pandemic 2019 varies from country to country.

Gross domestic product at constant prices

	2021 estimate	2020	2019
Global economy*			
Year-on-year change in %	5.9	–3.1	2.8
Index (2019 = 100) based on data from January 2022	103	97	100
Index (2019 = 100) forecast based on data from January 2020	107	103	100

* The IMF aggregates the annual growth rates of 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.

The economies of the member states of the **European Economic and Monetary Union ("EMU")** also returned to growth last year following the pandemic-induced recession. Economic output in the EMU countries measured in terms of price-adjusted GDP rose by 5.2% year on year in 2021, following a decline in 2020, which was the most significant contraction of price-adjusted GDP (–6.4%) recorded since the EMU was formed (see table on gross domestic product at constant prices, year-on-year change). The European Commission attributes the 2021 increase to the coronavirus vaccination campaigns and the gradual easing of pandemic-induced restrictions. However, disruptions in global supply chains, rising energy prices and a renewed surge in infections weighed on euro area economic activity towards the end of 2021. Price-adjusted GDP is no longer far below pre-pandemic levels in all member states, although economic recovery continues to vary between them.

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

	2021 in %	2020 in %	2011–2020 average in %	1999–2019 minimum in %
Euro area	5.2	–6.4	0.5	–4.5 (2009)
Germany	2.8	–4.6	1.1	–5.7 (2009)

positive driver for the rate of change of price-adjusted GDP in 2021 in most economic sectors, with the exception of agriculture, forestry and fishing (–2.1%), construction (–0.4%), and financial and insurance services (–0.4%).

Developments in the **financial markets** also continued to be dominated by the coronavirus pandemic in 2021. Unlike the previous year, however, markets focused on the economic recovery and related events, such as the global material and supply chain bottlenecks, and inflation. After sustained support from central banks, the changed macroeconomic environment in 2021 triggered discussions and initial decisions on the timing of the exit from the pandemic emergency purchase programmes. The US Federal Reserve, for example, announced at the December meeting of the Federal Open Market Committee ("FOMC") that it would end net bond purchases by March 2022, and also signalled three rate hikes for 2022. The European Central Bank ("ECB") had previously "significantly" increased its asset purchases under the pandemic emergency purchase programme ("PEPP") in the second and third quarters of 2021, while leaving key interest rates unchanged (the deposit rate remained at –0.5% throughout 2021). The PEPP, with a total volume of EUR 1,850 billion, involves both government and corporate bonds, which can be purchased very flexibly in terms of maturity, asset class and country of origin. The ECB Governing Council resolved in December 2021 to end the PEPP asset purchases by the end of March 2022. Banks continued to be motivated to lend due to the favourable terms of the ECB's targeted longer-term refinancing operations ("TLTRO III") in 2021: For banks that maintain at least their eligible net lending for a certain period, the interest rate applied to all TLTRO III transactions will be 50 basis points (bp) lower than the average deposit facility rate over the same period and in no event more than –1%.

These developments have resulted in swap rates in the euro area and the USA, in particular, rising noticeably year-on-year in 2021. In contrast, euro area and US money market rates were considerably below the prior-year averages. For instance, the 3-month EURIBOR averaged –0.55% in 2021 (2020: –0.43%); the 5-year EUR swap rate averaged –0.26% (2020: –0.35%); and the yield of the 10-year German government bond was –0.31% (2020: –0.47%). In the US, the 3-month LIBOR was 0.16% on average for the year in 2021, compared with 0.65% in the previous year. The 5-year USD swap rate averaged 0.94% in 2021 (2020: 0.59%), and the yield on 10-year US Treasuries was 1.44% (2020: 0.89%). The yield curves for the EUR and the USD moved in a similar direction although at different paces as measured by the difference between the yields of 10- and 2-year government bonds. On average in 2021, the curve steepness for German government bonds was 39 bp (2020: 22 bp), whereas US government bonds climbed to 117 bp (2020: 50 bp).

EUR 135.3 billion to EUR 107.0 billion due to the decline in demand for coronavirus aid, KfW again exceeded the pre-pandemic promotion level (2019: EUR 77.3 billion) due to an increase in commitments in climate action and the environment.

A consolidated profit of EUR 2.2 billion for 2021, after the previous year having been adversely impacted by coronavirus pandemic effects (EUR 0.5 billion), was proof of an excellent recovery in the bank's **earnings position**, and was well above expectations (EUR 0.8 billion). The operating result before valuation (before promotional expense), in contrast, declined from EUR 1.9 billion to EUR 1.7 billion. This development was also reflected in the cost-income ratio (before promotional expense), which rose to 45.9% (2020: 41.8%) due to higher administrative expense and the overall slight decline in income from interest and commissions. This extraordinarily positive valuation result increased consolidated profit by EUR 0.8 billion (2020: EUR –1.2 billion).

Consolidated total assets rose by EUR 4.6 billion to EUR 551.0 billion in financial year 2021. This development was largely attributable to the increase in Net loans and advances by EUR 14.9 billion to EUR 438.7 billion of which EUR 5.6 billion related to the KfW Special Programme 2020. The value adjustments from macro hedge accounting trended in the opposite direction, posting a market-induced decline of EUR 7.6 billion. The volume of own issues reported under Certificated liabilities amounted to EUR 447.6 billion (31 Dec. 2020: EUR 425.3 billion). The EUR 2.4 billion increase in equity to EUR 34.2 billion was due especially to consolidated comprehensive income.

Business performance in 2021 was largely characterised by the following developments:

A. High demand for KfW products in climate change and the environment

With a promotional business volume of EUR 107.0 billion (2020: EUR 135.3 billion), the group recorded an exceptional promotional year in 2021, marked by a decline in demand for coronavirus aid and an increase in commitments in the areas of climate action and the environment.

The increased promotional business volume in energy efficiency and renewable energy totalling EUR 47.1 billion (2020: EUR 34.3 billion), which in particular comprised commitments in financing for energy-efficient housing of EUR 19.3 billion (2020: EUR 26.8 billion) and the new business in Federal Funding for Efficient Buildings (*Bundes-förderung für effiziente Gebäude – "BEG"*) of EUR 15.2 billion (2020: EUR 0.0 billion), resulted in a promotional business volume in domestic business of EUR 82.9 billion (2020: EUR 106.4 billion). The decline in promotional business volume compared to 2020 was primarily due to the softened demand for coronavirus aid amounting to EUR 10.1 billion (2020: EUR 46.9 billion), of which EUR 9.1 billion (2020: EUR 44.5 billion) related to the KfW Special Programme launched by KfW as part of the government stabilisation measures for the coronavirus pandemic in 2020. The subsidiary KfW Capital made commitments totalling EUR 0.5 billion in 2021 (2020: EUR 0.9 billion).

International business commitments decreased by 18% to a promotional business volume of EUR 23.8 billion (2020: EUR 29.0 billion). In Export and project finance, the impact of the COVID-19 pandemic on global trade and large areas of the global economy as a whole continued to be reflected in new business, with commitments amounting to EUR 13.6 billion compared to EUR 16.6 billion in 2020. Commitments in Promotion of developing countries and emerging economies also decreased to a volume of EUR 10.1 billion (2020: EUR 12.4 billion), while DEG commitments of EUR 1.5 billion recorded a positive development in new business (2020: EUR 1.4 billion).

KfW raised EUR 82.6 billion in the capital markets to fund its business activities (2020: EUR 66.4 billion). Funding via the government-owned Economic Stabilisation Fund (*Wirtschaftsstabilisierungsfonds – "WSF"*) and the targeted longer-term funding of the Eurosystem via TLTRO III of EUR 3.0 billion and EUR 1.4 billion, respectively, was lower than in the previous year (EUR 39.0 billion and EUR 13.4 billion, respectively).

International business	[illegible]	[illegible]
Export and project finance	13.6	16.6
Promotion of developing countries and emerging economies	10.1	12.4
Volume of new commitments[1)]	**107.0**	**135.3**

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

B. Operating result exceeds expectations

At EUR 1,712 million (2020: EUR 1,855 million), the Operating result before valuation (before promotional expense) was 8% below prior-year level and exceeded the target by 5%. The outperformance was primarily due to the increase in net commission income (before promotional expense) from EUR 584 million to EUR 634 million, which was 11% above target. At EUR 1,452 million, Administrative expense (before promotional expense) was still below plan, despite exceeding the previous year's figure by EUR 122 million. Reasons include an increase in personnel and a rise in costs of external service providers in domestic and international business and in the change environment. Net interest income (before promotional expense) of EUR 2,531 million reached the target level but declined by 3% compared with the previous year (EUR 2,601 million) due to the persistent low interest environment. Nevertheless, net interest income still constituted the main source of KfW's income.

C. Positive risk provisions for lending business following the previous year's negative impact

Risk provisions for lending business yielded positive earnings contributions of EUR 196 million in 2021. Risk provisions for lending business thus posted a considerably better result than in the previous year, which had been negatively impacted by the coronavirus pandemic (EUR –777 million), and than the projected standard risk costs (EUR –550 million). Reversal effects from risk provisions created in the previous year, in particular, contributed to this positive development. These were due to reduced provisions for latent risks in stages 1 and 2 based on the macroeconomic environment assessment, which was more favourable than that of the previous year. Reversals of risk provisions for stage 3 for individual impaired loans and income from recoveries of loans previously written off also contributed to the positive risk provisioning result.

Moreover, effects from further development of the loss given default ("LGD") procedure, and rating upgrades, which largely result from the further developed rating procedure as well as from the improved macroeconomic environment, also had a positive impact. These effects are primarily reflected in the business sector Promotion of developing countries and emerging economies.

D. Record result in the equity finance business

The group generated an unusually high result of EUR 766 million (2020: EUR –281 million) from the valuation of the entire equity investment portfolio, which exceeded the target many times over. A positive development of EUR 211 million is due to reversals of impairment losses after the negative effects from the coronavirus pandemic in the previous year. Of this amount, EUR 197 million is attributable to DEG. The business sector Promotion of developing countries and emerging economies made the largest contribution in an amount of EUR 454 million to the overall result from the equity investment valuation, with EUR 424 million attributable to the DEG portfolio (of which EUR 140 million was attributable to foreign currency translation). In addition, the KfW Capital equity investment portfolio performed very well, with a value increase of EUR 211 million. Overall, EUR 68 million of the equity investment result was attributable to gains realised from the disposal of investments and EUR 698 million to the carrying amount result.

Key financial figures of KfW Group

Key figures of the income statement	2021 EUR in millions	2020 EUR in millions
Operating result before valuation (before promotional expense)	1,712	1,855
Operating result after valuation (before promotional expense)	2,575	691
Promotional expense	188	88
Consolidated profit	2,215	525
Cost-income ratio (before promotional expense)[1)]	45.9%	41.8%

Key economic figures	2021 EUR in millions	2020 EUR in millions
Consolidated profit before IFRS effects	2,354	633

Key figures of the statement of financial position	31 Dec. 2021 EUR in billions	31 Dec. 2020 EUR in billions
Total assets	551.0	546.4
Volume of lending	564.2	543.1
Volume of business	686.9	674.1[2)]
Equity	34.2	31.8
Equity ratio	6.2%	5.8%

1) Administrative expense (before promotional expense) in relation to adjusted income. Adjusted income is calculated from net interest income and net commission income (in each case before promotional expense).
2) The comparative figure was adjusted by EUR 332 million for full recognition of all trust activities.

Comparison with the previous year's forecast

	2020 forecast for 2021	2021 actual
New business		
Promotional business volume	EUR 81.0 billion	EUR 107.0 billion
Funding	EUR 70–80 billion	EUR 82.6 billion
Result		
Consolidated profit	EUR 0.8 billion	EUR 2.2 billion
Net interest income (before promotional expense)	EUR 2.5–2.6 billion	EUR 2.5 billion
Low interest environment	detrimental	detrimental
Net commission income (before promotional expense)	EUR 0.6 billion	EUR 0.6 billion
Administrative expense (before promotional expense)	EUR 1.5 billion	EUR 1.5 billion
CIR (before promotional expense)	48%	46%
Risk provisions for lending business	EUR –0.6 billion	EUR +0.2 billion
Valuation result	approx. EUR +0.1 billion	EUR +0.6 billion
Promotional expense	EUR 0.4 billion	EUR 0.2 billion

Reconciliation of internal earnings position (before promotional expense) with external earnings position (after promotional expense) for financial year 2021

	EUR in millions	Reconciliation EUR in millions	EUR in millions	
Net interest income (before promotional expense)	2,531	–144	2,386	Net interest income
Net commission income (before promotional expense)	634	–12	623	Net commission income
Administrative expense (before promotional expense)	1,452	14	1,466	Administrative expense
Operating result before valuation (before promotional expense)	**1,712**	**–170**	**1,542**	**Operating result before valuation**
Risk provisions for lending business	196	0	196	Net gains/losses from risk provisions
Net gains/losses from hedge accounting	–110	0	–110	Net gains/losses from hedge accounting
Other financial instruments at fair value through profit or loss	767	0	767	Net gains/losses from other financial instruments at fair value through profit or loss
Securities and investments	–4	0	–4	Net gains/losses from disposal of financial assets at amortised cost
Net gains/losses from investments accounted for using the equity method	14	0	14	Net gains/losses from investments accounted for using the equity method
Operating result after valuation (before promotional expense)	**2,575**	**–170**	**2,405**	**Operating result after valuation**
Net other operating income (before promotional expense)	–34	–18	–53	Net other operating income or loss
Profit/loss from operating activities (before promotional expense)	**2,541**	**–188**	**2,353**	**Profit/loss from operating activities**
Promotional expense	188	–188	0	–
Taxes on income	137	0	137	Taxes on income
Consolidated profit	**2,215**	**0**	**2,215**	**Consolidated profit**
Temporary net gains/losses from hedge accounting	–139		–139	Temporary net gains/losses from hedge accounting
Consolidated profit before IFRS effects	**2,354**	**0**	**2,354**	**Consolidated profit before IFRS effects**

promotional expense)	1,330	12	1,342	Administrative expense
Operating result before valuation (before promotional expense)	**1,855**	**–76**	**1,778**	**Operating result before valuation**
Risk provisions for lending business	–777	–5	–781	Net gains/losses from risk provisions
Net gains/losses from hedge accounting	16	0	16	Net gains/losses from hedge accounting
Other financial instruments at fair value through profit or loss	–428	0	–428	Net gains/losses from other financial instruments at fair value through profit or loss
Securities and investments	–6	5	–1	Net gains/losses from disposal of financial assets at amortised cost
Net gains/losses from investments accounted for using the equity method	31	0	31	Net gains/losses from investments accounted for using the equity method
Operating result after valuation (before promotional expense)	**691**	**–76**	**614**	**Operating result after valuation**
Net other operating income (before promotional expense)	–2	–12	–14	Net other operating income or loss
Profit/loss from operating activities (before promotional expense)	**688**	**–88**	**600**	**Profit/loss from operating activities**
Promotional expense	88	–88	0	–
Taxes on income	76	0	76	Taxes on income
Consolidated profit	**525**	**0**	**525**	**Consolidated profit**
Temporary net gains/losses from hedge accounting	–109	0	–109	Temporary net gains/losses from hedge accounting
Consolidated profit before IFRS effects	**633**	**0**	**633**	**Consolidated profit before IFRS effects**

At EUR 1,712 million (2020: EUR 1,855 million), the **Operating result before valuation (before promotional expense)** was below the prior-year level but above the target (EUR 1,628 million).

At EUR 2,531 million, **Net interest income (before promotional expense)** decreased compared to the 2020 figure (EUR 2,601 million). While interest margin income developed positively, the structure contribution failed to reach the target due to market conditions, which were characterised by the low interest environment and a flat yield and cost curve.

Net commission income (before promotional expense) amounted to EUR 634 million, which exceeded the 2020 figure (EUR 584 million) and expectations (EUR 571 million). This development was mainly due to the increase in cost-based remuneration for the implementation of the promotional programmes for the Federal Government to EUR 362 million (2020: EUR 339 million), primarily in energy efficiency and renewable energy including charging infrastructure. Remuneration for administration of German Financial Cooperation ("FC") also increased, to EUR 229 million (2020: EUR 217 million). The remuneration from the Federal Government was offset by related administrative expense.

Administrative expense (before promotional expense) increased from EUR 1,330 million to EUR 1,452 million, but was lower than expected (EUR 1,477 million). Personnel expense amounted to EUR 842 million, which is above the previous year's figure of EUR 770 million. This increase was largely due to an FTE increase that turned out to be lower than expected. Non-personnel expense (before promotional expense) rose to EUR 610 million (2020: EUR 560 million). This development resulted from the increased use of external service providers compared to the previous year, including for KfW's digitalisation and more stringent regulatory requirements applicable to IT.

Net additions to the provision for imminent credit risks (stage 3) including direct write-offs decreased by EUR 395 million year on year to EUR 8 million (2020: EUR 403 million). Net additions primarily related to DEG, in the amount of EUR 53 million (2020: EUR 95 million), and to the business sector Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*) in the amount of EUR 47 million (2020: EUR 80 million), of which EUR 37 million was attributable to education financing (2020: EUR 67 million). The business sector Export and project finance, in contrast, recorded net reversals of EUR 74 million (2020: additions of EUR 212 million), affecting the aviation industry in particular.

Net reversals of risk provisions in stage 1 of EUR 224 million (2020: net additions of EUR 63 million) as well as the decline in net additions in stage 2 of EUR 350 million to EUR 82 million reflected effects from lower probabilities of default due to the improved macroeconomic environment, further developed rating procedures and related transfers back to stage 1 in some cases. These effects were observed across countries and sectors, with the most significant reversals undertaken in the banking environment and for SMEs and start-ups. Further development of LGD procedures also led to effects contributing to reduced risk provisioning. In contrast, effects contributing to increased risk provisioning came from renewed forbearance measures in the cruise ship industry, which led to further stage transfers and additions to risk provisions in stage 2. Overall, existing risks from the general development of countries and sectors were considered on an individual basis as of 31 December 2021. Persisting uncertainties as of the reporting date due to the development of the pandemic were also addressed in this process.

Environmental, Social and Governance (“ESG”) risks do not present any new risks for KfW to take into account, as Risk Management already addresses ESG risks in the context of borrower ratings, credit assessments and portfolio analyses as part of the group’s risk strategy. These risks are therefore already reflected in risk provisions for the lending business; they did not have a material impact on the determination of any individual risk provisions.

Furthermore, at EUR 83 million, income from recoveries of loans previously written off was above that of the previous year (EUR 60 million). Of this amount, EUR 40 million was attributable to the business sector SME Bank & Private Clients and EUR 26 million to the business sector Export and project finance.

Risk provisions decreased to EUR 2.0 billion in financial year 2021 (2020: EUR 2.3 billion), of which EUR 1.4 billion was related to provisions for imminent risks in stage 3 (2020: EUR 1.3 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 0.3 billion.

The **net gains/losses from hedge accounting and other financial instruments at fair value through profit or loss** amounted to EUR 657 million (2020: EUR –412 million) and, in financial year 2021, were primarily driven by positive valuation effects from the equity investment portfolio, which were partly offset by purely IFRS-related effects from the measurement of derivatives used for hedging purposes.

The positive development of the equity investment portfolio measured at fair value through profit or loss was due to both the reversals of impairment losses taken on the valuation discounts as a result of the COVID-19 pandemic in the previous year, and further value increases. This development was also driven by exchange rate-induced increases in value, particularly due to the appreciation of the US dollar. Overall, the valuation resulted in income of EUR 752 million (2020: expense of EUR 312 million), largely due to the activities in the business sector Promotion of developing countries and emerging economies, with positive valuation effects of EUR 448 million (2020: EUR –380 million). Of DEG’s income of EUR 424 million, EUR 140 million was attributable to exchange rate-induced increases in value. In addition, the KfW Capital equity investment portfolio posted a value increase of EUR 194 million (2020: EUR 42 million).

98 million between the carrying amount and the fair value (2020: EUR 48 million). This development is partly attributable to increases in the value of covered and government bonds.

There were **net gains** of EUR 10 million (2020: EUR 30 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 14 million to the result. This was primarily due to value increases in the business sector KfW Capital.

Net other operating income (before promotional expense) was EUR –34 million, which was down on the previous year's figure (2020: EUR –2 million). This item also includes expenses of EUR 13 million from the increase in KfW Stiftung's foundation capital.

At EUR 188 million in 2021, KfW's domestic **promotional expense**, which has a negative impact on KfW Group's earnings position, was above the prior-year level (EUR 88 million) but below projections (EUR 364 million), due to the low-interest environment.

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. The volume of interest rate reductions was EUR 144 million in financial year 2021, which was above the prior-year figure (EUR 54 million) but below the projected figure (EUR 330 million). The increase in interest rate reductions was the result of passing on negative funding rates to KfW financing partners from the third quarter 2021 onwards, which led to an increase in demand for promotional loans at reduced rates.

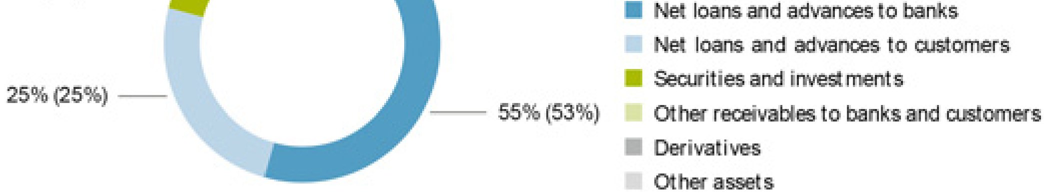
In addition to its lending business, KfW provided promotional grants, in particular for the Climate action campaign and the ERP Digitalisation and Innovation programmes, totalling EUR 18 million in financial year 2021 (2020: EUR 12 million), which were recognised as promotional expense in Net other operating income.

Moreover, promotional expenses reported in net commission income and administrative expense were incurred in an amount of EUR 26 million (2020: EUR 23 million).This spending was aimed, among other things, at the sale of KfW's promotional products.

Accounting for the net income tax result of EUR –137 million (EUR 2020: EUR –76 million), the **consolidated profit** of EUR 2,215 million was higher than in the previous year (EUR 525 million) and above expectations of EUR 793 million.

Consolidated profit before IFRS effects from hedging is another key financial figure based on Consolidated profit in accordance with IFRS to reflect the fact that KfW uses derivative financial instruments solely for hedging purposes. Under IFRS, the requirements for the recognition and valuation of derivatives and hedges give rise to temporary net gains or losses that are offset over the entire term. Against this backdrop, IFRS effects from hedging relationships amounting to EUR –139 million (2020: EUR –109 million) were eliminated.

The reconciled earnings position amounted to a profit of EUR 2,354 million (2020: EUR 633 million). The considerable increase in consolidated profit is primarily due to the positive effects from risk provisions and the valuation of the equity investment portfolio. Accordingly, the result exceeds the sustainable earnings potential of EUR 1.0 billion.



The **volume of lending** increased compared to the previous year, amounting to EUR 564.2 billion.

Volume of lending

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Loans and advances	440,623	425,880
Risk provisions for lending business	–1,943	–2,130
Net loans and advances	**438,680**	**423,749**
Contingent liabilities from financial guarantees	3,168	2,808
Irrevocable loan commitments	111,376	105,282
Loans and advances held in trust	10,999	11,239
Total	**564,223**	**543,078**

Loans and advances increased by EUR 14.7 billion in 2021, of which around EUR 6 billion was attributable to the KfW Special Programme 2020, with the KfW Entrepreneur Loan and KfW Instant Loan programmes, in particular, contributing a total of EUR 7.6 billion, while the coronavirus special programme “Direct participation for syndicate financing”, in contrast, recorded a decline of EUR 2.5 billion. Overall, disbursements in new lending business more than compensated for unscheduled repayments (EUR 14.2 billion; 2020: EUR 11.5 billion) and scheduled repayments. At EUR 438.7 billion, Net loans and advances continued to account for 78% of lending volume.

Contingent liabilities from financial guarantees amounted to EUR 3.2 billion, an increase of EUR 0.4 billion on the prior-year figure (2020: EUR 2.8 billion). The increase in Irrevocable loan commitments of EUR 6.1 billion to EUR 111.4 billion was due to the irrevocable commitment to the Federal Government in connection with the Future Fund in the amount of EUR 8.5 billion and commitments of EUR 2.1 billion under the KfW Special Programme. The KfW Entrepreneur Loan and KfW Instant Loan programmes were the most significant drivers, with a total of EUR 5.0 billion, while the coronavirus special programme “Direct participation for syndicate financing” recorded a decline of EUR –3.2 billion. Overall, the coronavirus aid programmes recorded reduced demand in 2021. Within assets held in trust, the volume of Loans and advances held in trust, which primarily comprise loans to promote developing countries and emerging economies financed by budget funds provided by the Federal Republic of Germany, decreased by EUR 0.2 billion to EUR 11.0 billion.

At EUR 8.4 billion, Other loans and advances to banks and customers were EUR 2.4 billion below the previous year’s amount of EUR 10.7 billion. Of the decline, EUR 4.1 billion resulted from receivables from cash collateral in connection with collateral management in the derivatives business; short-term money market transactions, in contrast, rose by EUR 2.0 billion.

Equity investments	4,015	3,016
Shares in non-consolidated subsidiaries	68	48
Total	**39,856**	**38,844**

The **securities portfolio** remained virtually unchanged in financial year 2021. The portfolio of **Equity investments** and **Shares in non-consolidated subsidiaries** increased by EUR 1.0 billion to EUR 4.1 billion in 2021. This development was due, among other things, to value increases of EUR 0.7 billion, in particular in the business sectors Promotion of developing countries and emerging economies and KfW Capital.

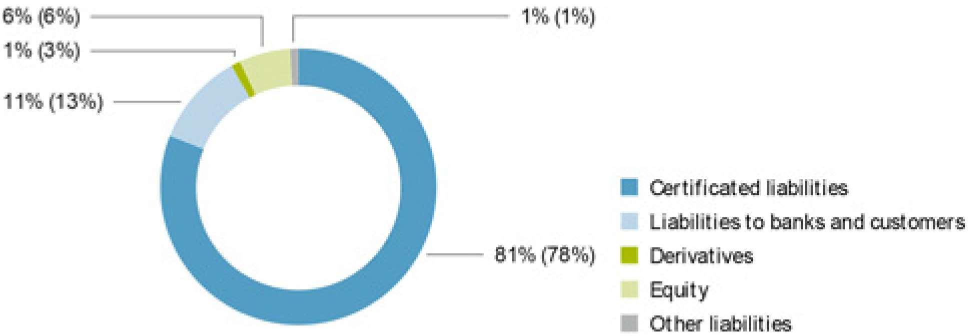
Value adjustments from macro hedge accounting declined by EUR 7.6 billion, based on fair value, from EUR 12.2 billion to EUR 4.6 billion. **Derivatives** with positive fair values, which are primarily used to hedge refinancing transactions, rose from EUR 13.3 billion in the previous year to EUR 13.9 billion. This was due to value adjustments from micro hedging increasing from EUR 7.9 billion to EUR 8.4 billion.

KfW reduced its **balances with central banks** by EUR 1.7 billion to EUR 42.4 billion. The liquidity held continues to ensure the expected servicing of coronavirus aid measures and to enable reaction to market events at short notice. There were only minor changes in the **other asset line items** in the statement of financial position.

Development of financial position

KfW Group's funding strategy in the national and international capital markets is based on the four product categories: "benchmark programmes in euros and US dollars", "Green Bonds – Made by KfW", "other public bonds" and "private placements". Moreover, KfW accessed funding via the government-owned WSF as part of the KfW coronavirus special programme in the reporting year. KfW significantly reduced its funding via participation in the targeted longer-term funding of the Eurosystem via TLTRO III in 2021. Accordingly, the share of total assets accounted for by funding in the form of certificated liabilities rose to 81% overall (2020: 78%).

Financial position as of 31 December 2021 (31 Dec. 2020)



Borrowings increased by EUR 9.7 billion to EUR 506.1 billion.

Funds raised in the form of certificated liabilities rose by EUR 22.3 billion to EUR 447.6 billion. Of this increase, EUR 13.6 billion was a result of the greater volume of medium and long-term bonds and notes issued, which remain the group's principal source of funding. At year-end 2021, such funds amounted to EUR 397.6 billion (31 Dec. 2020: EUR 384.0 billion) and accounted for 79% of borrowings. Short-term issues of commercial paper increased by EUR 8.7 billion to EUR 50.0 billion. Total short-term funds, including demand deposits and term deposits, amounted to EUR 51.6 billion, compared with EUR 44.0 billion the previous year. Some of the new funding sources tapped in connection with the KfW coronavirus special programme in 2020 were reduced. This largely resulted in the decline in Other funding of EUR 11.5 billion to EUR 56.9 billion (31 Dec. 2020: EUR 68.4 billion). In addition to the decrease of EUR 3.5 billion in promissory note loans (*Schuldscheindarlehen*) from banks and customers to EUR 40.8 billion (largely WSF funding), this also consisted of minor repurchase agreements, which declined, due to the repayment of EUR 13.4 billion (nominal) of loans under TLTRO III operation 4, by EUR 11.3 billion to EUR 2.1 billion (31 Dec. 2020: EUR 13.3 billion). In contrast, cash collateral received, which primarily serves to reduce counterparty risk from the derivatives business, increased by EUR 4.0 billion to EUR 9.0 billion (31 Dec. 2020: EUR 4.9 billion).

The carrying amounts of **derivatives** with negative fair values, which were primarily used to hedge loans, declined by EUR 7.3 billion from EUR 13.7 billion, primarily due to changes in market parameters, and amounted to EUR 6.4 billion at year-end 2021.

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

At EUR 34.2 billion, **equity** was EUR 2.4 billion above the level of 31 December 2020 (EUR 31.8 billion). The increase resulted in particular from consolidated profit (EUR 2.2 billion). The partial reversal of reserves in accordance with Section 340g of the German Commercial Code (*Handelsgesetzbuch – "HGB"*) of EUR 0.4 billion, resulted in a reclassification within Equity in accordance with IFRS, with no effect on profit or loss. The equity ratio increased year on year from 5.8% to 6.2% as of 31 December 2021, due to consolidated profit.

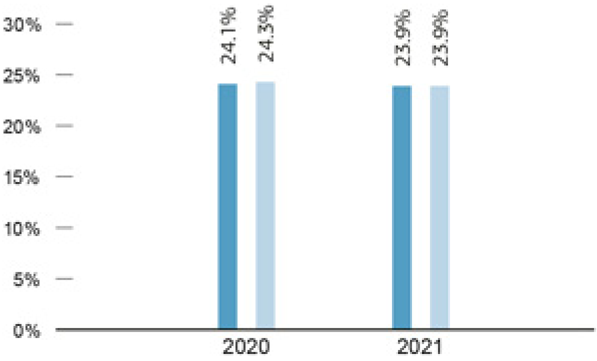
Equity

	31 Dec. 2021 EUR in millions	31 Dec. 2020 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	22,026	19,411
Fund for general banking risks	200	600
Revaluation reserves	–957	–1,151
Total	**34,207**	**31,797**

The consolidated profit was allocated to retained earnings.

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

Regulatory capital ratios:

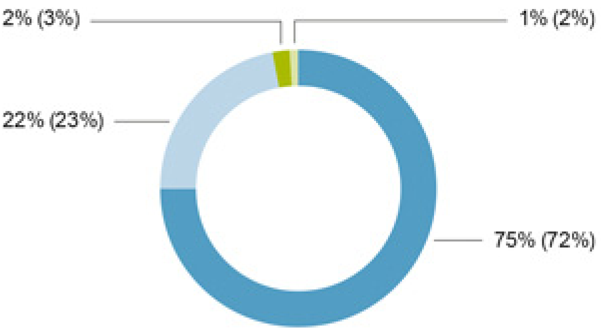


The slight drop in the capital ratios is primarily due to the implementation of CRR II (Capital Requirements Regulation), methodological adjustments (in particular the application of regulatory IRBA requirements) and the reclassification of a number of structured funds as securitisation. These effects are, however, largely compensated by the recognition of income.

- Tier 1 capital ratio
- Total capital ratio

Credit risk:

2021 (2020), Net exposure breakdown

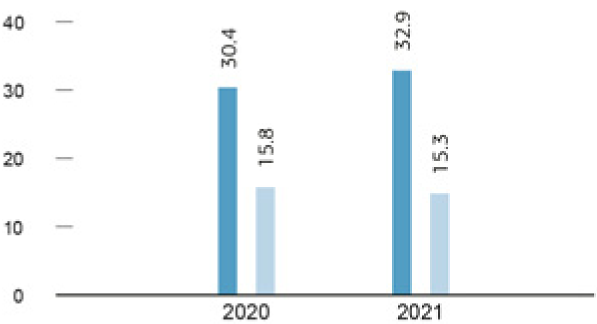


The share of investment grade net exposure increased year-on-year to 75% of total net exposure. This change is attributable to new business, particularly in the energy efficiency and renewable energy programmes.

- Investment grade
- Non-investment grade
- Watch list
- Default

Economic risk-bearing capacity:

(EUR in billions)

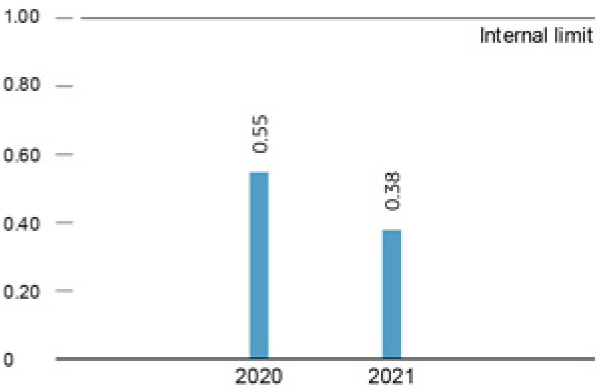


The excess coverage increased in 2021 due to the growth in available financial resources driven primarily by the annual result and the lower total capital requirement. Economic risk-bearing capacity was observed at a confidence level of 99.90% in the reporting year and improved compared to the previous year.

- Available risk coverage resources
- Total ECAP requirement

*After diversification

Liquidity risk:

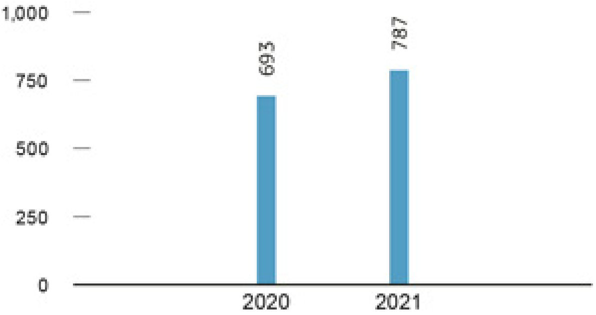


The liquidity risk indicator remained considerably below the internal limit throughout the year.

Liquidity risk indicator (worst case)

Operational risk:

ECAP (EUR in millions)



The updating of risk scenarios led to an increase in economic capital requirements in 2021.

ECAP

The primary objective of KfW Group is to “transform the economy and society to improve economic, environmental and social living conditions around the world.” KfW is enhancing its ESG risk management on this basis, in order to identify and assess environmental, social and governance risks (ESG risks) even earlier in future and to take mounting regulatory requirements into account. The current focus of the project on ESG risks is on further developing ESG stress testing capabilities and designing an ESG risk database to store an assessment of ESG risks for each risk-relevant business partner in the form of an ESG risk profile. ESG risks are already addressed in risk management, particularly in the context of borrower ratings, credit assessments and portfolio analyses as part of the risk strategy.

Basic principles and objectives of risk management

KfW Group has a statutory promotional mandate. Sustainable promotion is KfW Group’s overarching purpose. The aim of risk management is for the group to take risks only to the extent that they appear manageable in the context of its current and anticipated earnings position and capital resources. KfW Group’s risk/return management takes into account the business model of a promotional bank without the primary intention of generating a profit and without a trading book, with appropriate implementation of supervisory requirements constituting a fundamental prerequisite for the group’s business activities.

The promotional bank business model determines the group’s risk culture with its four regulatory-based elements: leadership culture, responsibilities, communication and incentives. Incentive structures for employees and their responsibilities are designed accordingly. Senior management specifies the desired code of conduct and sets an example in practising it, with the desired dialogue established by means of communication with and through the relevant bodies.

Current developments

The coronavirus pandemic, which lasted throughout the financial year, continued to present a range of challenges to KfW, requiring ongoing management of the resulting implications.

As a result, the procedures already adopted in the previous year to deal with operational risks and to keep business operations up and running largely continued, with the measures being reviewed and adjusted at regular intervals based on the further course of the pandemic.

As soon as vaccines became available in the EU, KfW took measures to offer its employees vaccinations, which were very positively received. Following the emergence of another critical variant of the virus, steps were taken in the fourth quarter to continue to ensure a high level of safety for the workforce and security in business operations by offering another round of vaccinations.

As in 2020, the coronavirus pandemic shaped global economic developments in 2021. Although economic recovery emerged in most countries in 2021 following the marked slump in economic output in 2020, it varied in its intensity and speed, and is still marked by increased uncertainty in terms of stability and continuity (for reasons including the risk of new virus mutations). Those countries that had already been hit hard in 2020 – i.e. whose credit rating was already weak before the crisis, which are heavily dependent on tourism, have little fiscal leeway, have low vaccination rates or are particularly vulnerable in terms of foreign trade – remained greatly affected by the pandemic in 2021. KfW has taken account of this situation since the beginning of the pandemic and has taken steps to counteract it. The collateral requirements for new business in the public sector were increased – in some cases significantly – in many

The outbreak of the COVID-19 pandemic in 2020 prompted KfW's risk management to step up its monitoring of banking markets and individual banks. KfW continued to analyse the national banking markets, as well as the risks associated with individual banks in 2021, to determine the expected impact of the pandemic, taking government aid measures into account ("heat map"). The regular ratings for the bank portfolio required significantly fewer changes in 2021 than in the previous year. Almost 30% of the business partners/financial institutions were downgraded in 2020; only 5% of the portfolio was upgraded. The 2021 rating cycle was dominated by constant ratings (75%). The rating only deteriorated for just over 10% of the portfolio, with almost 15% showing an improvement. The process has not yet revealed any signs of crisis in individual banking markets or business models triggered by the COVID-19 pandemic.

So far, the concerted support provided by national banking supervisors and governments has mitigated the negative impact of the COVID-19 pandemic for most banks/banking markets. KfW believes, however, that the partial extensions of credit moratoria in a large number of countries remain a latent risk for future credit quality in the medium term. Serious negative effects on the corporate sector have emerged as a result of the COVID-19 pandemic. In the face of these challenges, KfW and its subsidiaries took extensive risk/portfolio and credit management measures from the very start of the pandemic. In addition to rating downgrades, these include more intensive monitoring activities, adjustments to the value of tangible collateral, reviews and, where appropriate, adjustments of the risk guidelines, risk recommendations and sector limits, and the implementation of tight control and risk reduction in critical sectors. Despite rising infection rates at the end of 2021 (Delta/Omicron variants), coupled with serious material shortages, supply chain bottlenecks and higher inflation/rapidly increasing energy prices, the situation in the corporate sector is more stable than in the previous year. As a result, significantly fewer rating downgrades had to be made in 2021 than in the first year of the pandemic. The recovery process still varies considerably from sector to sector, with certain industries hit harder by the pandemic.

The impact of the crisis on the loan portfolio is still particularly evident in sectors linked to transport and with close ties to the service industry, such as aviation (including the associated infrastructure, e.g. airports), as well as in the cruise shipping portfolio, which is largely secured by state credit insurance. These segments partly saw significant negative rating migrations, triggering an increased need for risk provisions. In addition, forbearance measures were agreed with customers primarily in the Aviation, Mobility & Transport, Maritime Industries and Resources and Recycling sector departments. In the Aviation segment, which was hit particularly hard by the crisis, the portfolio strategy adopted in 2020 for the existing business in the E&P business sector was continued, with critical exposures being reduced.

Cyclical sectors, on the other hand, which were dealt a particularly heavy blow by the pandemic-induced growth slump in 2020, such as basic industries, benefited from a strong upturn in demand and significant price increases thanks to catch-up effects, meaning that ratings in this segment improved overall.

Following the peak of the COVID-19 pandemic, global economic recovery slowed during 2021, and prospects of a return to the pre-crisis situation in 2022 have diminished. In addition to disruptions to supply and transport chains (no longer solely due to the pandemic), this trend has also been caused by indications of increasing shortages of raw materials, recyclable waste and semi-finished products in the industrial sector. These uncertainties are accompanied by rising energy prices.

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.

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 the level of the Executive Board (Credit Risk Committee, Market Price Risk Committee and Operational Risk Committee) which prepare decisions for the Executive Board and also take their own decisions within their remits. The committees also perform KfW Group management functions; thus, representatives from KfW subsidiaries are also included. Internal Auditing also has the right to attend committee meetings as a guest. 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.

Credit Risk Committee

The Credit Risk Committee is chaired by the Chief Risk Officer and meets once a week. The committee's other voting members are the Director of Credit Risk Management, members of the Executive Board with front-office responsibilities and KfW IPEX-Bank's Chief Risk Officer ("CRO"). The CRO of DEG has guest status. The weekly meetings of the Credit Risk Committee involve in particular making important lending decisions in line with the credit approval policy, with KfW subsidiary exposures also being presented. In addition, current developments in the loan portfolio, including country and sector risks, are discussed on an ad hoc basis; DEG's CRO is also entitled to vote in these discussions and the managing director of KfW Capital responsible for risk issues has guest status. Once a month, the (General) Credit Risk Committee acknowledges the submissions addressed in the working groups, discusses overarching credit risk issues and makes decisions on significant adjustments in accordance with the competency matrix. These include in particular minutes.

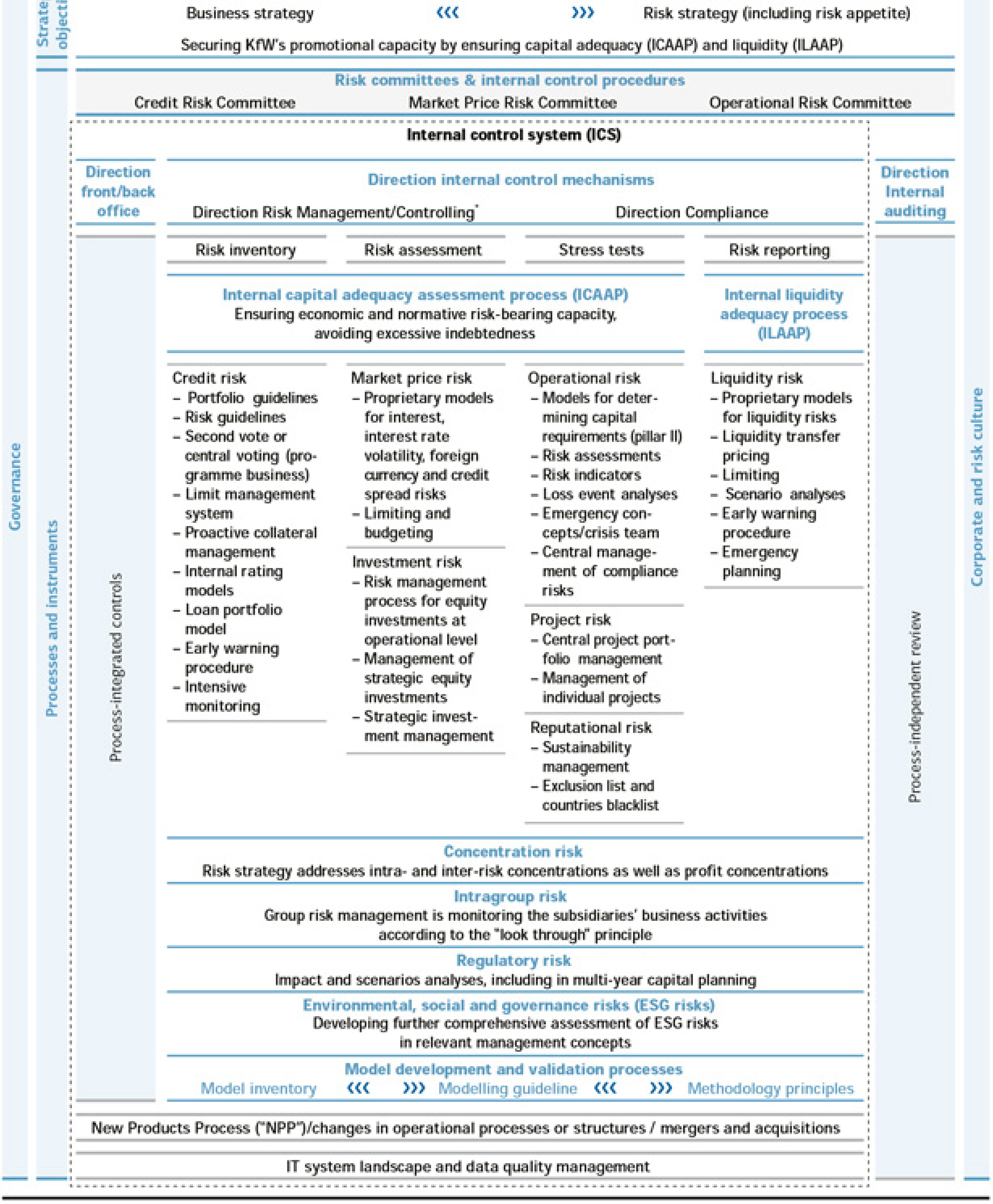
Market Price Risk Committee

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, acknowledging validation reports and making decisions on recommendations resulting from validation. A decision on the matters addressed is either made directly by the Market Price Risk Working Group or prepared for referral to the Market Price Risk Committee.

Operational Risk Committee

The Operational Risk Committee meets once a quarter and provides support to the Executive Board in cross-functional management and the necessary decisions and acknowledgements in respect of operational and reputational risk, and group security including business continuity management. 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 makes decisions on group-wide management measures. Moreover, 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 business continuity management (“BCM”) the committee establishes crisis-prevention and emergency-planning measures using the results of the annual business impact analysis. Monitoring is based on reports about planned or implemented emergency and crisis team tests and significant disruptions to business. 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 relating to group security and business continuity management (“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”).

Additionally, the subsidiaries and organisational entities of KfW Group exercise their own control functions within the group-wide risk management system. Group-wide projects and working groups are in place to implement a group-wide 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.



* In addition to Risk Controlling, Credit Risk Management and Transaction Management in some cases also exercise control functions due to organisational reasons.

mitigation instruments into account) and the gross risk. The key outcome of the risk inventory is an overall risk profile, which provides an overview of KfW Group's material and immaterial risk types. The 2021 inventory identified that KfW Group faces the following material risks: credit, market price, liquidity, operational, equity investment, regulatory, project, reputational and intragroup risks. Risk concentrations associated with material risks either within a risk type or across various risk types are taken into account in the risk inventory. In addition, the risk inventory process involved looking at the impact of ESG (environmental, social and governance) risks and the COVID-19 pandemic 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 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 model for measuring risks for the "project risk" risk type, which is classed as material, is also subject to regular review.

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 group's internal capital adequacy assessment process ("ICAAP") is characterised by two perspectives:

The aim of the ICAAP's normative perspective is in particular the continuity of operations. To this end, the regulatory and supervisory capital requirements of Pillar I in accordance with the Capital Requirements Regulation ("CRR") and the German Banking Act (*Kreditwesengesetz – "KWG"*) are to be ensured both on an ongoing basis, and in a longer-term view (normative capital planning). In addition to a base scenario, the total capital ratio is also considered in adverse scenarios. This is intended to enable early identification of any capital bottlenecks. This also takes into account potential effects resulting from risks that do not have to be explicitly backed by capital under Pillar I. Achievement of the strategic risk-bearing capacity objectives is also monitored in KfW's planning and management process. The development of the large exposure limit and the leverage ratio are monitored as further structural capital requirements.

The economic perspective of the ICAAP serves to safeguard the economic substance of the institution. This is achieved by comparing the capital available as of a reporting date (available financial resources) with the risk assumed as of the same date (economic capital requirement or ECAP for all material risks to capital). Both capital and risk figures are present value-based and static, i.e. they do not take into account new business or expected results. Available financial resources are based on regulatory capital, adjusted for impaired assets and accrued profits. The amount of economic capital required is largely determined by the confidence level for risk measurement. The multi-year capital planning process does not include a 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.

requirements induced by business sector and area planning, this process also takes into account the risk objectives and the bank's risk appetite. Budget compliance is checked on a monthly basis and action is taken, if necessary. Moreover, economic capital budgets are set for material risk types as their central control and limit variable, and are monitored monthly.

Normative risk-bearing capacity

Key regulatory figures

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Total risk exposure in accordance with Art. 92 CRR	135,135	124,237
– Credit risk	*127,261*	*116,690*
– Market price risk	*2,488*	*2,234*
– Operational risk	*5,386*	*5,313*
Regulatory capital	32,335	30,129
– (Common equity) tier 1 capital	*32,279*	*29,896*
– Additional tier 1 capital	*0*	*0*
– Tier 2 capital	*57*	*233*
CET1 ratio	23.9%	24.1%
Tier 1 capital ratio	23.9%	24.1%
Total capital ratio	23.9%	24.3%

KfW calculates the total risk exposure for significant parts based on an IRBA. The drop in the capital ratio is primarily due to the CRR II implementation, methodological adjustments (in particular the application of regulatory IRBA requirements) and the reclassification of a number of structured funds as securitisation. At 23.9%, the total capital ratio at year-end 2021 remained above the overall capital requirement. The impact of the macroprudential measures announced on 12 January 2022 (increase in the domestic countercyclical capital buffer and addressing specific risks from residential real estate financing) on KfW Group is expected to be low. The KfW portfolio does not contain any material exposure secured by residential properties, as the housing-related programmes are concluded as part of on-lending business and are secured by final-borrower assignments. According to the current impact analysis, the increase in the countercyclical capital buffer in Germany by 0.75 percentage points will increase the capital requirements by 0.2 percentage points from 1 February 2023.

Minimum requirements for total capital ratios

	31 Dec. 2021	31 Dec. 2020
Total SREP capital requirements (TSCR)	**12.5%**	**13.0%**
Capital conservation buffer	*2.5%*	*2.5%*
Countercyclical capital buffer	*0.08%*	*0.03%*
Other systemic buffer	*1.0%*	*0.66%*
Overall capital requirement (OCR)	**16.1%**	**16.2%**

or if their credit ratings deteriorate (migration). Credit risk includes settlement risk in connection with derivative transactions, and credit valuation adjustment risk ("CVA" risk) in relation to derivative exposures. The economic capital requirement for credit risk is quantified by the Risk Controlling department, largely with the help of statistical models. For counterparty and migration risks, the loss potential is computed using a loan portfolio model and the risk measure of "credit value-at-risk". The difference between credit value-at-risk and expected loss is referred to as the economic capital requirement. 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.

Since January 2021, the economic capital requirement for equity investments at operational level has been measured using a new approach in order to take account of possible fluctuations in the value of the positions and thereby also to meet the corresponding requirements set out in the Bundesbank guideline "Supervisory assessment of bank-internal capital adequacy concepts and their integration into the overall performance and risk management processes (ICAAP) – Updated version" (2018) [1] para. 57.

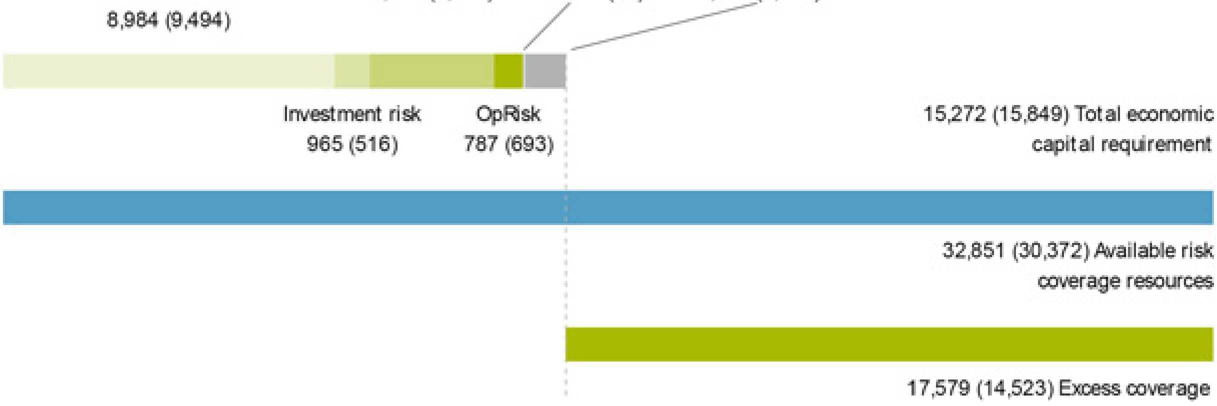
The economic capital requirement for market price risk is calculated on the basis of the value-at-risk concept. Pillar II's economic analysis takes account of interest risk (consisting of the jointly analysed sub-risk types: interest risk, as well as tenor and cross-currency basis spread risks) of the 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 value-at-risk ("VaR"), which takes into account diversification effects between the various sub-types 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 projects and building blocks (agile implementation units used to bundle IT further development activities) and general assumptions about potential losses in the project portfolio are included in risk measurement. The building blocks consist of mixed teams of IT and departmental staff.

In addition, as a central result of the annual ICAAP adequacy assessment, a **model buffer** was applied to cover model weaknesses and foreseeable methodological changes in economic risk-bearing capacity.

Using this method, the economic risk-bearing capacity as of 31 December 2021 satisfied a confidence level of 99.90%. The excess coverage of the available financial resources beyond the total capital requirement as of 31 December 2021 of EUR 17,579 million increased compared to the previous year's figure (EUR 14,523 million). This is primarily due to the increase in available financial resources, which were driven in particular by the accrued consolidated comprehensive income for 2021. In addition, the capital requirement is lower, especially for credit and market price risks. The lower capital requirement for credit risks is primarily due to a fundamental change in the system and methodology used for credit risk measurement. The capital requirement for market price risks decreased due to lower interest risks as



In brackets: figures as of 31 December 2020

The Group manages **liquidity risks** primarily on the basis of internal risk indicators. 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 additionally 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.

Reputational risks are evaluated and managed on a qualitative basis. No capital backing is currently provided as part of calculating risk-bearing capacity. The materiality of reputational risk is primarily due to the fact that KfW is a government-owned institution and as such, is subject to corresponding expectations in terms of ethics, governance and compliance standards. Materiality is thus not based on observed or potential decreases in KfW Group's net assets, earnings or liquidity.

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 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 continues to develop 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, KfW Group monitors, on a quarterly basis, different scenarios (baseline or expected scenario), a downturn scenario (slight economic slowdown) and a stress scenario (deep recession) as well as their respective effects on risk-bearing capacity. These analyses demonstrate the group's resilience and ability to act in the event of the occurrence of one of these scenarios. The baseline and stress scenarios also take the leverage ratio into account.

economic capital requirement for the corresponding types of risk will rise. Losses from securities prices as well as from operational and project risk further reduce capital in the stress scenario.

Overall, the group meets the economic risk-bearing capacity requirements, including the confidence level of 99.90% in the scenarios analysed. The regulatory capital ratios and the leverage ratio exceed the threshold values defined for risk appetite.

Stress testing activities in 2021 focused on simulating the impact of the COVID-19 pandemic and its after-effects. The potential consequences of a sharp rise in interest rates were also analysed. In addition to the scenarios motivated by current macroeconomic risk potentials, further stress tests are regularly carried out to examine the resilience of KfW Group's economic and normative risk-bearing capacity, as well as its liquidity resources. In addition to sensitivity analyses and standard stress tests, concentration and inverse stress tests are also carried out to demonstrate how concentration risks and other potential dangers could jeopardise KfW Group's business model. A particular focus was placed on ESG risks in the banking portfolio in 2021. Furthermore, a climate stress test was conducted in 2021 to examine the transition risks in the portfolio associated with direct carbon pricing in accordance with the Net Zero 2050 strategy.

The scenario calculations and stress tests performed do not indicate any material need for action with regard to KfW Group's risk-bearing capacity or liquidity resources. With regard to the potential impact of the finalisation of Basel III, the uncertainty resulting from the draft CRR III published in October 2021 has been reduced significantly, as has the expected negative impact on the bank's normative risk-bearing capacity (incorporation of the European Commission's proposal into the standard normative risk-bearing capacity scenarios based on the assumption of continued zero-weighted exposures in the "central government" risk exposure category for EU member states, which is only applied for the Federal Republic of Germany and for public entities in Germany). The group is keeping a close eye on developments relating to the finalisation of the supervisory requirements.

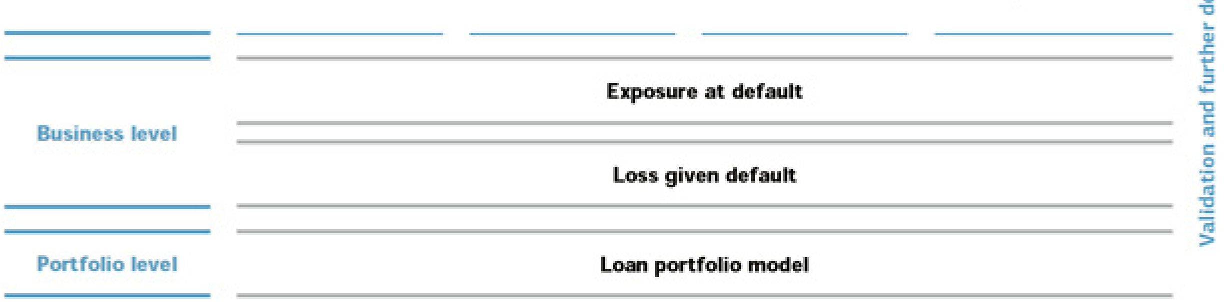
KfW's stress testing programme is subject to an annual adequacy assessment, the aim being to further enhance the stress tests and scenario calculations as a component of overall bank management in order to meet internal and regulatory requirements.

Types of risk

COUNTERPARTY DEFAULT RISK

KfW Group faces counterparty default risks[1)] in the context of its promotional mandate. 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.

1) Counterparty default risk is defined as the risk of financial loss that can occur if the borrower or counterparty fails to meet contractual payment obligations. Counterparty default risk also includes country risk, comprising transfer, conversion and political risks.



Counterparty default risk 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. The expected loss is taken into account when determining risk-bearing capacity by deducting it from the available financial resources in accordance with the supervisory requirements of Article 158 of the CRR.

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[2)] 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 special programmes for coronavirus aid. Several further developments were implemented in 2021 (including PD rating procedures for large companies [corporates] and countries). Furthermore, a risk measurement procedure was developed for internal control purposes in the form of the enhanced investment fund rating, which provides an assessment of future returns and performance in the form of a score. This procedure was also implemented in 2021. In addition to these activities, various new developments have been initiated in 2021 (including PD rating procedures for banks), which are scheduled to take effect on 31 December 2022.

The probability of default is mapped on a uniform master scale for the entire KfW Group for the 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.

2) 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 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 is also required by the Board of Supervisory Directors' Risk and Credit Committee for pre-defined, individual transaction volumes (according to rating and product type).

The portfolio guidelines distinguish between different types of counterparties and product variants and define the conditions under which business transactions may generally 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 risk concentrations (concentration limits) and credit rating-dependent individual counterparty risk (counterparty limits). Concentration limits serve to restrict risk concentrations in the loan portfolio and thus to prevent major individual losses. Counterparty limits serve to fine-tune the counterparty-specific management of credit default risk.

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 and, if necessary, to make preparations for handling these loans. This involves regularly reviewing and documenting the economic situation, the particular borrower's market environment and the collateral provided, and formulating proposals for remedial action – particularly proposals for risk-limiting measures. For non-performing loans and also to a large extent for watch-list exposures[3], process responsibility lies with restructuring units, to ensure involvement of specialists 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, DEG and KfW Capital 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.

In the event of a crisis in the banking sector, the bank has to be able to act immediately both in-house and externally. A financial institution crisis plan is also in place for this purpose. It primarily provides for the establishment of a working group under the direction of the Credit Risk Management department, immediate loss analysis and implementation of the necessary next steps.

3) 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.

	Rating 5–8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Non-investment grade	Rating 9–15	34,326	243	0	34,503	4,675	0
Watch list	Rating 16–18	16,204	1,636	0	8,765	20,098	0
Default	Rating 19–20	0	0	648	0	0	4,531
Total		**305,962**	**1,880**	**648**	**101,598**	**24,773**	**4,531**

		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	21,681	0	0	41,582	0	0
	Rating 5–8	13,736	0	0	41,555	0	0
Non-investment grade	Rating 9–15	346	0	0	22,579	1,440	0
Watch list	Rating 16–18	22	0	0	3,468	3,285	0
Default	Rating 19–20	0	0	0	0	0	312
Total		**35,784**	**0**	**0**	**109,184**	**4,725**	**312**

1) Loans and advances to customers also include the retail business, for which the stage is not derived based on the current rating but on the basis of negative criteria and 30 days past due status. Risk concentrations arise in the event of negative criteria or 30 days past due status. If one of these criteria is met, the customer is placed on the watch list. In contrast, the stage 1 share of the retail segment without significant deterioration in credit risk is largely allocated to “non-investment grade”.

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Non-investment grade	Rating 9–15	33,154	582	0	33,469	5,787	0
Watch list	Rating 16–18	16,082	887	0	7,961	6,647	0
Default	Rating 19–20	0	0	235	0	0	18,656
Total		**294,009**	**1,522**	**235**	**100,069**	**12,474**	**18,656**

		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	22,612	0	0	33,210	0	0
	Rating 5–8	12,639	0	0	34,857	353	0
Non-investment grade	Rating 9–15	473	0	0	28,952	3,205	0
Watch list	Rating 16–18	0	0	0	5,771	1,545	0
Default	Rating 19–20	0	0	65	0	0	257
Total		**35,725**	**0**	**65**	**102,790**	**5,103**	**257**

1) Loans and advances to customers also include the retail business, for which the stage is not derived based on the current rating but on the basis of negative criteria and 30 days past due status. Risk concentrations arise in the event of negative criteria or 30 days past due status. If one of these criteria is met, the customer is placed on the watch list. In contrast, the stage 1 share of the retail segment without significant deterioration in credit risk is largely allocated to “non-investment grade”.

Securities and investments	35,774	0	0	1
Off-balance sheet transactions	114,126	297	0	3
Total	**587,348**	**4,136**	**132**	**2,491**

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 2020

	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	295,460	167	0	69
Loans and advances to customers	129,375	17,402	127	16,164
Securities and investments	35,779	65	0	61
Off-balance sheet transactions	108,025	239	0	86
Total	**568,640**	**17,872**	**127**	**16,381**

1) Net carrying amount, excluding collateral and other credit enhancements

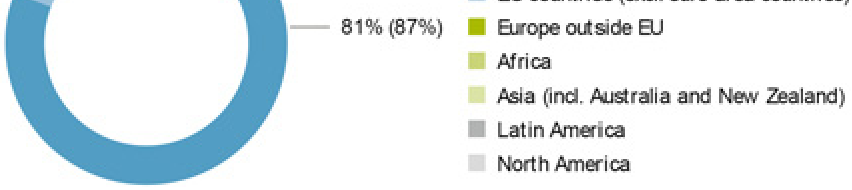
A large part of the personal collateral of the financial instruments classified as stage 3 comprises federal guarantees and credit insurance. The federal guarantee for the fully protected mandated transaction within the framework of the support measures for Greece in the approximate amount of EUR 15 billion is no longer included following a rating upgrade for Greece. Tangible collateral for financial instruments classified as stage 3 consists of aircraft and ship mortgages.

KfW Group did not take possession of any assets previously held as tangible collateral in 2021.

Portfolio structure

The interaction of the risks associated with the individual exposures in KfW Group's loan portfolio[4)] is assessed based on an internal portfolio model. Concentrations of individual borrowers or groups of borrowers give rise to a risk of major losses that could jeopardise KfW Group's existence. On the basis of the economic capital concept, the Risk Controlling department measures risk concentrations by individual borrower, sector and country. Risk concentrations are primarily reflected in the economic capital requirement. The results of these measurements form the main basis for managing the loan portfolio.

4) 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.

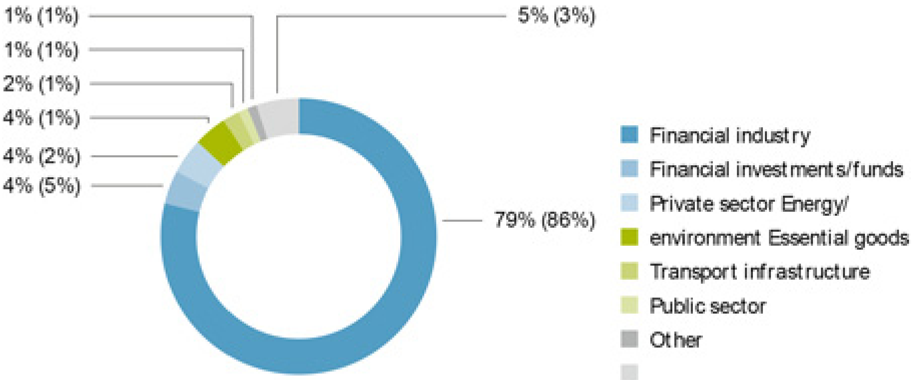


Regions

As of 31 December 2021, 89% of KfW Group's loan portfolio in terms of economic capital requirements was attributable to the euro area (31 Dec. 2020: 91%). The main driver behind the decline is the move to a new system for calculating risk indicators. This resulted in a reduction in economic capital requirements, in particular in Germany – above all in the on-lending business. Outside of Germany, new business, especially in the business sector Promotion of developing countries and emerging economies, has led to an increase in the economic capital requirement.

Economic capital requirement by sector

31 December 2021 (31 Dec. 2020)



Sectors

The significant share of overall capital required for credit risks attributable to the financial sector 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. Overall, the financial sector's share of the economic capital requirement has increased in absolute terms, while in relative terms, it has fallen to 79% (31 Dec. 2020: 86%). The model adjustments already mentioned in the "Overview of key indicators" section led to a decline in the economic capital requirement. The economic capital requirement for the private sector also increased, mainly due to the model adjustments.

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[5] by credit quality category. The higher proportion of investment grade exposure in total net exposure was primarily the result of new business, particularly in energy efficiency and renewable energy programmes. The share of watch list positions of 2.0% (2020: 2.9%) and the share of default positions of 1.0% (2020: 2.2%) have fallen.

Securities-based securitisations in KfW Group's portfolio

Securitisations had a par value of around EUR 6.1 billion as of 31 December 2021. 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 6.1 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. 2021	31 Dec. 2020
	%	%
Europe	99.9	99.8
World	0.0	0.0
North America	0.1	0.2
Africa	0.0	0.0
Asia	0.0	0.0

Exposure based on par values

	ABCP	Auto-ABS[1]	RMBS	Other securiti-sations	Total as of 31 Dec. 2021	Total as of 31 Dec. 2020
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	2,690	1,716	950	734	6,090	6,125
Non-investment grade	0	0	0	0	0	98
Watch list	0	0	0	0	0	0
Default	0	0	0	7	7	0
	2,690	**1,716**	**950**	**741**	**6,097**	**6,229**

1) Auto ABS are based on receivables from automotive financing agreements (included in "Other securitisations" as of 31 December 2020).

5) Net exposure is the economic loss that potentially occurs in the event of an economic or political default event.

– foreign currency risk and
– issuer-related spreads for securities (credit spread risk).

Market price risk within the group required a total of EUR 3.377 billion in economic capital as of 31 December 2021. This is EUR 0.312 billion lower than the previous year. The change is due first and foremost to the reduction in optional risk components (reduced interest risk due to floors on loans) in the interest risk. KfW Group market price risk breaks down as follows:

Economic capital requirement for market price risk

	31 Dec. 2021	31 Dec. 2020
	EUR in millions	EUR in millions
Interest risk[1]	**2,813**	**3,012**
Interest risk	2,734	3,022
Tenor basis spread risk	282	158
Cross-currency basis spread risk	631	377
Interest rate volatility risk	384	319
Currency risk	693	693
Credit spread risk	411	358
Diversification	–925	–693
Market price risk	**3,377**	**3,689**

1) Due to diversification effects in the interest risk, the risk sub-types do not add up to the total interest risk.

Value-at-risk approach

The economic capital requirement is calculated using a value-at-risk (“VaR”) calculation across the various types of market price risk using a uniform method. Historical simulation is used as the VaR model. Historical simulation is based on market data time series comprising the previous three years (751 trading days). The uniform holding period is twelve months, with time scaling based on a one-day holding period. In addition, scaling to the target quantile (99.9%) is carried out on the basis of a 97.5% quantile determined using historical simulation.

VaR indicators are determined for each of the following sub-types of market price risk: interest risk, tenor and cross-currency basis spread risks, currency risk, interest rate volatility risk and credit spread risk. The total VaR is also calculated, taking account of diversification effects between the aforementioned risk sub-types. The total VaR, interest risk, interest rate volatility risk, credit spread risk and currency risk are limited.

Interest rate volatility risk

The interest rate volatility risk is based on changes in the market values of modelled interest rate options (e.g. termination rights or 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 Value at Risk 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 capital requirement for interest rate volatility risk was EUR 384 million as of 31 December 2021.

Currency risk

The economic capital requirement for currency positions is calculated in the same way as for interest risk, using historical simulation. The capital requirement for currency risk remained unchanged at EUR 693 million as of 31 December 2021.

Credit spread risk

Risk measurement is carried out for the securities portfolio. The economic capital requirement for this risk type is calculated in the same way as for other risk types, using historical simulation. The economic capital requirement for credit spread risk as of 31 December 2021 was EUR 411 million. Credit spread risk increased by EUR 53 million year on year.

Stress testing

In addition to the calculation of the ECAP requirement based on the VaR model of historical simulation, the effects of extreme market situations (scenarios) on the present value and VaR target variables are determined by means of stress tests. The new regulatory requirements (EBA GL on IRRBB) for present value stress testing (interest rate risk in the banking book – IRRBB) are also met.

LIQUIDITY RISK

Liquidity risk is the risk of a lack of liquidity on the part of an institution or market, or of more expensive funding. Liquidity risk thus comprises insolvency risk, market liquidity risk and funding risk.

- Insolvency risk: Risk that payment obligations cannot be met, cannot be met on time or cannot be met in full.
- Market liquidity risk: Risk of (value) losses if assets cannot be traded on the market due to lack of liquidity, cannot be traded in due time, in full or in sufficient quantity or cannot be traded at prevailing market conditions.
- Funding risk: Risk of lower income due to more expensive funding (liabilities) that cannot be passed on to borrowers.

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 and the utilisation threshold under Article 4 of the KfW Law. In addition, liquidity gaps are limited based on business already concluded, available liquidity potential and the maturity gap between inflows and outflows.

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.

Parallel to the above approach, KfW Group also determines the available liquidity potential, which largely consists of KfW's account with the Bundesbank, repurchase agreement assets, the liquidity portfolio and the volume of commercial paper that is regularly placeable on the market. The available liquidity potential is subjected to stress analysis in the same way as the other cash flow components. The ratio of cumulative required liquidity to the cumulative available liquidity potential is calculated for each scenario. This figure may not exceed the value of 1 in any scenario for any period. The prescribed horizon in the normal case scenario is twelve months, in the stress case six months, and in the two worst case scenarios, three months. The scenario assumptions are validated on an annual basis.

The indicators are calculated and reported to the Market Price Risk Committee on a monthly basis. The following table presents the risk indicators for the scenarios as of 31 December 2021:

KfW liquidity risk indicators

	31 Dec. 2021	31 Dec. 2020
	Indicator	Indicator
Normal case	0.20	0.45
Stress case	0.28	0.49
Worst case (institution-specific)	0.18	0.33
Worst case	0.38	0.55

The internal liquidity risk indicators remained below the internal limit of 1 throughout the year.

KfW made further disbursements under special programmes for coronavirus aid on behalf of the Federal Government in 2021. Compared to the previous year, however, the volume of these disbursements was much lower and they had very little effect on the liquidity situation and liquidity risk measurement. These aspects were reflected in the liquidity risk indicators. This means that the coronavirus pandemic did not have a significant impact on the liquidity situation in 2021 either.

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 70 billion. While at EUR 82.6 billion, the nominal volume issued under this programme was lower in 2021 than in the previous year (EUR 96.6 billion), the average maturity of the issues was higher at 160 days (2020: 131 days). The volume outstanding on the reporting date of 31 December 2021 was EUR 37.4 billion. The programme volume of the U.S. Commercial Paper ("USCP") programme came to USD 20 billion in 2021. 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 higher than in the previous year (USD 59.9 billion) at USD 62.3 billion. The average maturity of the issues declined by two days to 66 days. The outstanding volume amounted to USD 10.3 billion as of 31 December 2021. KfW participated in the ECB's targeted longer-term refinancing operations (TLTRO) in 2021 as well, raising an additional EUR 1.4 billion in March 2021. The TLTRO funds from 2020 in an amount of EUR 13.4 billion were repaid to the ECB in December 2021.

OPERATIONAL RISK AND BUSINESS CONTINUITY MANAGEMENT

In accordance with Article 4 (1) No. 52 of the CRR, KfW Group defines operational risk as the risk of loss resulting 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. The following sub-types of operational risk are also generally defined and monitored by specialised second line of defence units: information security risk, compliance risk, legal risk, business interruption risk, payment transaction risk, service provider risk (including outsourcing risk), secondary model risk[6)], personnel risk, personal and physical security risk, conduct risk and operational risk from adjustment processes.

KfW Group's organisational structure provides for a two-tier system comprising decentralised and centralised units liaising with the Operational Risk Committee. Management of risks is decentralised and performed within the business sectors and subsidiaries by the respective directors or managing directors, 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.

The aim of management and control of operational risk and business continuity management is the proactive identification and averting of potential losses for KfW Group, i.e. to make emergencies and crises manageable and to secure KfW Group's structural ability to remain in operation even in the event of loss of key resources.

6) Primary model risks are mapped in the original risk type (e.g. credit or market price risk).

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.

Losses caused by the COVID-19 pandemic that relate to operational risks are recorded bank-wide as a collective event; in addition, potential effects of the pandemic are evaluated as part of the risk assessments to ensure their inclusion in the calculation of the economic capital requirement for OpRisk.

The risk assessments were completed as planned in 2021. Updating and recalculation of the scenarios led to an increase in the ECAP for operational risks (of approx. EUR 55 million).

Business continuity management is implemented if a business interruption occurs due to internal or external events. This is an integrated management process which covers the four key outage and loss scenarios: site outages (building or infrastructure), IT system outages, staff outages and service provider outages. Business continuity management incorporates preventative components (emergency preparedness) and reactive components (emergency and crisis management).

For the purpose of business continuity management, business processes are analysed and categorised based on how critical they are, and the supporting resources for each case examined accordingly. Identifying critical business processes and their dependency on supporting resources forms the basis for effective business continuity management. Individual measures are developed for these business processes and their supporting resources, in order to be able to guarantee the required availability and reduce business risks. These include emergency workstations, emergency plans, communication tools and alerts/alarms. KfW Group’s crisis team takes responsibility for overall crisis management if necessary. It practises emergency and crisis organisation teamwork in regular crisis team tests.

KfW has set up a coronavirus task force to coordinate measures addressing the pandemic. Regular meetings were held to define various measures aimed at counteracting staff outages with a negative impact on KfW’s business activities, and their effectiveness was reviewed on an ongoing basis following their implementation. In order to keep business operations up and running, the measures taken included introducing split operations for critical functions (i.e. the permanent separation in terms of work location of individuals responsible for ensuring the same work process) and increasing the IT capacities required to allow employees to work from home on a large scale within a short space of time, while adhering to the applicable occupational health and safety regulations in the process.

guidelines. Specific rules tailored to certain segments of equity investments are also set out in portfolio guidelines, working instructions or risk guidelines. Risk measurement is performed at an individual loan commitment level for operational level equity investments in the same way as for credit risk using models specified for this purpose. Equity investment portfolio risks are reported separately in a dedicated report as well as quarterly in the 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 accordance with 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.

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.

Reputational risk

Reputational risk is the risk that the perception of the group from the point of view of the relevant internal and external stakeholders will deteriorate for the long term with a negative impact on KfW Group. This negative impact could lead to a decrease in KfW Group's net assets, earnings or liquidity (e.g. decline in new business) or may be of a non-monetary nature (e.g. difficulty in recruiting new staff). Reputational risk may arise as a consequence of other types of risk, or independently.

achieved with the launch of the special programmes for coronavirus aid remained stable for KfW throughout 2021.

Project risk

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/building blocks). Managing project risk is part of project/building block management in both the project/building block planning and execution stages.

The internal “Planning, Control and Project Management” department supports the projects and building blocks in fulfilling their objectives and achieving their targets. The “Planning, Control and Project Management” department provides scaled specifications and support services according to project and building block size. As the central authority for overall portfolio management, it provides the methodological framework for implementation of projects and building blocks within the group and is responsible for the evaluation and presentation of the risk situation of the overall portfolio for a specified number of projects and building blocks. Compliance with this framework and these requirements by the aforementioned projects and building blocks is also monitored and supported.

Regulatory risk

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 to be addressed 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 as part of capital planning and in cooperation with the owners. In this context, potential negative effects arising from the finalisation of the capital adequacy requirements under Basel III are analysed and assessed, in particular.

Moreover, KfW actively keeps track of changes in its legal environment, which makes it possible to identify new regulatory requirements and to determine any necessary action.

respective company management holds overall responsibility. Design and implementation at the different corporate levels are the responsibility of the relevant managers according to the organisational structure.

In accordance with the COSO model, the ICS consists of the five following interrelated components: control environment, risk assessment, control activities, information/communication and monitoring/auditing. These components extend to all KfW Group's organisational entities, functions and processes.

The control environment is the environment within which KfW Group introduces and applies rules. Risk assessment includes the identification, analysis and evaluation of risks that result from implementing corporate strategy. Control activities are aimed at achieving 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.

7) See Section 25a (1) no. 1 KWG, MaRisk AT 4.3, and Sections 289 (5), 315 (2) no. 5, 324, and 264 d HGB
8) COSO = Committee of Sponsoring Organizations of the Treadway Commission

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 (“NFRs”) by means of key indicators (e.g. for money laundering, other criminal activities, financial sanctions, WPC and data protection) in line with the central requirements for operational risk management.

Within the scope of its duties as second line of defence, Compliance is responsible for and authorised to implement statutory or regulatory requirements and Executive Board decisions, to analyse individual cases/irregularities, to coordinate necessary measures and, where applicable, to initiate ad hoc measures to limit damage. In relation to all other areas of the group, the Compliance department performs its tasks autonomously and independently and is not subject to any instructions, in particular with regard to analysis (including evaluation of results), monitoring activities, defining and implementing rules and measures, and reporting. In order to perform its duties, Compliance has a complete and unrestricted right to information, inspection and access to all premises, documents, records, audio recordings and systems.

As in the previous year, KfW’s business activities relating to the COVID-19 pandemic as part of the KfW Special Programme did not result in any sustained increase in the overall risk level in the relevant compliance risk types (money laundering/terrorist financing, other criminal activities). This is due to the structural use of existing implementation channels (on-lending) and products (promotional loans).

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. Audits of key second line functions, specifically also in the compliance environment, were also part of the 2021 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 2021 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 and incorporates the audit results of the subsidiaries’ internal auditing departments in group-wide internal audit reporting.

previous year, but above the average for 2011–2020. This pattern is forecast for industrialised nations as well as for developing countries and emerging economies (see table on gross domestic product at constant prices, year-on-year change). KfW also assumes, as does the IMF, that real GDP for emerging economies and low-income countries in 2022 will be below the forecast for 2022 issued in January 2020. KfW agrees with the IMF's assessment that country-specific prospects are primarily determined by differences in both access to COVID vaccines and the extent of economic policy support. The emergence of the Omicron coronavirus variant makes it clear that economic and health impacts of the COVID-19 pandemic will continue to be a factor in global GDP growth in 2022.

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

	2021 estimate in %	2022 forecast in %	2011–2020 average in %
Global economy*	5.9	4.4	2.8
Industrialised countries*	5.0	3.7	1.2
Developing countries and emerging economies*	6.5	4.8	4.1

* 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. Average calculated as the geometric mean of annual growth rates.

According to the IMF, there are major uncertainties regarding the further development of the pandemic, inflation and the global financial environment. The downside risks, which, if they materialise, would result in lower than forecast global real GDP growth in 2022, are clearly dominating. They include (a) the emergence of more transmissible and deadlier SARS-CoV-2 variants that could reinforce the pandemic's spread and intensity; (b) pandemic-induced supply-demand mismatches persisting longer than expected, which could also lead to a faster-than-anticipated monetary normalisation in industrialised countries and a sudden tightening of global financial conditions due to sustained price pressures; (c) an increase in financial market volatility, for example, due to sudden and rapid shifts in investor sentiment. In addition, greater social unrest, more adverse climate shocks, cyberattacks involving critical infrastructure and the escalation of geopolitical tensions in trade and technology, notably between China and the USA, pose further negative risks. A more favourable development of global real GDP than anticipated is conceivable if, in particular, safe and effective vaccines against COVID-19 can be produced more quickly and in greater volumes on a sufficient scale worldwide, or if there is a productivity growth spurt after the pandemic has accelerated the pace of structural change in many economic sectors towards more automation and transformation of workplaces.

For the **euro area**, KfW expects price-adjusted GDP to grow by 3.6% in 2022. This means that the anticipated growth rate will decrease by 1.6 percentage points year on year, but still exceed the average of 2011–2020 many times over. If this projection proves accurate, total economic output will return to above the pre-pandemic level of price-adjusted GDP, i.e. that of 2019 (see table on gross domestic product at constant prices, year-on-year change). In line with the European Commission, KfW assumes that COVID-19 will generally not cause any major disruptions to overall economic activity in the euro area in 2022 due to the vaccination rates achieved and the fact that households and businesses have adjusted to the remaining pandemic-induced restrictions, that supply chain bottlenecks

GDP in 2022 is therefore expected to return to a higher level than in 2019, the year before the outbreak of the coronavirus pandemic (see table on gross domestic product at constant prices, year-on-year change). In view of the forecasts for the global economy described above and assuming the easing of supply chain bottlenecks for raw materials and intermediate products in the course of 2022, KfW expects that, among the base factors determining GDP, gross value added in the manufacturing sector will grow in 2022, thereby bolstering the increase in 2022 price-adjusted GDP. Price-adjusted gross value added is also expected to grow in 2022 in the retail, transport and hospitality sector as well as the other services sector, both of which have had to deal with health policy-related restrictions imposed on their business operations since the outbreak of the COVID pandemic in 2020. Among the expenditure components of GDP, KfW expects gross fixed capital formation in machinery and equipment and private consumption expenditure to achieve the greatest price-adjusted increases in 2022. The expected price-adjusted private consumption expenditure is based on the assumption that the average number of persons in employment located in Germany will increase in 2022 compared to the previous year and that the seven-day COVID case rate in Germany will again decline in the course of 2022 compared to the winter half-year 2021/2022.

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

	2021	2022 forecast	2011–2020 average	2022 forecast
	in %	in %	in %	2019 index =
Euro area	5.2	3.6	0.5	102
Germany	2.8	3.2	1.1	101
USA	5.7	3.8	1.6	106

Should the forecast easing of supply chain bottlenecks fail to materialise, financing conditions unexpectedly improve and restrictions be imposed on business activities again due to new coronavirus mutations, Germany could post a price-adjusted GDP growth rate below that predicted by KfW for 2022. A higher price-adjusted GDP growth rate than predicted by KfW for 2022 could primarily result from an unexpectedly rapid containment of new COVID infections and from supply chain bottlenecks easing more quickly than anticipated. Russia’s attack on Ukraine on 24 February 2022 has further increased the uncertainty of our forecast. The economic impact depends on the further escalation or de-escalation steps of the military conflict, the sanctions ultimately imposed against Russia and that country’s countermeasures. The effect on German and on European economic output is very difficult to assess at present. Anything is still possible – from another recession to the growth forecast in this report of 3.2%.

in 2022 and exceed pre-crisis levels. The ECB regards the current elevated inflation rates as largely temporary and expects a decline in monthly reported inflation rates in the course of 2022. KfW expects a continued gradual increase in EUR swap rates in 2022. On average, the yield curve (the spread between ten and two-year swap rates) is expected to steepen in 2022.

KfW also expects a further rise in interest rates for the USA in 2022 based on continued economic recovery and monetary tightening. On average, KfW expects the yield curve (the spread between ten and two-year USD swap rates) to steepen clearly in 2022. The US Federal Reserve is expected to taper its net purchases of securities to zero and to start interest hikes in the course of 2022.

New business projections

Overview

As the central control variable for its net assets, KfW Group projects new business volume of EUR 87.1 billion for 2022. For the business sectors Export and project finance, KfW Development Bank and DEG, this reflects continued promotional business at the level of 2021, as well as the high demand for long-term loans in the domestic promotional business. These new business projections are subject to change due to the persistent pandemic, its economic consequences and any potential political measures, as well as new or changed priority areas for Germany’s new Federal Government. For example, the option of applying for KfW coronavirus aid was extended until 30 April 2022 (previously 31 December 2021) at short notice, and it was not possible to consider the potential demand for these funds in the projected figures. This dynamic development means that KfW can only make estimates, including with respect to any substitution effects on other funding programmes, within a broad range. For this, the further development of the pandemic, its economic consequences and any related political measures will be decisive. KfW’s internal forecast for all domestic coronavirus aid programmes in 2022 currently estimates a range between EUR 1.6 and 14.5 billion. In light of the current situation, this estimate is subject to great uncertainty. In any event, KfW will fulfil its mandate and continue to support the German economy and society, especially during the pandemic. Given that the procedures for adjusting the actual figures, if necessary, are established the same way as in 2021, there should not be any obstacles.

Commitments under the Federal Funding for Efficient Buildings (BEG) were suspended on 23 January 2022 at 12 p.m. due to the inordinate number of applications that resulted in the earmarked budgetary resources being exhausted ahead of schedule. The Federal Ministries for Economic Affairs and Climate Action, for Housing, Urban Development and Construction, and of Finance agreed on 1 February 2022 to check and approve all applications eligible for promotion received before the suspension date in due course and according to the programme criteria valid up to that time. Since 22 February 2022, it is possible to submit new applications for promotion of refurbishment under the Federal Funding for Efficient Buildings programme. In contrast, the funding for new builds is to be restructured for the future. KfW is in close contact with the Federal Ministry for Economic Affairs and Climate Action as regards this issue.

borrower interest rates to 0% (depending on the capital market interest rate). In addition, since the beginning of 2022, corporate and start-up financing has been bundled in the new ERP promotional loan programme, with a view to making the promotional offering in this segment even simpler and more customer-friendly.

Favoured by the persistently low interest rates, the Private Clients business segment continues to be characterised by a high level of willingness to invest, particularly in the energy-efficient housing area. A significant decline in demand for the Federal Government promotion of energy-efficient buildings ("BEG") products is not expected, despite the Efficiency House 55 standards being discontinued. Further impetus from the new Federal Government to boost demand is conceivable, particularly in housing refurbishment, which is highly relevant to climate protection. Due to the sustained high demand, educational funding, which is also anchored in the Private Clients business segment, is expected to be offered at the same level as the previous year.

The business sector **Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients)** anticipates strong demand for loans both in municipal investments and in customised finance of companies, banks and promotional institutions of the federal states. This demand is also driven by the new flexibility generated by passing on negative funding rates to financing partners. The business sector plans promotion with a total new business volume of EUR 9.2 billion in 2022.

As regards customised financing for companies, the impact of the coronavirus pandemic on corporate willingness and capacity to take on debt for new investments cannot yet be definitively predicted. However, investment demand is again expected to be robust in 2022.

The demand for municipal investment remains high from the perspective of the Municipal and Social Infrastructure segment given the central role of municipalities and municipal enterprises in meeting the challenges posed by climate change, the need for digitalisation and the COVID-19 pandemic, as well as the importance of climate resilience brought to light by the catastrophic floods of July 2021. However, the strained budget and debt situation of some municipalities, combined with limited capacities in the construction industry and administration, continue to restrict their ability to invest. The business sector expects increasing demand for promotional funds overall. Individual financing with financing partners in Germany and Europe and global funding of promotional institutions of the German federal states continue to be characterised by a sound refinancing situation at partner banks and the current low interest rates combined with the ECB's expansionary monetary policy. Demand for global loans to support leasing investments has improved again after a temporary period of pandemic-induced restraint. As regards funding for export loans, demand is currently stable but dependent on the development of the export economy after the COVID-19 pandemic. The persistent low-interest environment represents a permanent challenge to maintaining the attractiveness of products with regard to global loans for Europe and global funding of promotional institutions of the German federal states, as well as for customised corporate finance.

The first three components of the Future Fund ("*Zukunftsfonds*") initiated by the Federal Government with a volume of EUR 10 billion until the end of 2030 were launched in summer 2021. The aim of the Future Fund is to use its various components to provide more financing for the growth of young and innovative technology companies in particular. The Future Fund's activity is expected to generate a sizable increase in commitments made on a trust basis for the Federal Government, from EUR 0.2 billion in financial year 2021 to a projected EUR 1.3 billion in 2022.

Financial markets

The business sector **Financial markets** plans new investments of EUR 0.4 billion in its green bond portfolio for financial year 2022 in order to stabilise its volume within the target corridor of EUR 2.0 to 2.5 billion, taking into account maturing bonds.

International business

Despite the globally deteriorating economic outlook, there are still regions with growth potential in Europe, as well as among developing countries and emerging markets relevant for the **Export and project finance** business sector. Economic stimulus programmes can also generate stimulus for financing demand (e.g. PPPs), particularly in the area of infrastructure investments and projects relating to the transformation to a climate-neutral economy. Health risks (COVID-19) and geopolitical risks remain relevant to the business sector Export and project finance, and are currently evident primarily through lower country ratings. Similar to protectionist efforts, these risks could have a noticeable adverse effect on world trade and thus on investment and financing opportunities. On the other hand, targeted regionalisation of supply chains in response to the pandemic could open up opportunities for lending. From today's perspective, despite the uncertainties, the post-COVID era is expected to offer sufficient potential for German and European exporters and companies that invest in their competitiveness. Financing approaches can be derived from this for the business sector Export and project finance. Export and project finance expects a commitment volume of EUR 14.6 billion for 2022.

KfW has decided to split the former business sector **Promotion of developing countries and emerging economies** with its two business areas KfW Development Bank and Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG) into two separate business sectors from 2022.

The **KfW Development Bank** business sector is expected to experience continued dynamic business growth in 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 in 2022. In view of the ongoing COVID-19 pandemic, support to partner countries through rapid and efficient implementation of the coronavirus immediate assistance programmes will also play a role in 2022. In this regard, the international donor community is increasingly focusing on sustainable reconstruction, which is being further developed in concepts such as "Build Back Better" and "Green, Resilient and Inclusive Development" ("GRID"). In addition, issues such as cooperation with Africa, alleviating poverty, the mitigation of crises and causes of displacement, as well as climate protection and the protection of other global goods are high on the political agenda in Germany and EU. The German Federal Government mobilisation of private capital, greater visibility for European development cooperation and closer cooperation between European promotional institutions. In light of geographical expansion and the increase in funding for guarantees from the expanded European Fund for Sustainable Development Plus (EFSD+), cooperation with the EU will gain in importance in the coming years. Against the backdrop of planned projects of the German Federal Government and international institutions, KfW Development Bank currently expects a new business volume of EUR 11.6 billion for 2022.

The **DEG** subsidiary is assigned to the DEG business sector of the same name. Economic development in developing countries and emerging markets relevant for DEG's activities is expected to be particularly affected by the coronavirus pandemic and its economic impact globally and in DEG's partner regions in 2022. The aim is to continue 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). DEG aims to achieve net impact contributions through its financing, including through transformative support for its customers and investments in high-impact sectors. Specific promotional programmes, including with respect to environmental and social management, climate and resource protection, and training, support the companies financed by DEG in implementing international good practices.

The current financing and promotional offerings for German companies have been expanded to support the German economy in developing countries and emerging economies, particularly in Africa. To this end, German businesses have access not only to the German Desk service, but also to the AfricaConnect financing product, designed to promote investment in Africa through risk assumption and provision of attractive terms under the Federal Government's Development Investment Fund ("EIF").

In order to successfully develop its business model with a focus on impact/climate and in view of the market situation still characterised by COVID-related effects, DEG has firmly set its new business framework at a medium level for the next three years, after which it projects a return to moderate growth. DEG expects a new commitment volume of EUR 1.6 billion for financial year 2022.

Funding projections

KfW issues bonds worldwide to **fund** its promotional activities. It issues these bonds in a large number of currencies and with differing maturities, thereby addressing a variety of target groups. Thanks 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 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. Due to the high demand for Green Bonds – Made by KfW, their share of the total issue volume is expected to continue to gain in importance. KfW currently anticipates issuing liquid large-volume green bonds in various currencies with a total volume of at least EUR 10 billion in 2022.

The total issue volume in financial year 2022 is projected to be EUR 80 to 85 billion.

implementation of promotional programmes in Germany on behalf of the Federal Government as well as remuneration based on the General Agreement on Financial Cooperation.

Administrative expense is projected to increase to EUR 1.5 billion in 2022. This includes the launch of company policy projects such as processing and development of promotion in domestic business, further development of the business sectors Export and project finance, and DEG, along with modernisation, digitalisation and regulation projects.

Overall, the operating result before valuation is expected to decline year on year. The cost-income ratio ("CIR") before promotional expense is budgeted at 51% for 2022.

At EUR 0.5 billion, the expected standard risk costs for 2022 are EUR 0.1 billion below the projected risk provisions required for 2021. However, risk provisions for the lending business for 2022 remain dependent on the further course of the coronavirus pandemic. With the valuation result in 2021 characterised in particular by impairment reversals in the equity investment portfolio due to economic easing after the pandemic year 2020, projections for 2022 assume that the positive valuation result/net other operating result in the amount of around EUR 0.2 billion will stabilise. The continued uncertain situation due to the COVID-19 pandemic may lead to significant positive or negative deviations in the projected operating result after valuation.

KfW expects promotional expense of EUR 0.4 billion in 2022. Realisation of a year-on-year increase of EUR 0.2 billion compared to 2021 promotional expense will depend on market conditions in 2022.

Overall conclusion

In light of the economic recovery and expected demand, KfW projects new business volume of EUR 87.1 billion and consolidated profit of EUR 0.9 billion for 2022.

KfW expects that the latest developments in the Russia-Ukraine conflict, with Russia's attack on Ukraine on 24 February 2022, will have a negative impact on German and global economic output in 2022. This may therefore adversely affect achievement of our objectives set for financial year 2022. In KfW's current assessment, the crisis particularly affects KfW's loan and equity investment exposures in Ukraine and Russia. KfW's exposure is largely covered by export and credit insurance and by guarantees from the Federal Republic of Germany. Indirect effects of the conflict can also be expected on the group's business and its earnings position as well. For instance, there may be a negative impact on the energy and commodity markets, and consequences of being affected by the sanctions imposed. It is not really possible to give a precise forecast of the overall impact on the net assets, financial and earnings position at present, given the dynamic development, particularly concerning uncertain further escalation or de-escalation steps of the military conflict. KfW will continue to closely monitor the development of the conflict and the consequences for KfW's business.

Financial statements	2021 EUR in millions	2020 EUR in millions
Volume of business	667,398	643,716
Total assets	562,355	543,320
Bonds issued	443,617	412,754
Own funds	29,816	28,431
Net interest income (before promotional expense)	2,068	2,050
Net commission income (before promotional expense)	493	460
Administrative expense (before promotional expense)	1,130	1,034
Promotional expense	188	88
Profit for the year	1,784	1,599

Development of KfW

KfW's earnings in financial year 2021 improved compared to the prior-year level. Net interest income before promotional expense increased compared to the previous year despite the persistent low interest rates. Net commission income before promotional expense was higher than in the previous year as a result of the remuneration for the Energy-efficient Construction and Refurbishment programmes, which were in high demand. The cost-income ratio (before promotional expense) increased to 44.1% (2020: 41.2%) due to higher administrative expenses. KfW strengthened its capital base due to its earnings position, with a profit for the year of EUR 1,784 million.

KfW's total assets increased by EUR 19.0 billion to EUR 562.4 billion in financial year 2021, with business volume increasing from EUR 643.7 billion to EUR 667.4 billion.

KfW's promotional business volume amounted to EUR 94.3 billion, lower than the Group's promotional business volume of EUR 107.0 billion. The difference relates to the international business and results from DEG and IPEX Export and project finance.

Development of earnings position

KfW's operating result before valuation and promotional expense was EUR 1,392 million, which was lower (by EUR 238 million) than the previous year's figure of EUR 1,630 million.

General administrative expenses (before promotional expense)	1,130	14	1,144	General administrative expenses incl. depreciation, amortisation and impairments on property, plant and equipment and intangible assets
Other operating income and expenses (before promotional expense)	–39	–18	–57	Other operating income and expenses
Operating result (before risk provisions/valuation/promotional expense)	**1,392**	**–188**	**1,204**	**Operating result (before risk provisions/valuation)**
Valuation result	32	–1	31	Income from reversals of write-downs of equity investments, shares in affiliated companies and securities held as fixed assets
Risk provisions for lending business	113	1	113	Income from the reversal of impairment losses on receivables and certain securities and the reversal of provisions for loan losses
Net result from transfer agreements	41	0	41	Income from profit pooling, profit and loss transfer and partial profit transfer agreements
Reversal of the fund for general banking risks	400	0	400	Reversal of the fund for general banking risks
Profit/loss from operating activities (before promotional expense)	**1,978**	**–188**	**1,790**	**Profit/loss from operating activities**
Promotional expense	188	–188	0	–
Taxes on income	4	0	4	Taxes on income
Other taxes	2	0	2	Other taxes
Profit for the year	**1,784**	**0**	**1,784**	**Profit for the year**

General administrative expenses (before promotional expense)	1,034	12	1,046	General administrative expenses incl. depreciation, amortisation and impairments on property, plant and equipment and intangible assets
Other operating income and expenses (before promotional expense)	155	–12	143	Other operating income and expenses
Operating result (before risk provisions/valuation/promotional expense)	**1,630**	**–88**	**1,542**	**Operating result (before risk provisions/valuation)**
Valuation result	–10	1	–9	Impairments of and valuation allowances on equity investments, shares in affiliated companies and securities held as fixed assets
Risk provisions for lending business	44	–1	43	Income from the reversal of impairment losses on receivables and certain securities and the reversal of provisions for loan losses
Net result from transfer agreements	31	0	31	Income from profit pooling, profit and loss transfer and partial profit transfer agreements
Profit/loss from operating activities (before promotional expense)	**1,695**	**–88**	**1,607**	**Profit/loss from operating activities**
Promotional expense	88	–88	0	–
Taxes on income	6	0	6	Taxes on income
Other taxes	2	0	2	Other taxes
Profit for the year	**1,599**	**0**	**1,599**	**Profit for the year**

At EUR 2,068 million, **net interest income (before promotional expense)** was higher than in the previous year (EUR 2,050 million). The increase was due to lower interest income in the lending and money market business that was more than offset by a reduction in interest expense.

Net commission income (before promotional expense) of EUR 493 million was EUR 33 million above the previous year’s level of EUR 460 million. The increase is primarily due to the remuneration for the Energy-efficient Construction and Refurbishment programme and its successor, Federal Funding for Efficient Buildings, totalling EUR 119 million (2020: EUR 83 million). In addition, KfW recorded a EUR 28 million increase in commission income from the programmes for charging stations for electric cars, to EUR 29 million. Commission income generated by the administration of German Financial Cooperation (“FC”) in the business sector Promotion of developing countries and emerging economies increased to EUR 229 million (2020: EUR 217 million). Commission income from the KfW Special Programme for coronavirus aid decreased to EUR 61 million (2020: EUR 99 million), with commission income from the “Baukindergeld” scheme dropping to EUR 48 million (2020: EUR 67 million). The remuneration from the Federal Government was offset by related administrative expenses.

Administrative expense (before promotional expense) increased by EUR 96 million to EUR 1,130 million, largely due to higher expenses for wages and salaries, as well as higher costs for external service provision because of the growth in the change portfolio.

income from the successful recovery of loans previously written off. The net reversal of general valuation allowances was due to the improved macroeconomic outlook. There was a decline in specific valuation allowances and specific provisions for the lending business from EUR 602 million to EUR 503 million as well as a decline in the general valuation allowances and general provisions for the lending business from EUR 579 million to EUR 532 million. Non-performing loans in the amount of EUR 121 million in connection with specific valuation allowances were written off in financial year 2021 (2020: EUR 75 million).

KfW's domestic **promotional expense**, which has a negative impact on the its earnings position, amounted to EUR 188 million in 2021 compared to EUR 88 million in 2020. The key component of KfW's promotional expense is interest rate reductions of EUR 144 million, granted during the first fixed interest rate period in addition to passing on its favourable refinancing conditions. Moreover, promotional expenses reported in net commission income and administrative expense were incurred in the amount of EUR 26 million (2020: EUR 23 million). This spending was aimed at, among other things, the sale of KfW's promotional products. Other operating expenses include EUR 18 million (2020: EUR 12 million) in promotional grants awarded as a supplement to the lending business as a promotional expense.

Income from profit pooling, profit and loss transfer and partial profit transfer agreements includes interest on the silent contribution to KfW IPEX-Bank GmbH of EUR 15 million and KfW Capital GmbH profits transferred of EUR 26 million.

The partial reversal of the **fund for general banking risks** in the amount of EUR 400 million contributed positively to the overall result.

Financial year 2021 closed with **profit for the period** of EUR 1,784 million (2020: EUR 1,599 million), which was fully allocated to retained earnings.

Development of net assets

KfW saw both its total assets and its volume of business increase in financial year 2021.

Volume of receivables

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Loans and advances to banks	334,064	323,153
Loans and advances to customers	110,489	111,362
Loans held in trust	10,561	10,799
Contingent liabilities from financial guarantees	711	667
Irrevocable loan commitments	104,332	99,729
Total	**560,157**	**545,711**

Total bonds and other fixed-income securities increased by EUR 1.3 billion to EUR 39.9 billion (2020: EUR 38.6 billion). Holdings of repurchased own issues also climbed from EUR 3.7 billion in 2020 to EUR 3.9 billion. This was equivalent to 1.0% of bonds issued.

At a total amount of EUR 36.0 billion, holdings of securities of other issuers, which make up 90.2% of the total holdings of all bonds and other fixed-income securities, slightly exceeded the previous year's level of EUR 34.9 billion, by EUR 1.1 billion. Of the securities from other issuers, 76.4% is eligible as collateral for funding operations with the European Central Bank (ECB).

In addition to the Treasury securities portfolios, KfW holds asset backed securities (ABS) with a carrying amount of EUR 6.1 billion, (2020: EUR 6.3 billion), related to its securitisation and SME finance activities. Potential risks are sufficiently addressed by appropriate risk provisioning.

The value of shares in affiliated companies amounted to EUR 3.8 billion (2020: EUR 3.7 billion). KfW's assets held in trust rose by EUR 1.1 billion to EUR 18.3 billion (2020: EUR 17.2 billion).

Development of financial position

In 2021, KfW raised EUR 82.6 billion in the capital markets to fund its business activities (2020: EUR 66.4 billion). A total of 211 bonds were issued in 15 currencies. The 37 Green Bond transactions (including 15 top-ups) with a volume of EUR 16.2 billion made a 19.6% contribution to funding.

Borrowings increased by EUR 19.1 billion to EUR 502.8 billion.

Borrowings

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Federal Republic of Germany		
– ERP Special Fund	138	216
– Federal budget	4,343	5,077
– Economic Stabilisation Fund (WSF)	35,400	38,000
	39,881	**43,294**
Other lenders	4,006	3,681
Liabilities to customers	**43,886**	**46,974**
Liabilities to banks	**15,271**	**23,941**
Bonds issued	5,553	16,825
Bearer securities (incl. commercial paper)	436,525	393,925
Accrued interest and interest payable	1,539	2,004
Bonds and notes issued	**443,617**	**412,754**
Total	**502,774**	**483,669**

The share of funds from banks and customers (excluding federal budget funds) decreased slightly year on year to 3.8% (2020: 5.7%). This includes cash collateral received primarily to reduce counterparty risk from the derivatives business in the amount of EUR 8.8 billion (2020: EUR 4.8 billion). Liabilities to banks included the TLTRO III transactions amounting to EUR 1.4 billion (2020: EUR 13.4 billion).

Balances with central banks fell slightly by EUR 1.7 billion to EUR 42.4 billion (2020: EUR 44.2 billion).

KfW's **own funds** amounted to EUR 29.8 billion as of 31 December 2021, up 4.9% compared to the previous year. This increase was exclusively due to the net profit of EUR 1,784 million allocated to retained earnings. Part of the fund for general banking risks was reversed and it now amounts to EUR 0.2 billion (2020: EUR 0.6 billion).

Own funds

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Subscribed capital	3,750	3,750
Uncalled contributions outstanding	–450	–450
Capital reserve	8,447	8,447
Reserve from the ERP Special Fund	1,191	1,191
Retained earnings		
a) Statutory reserve under Article 10 (2) KfW Law	1,875	1,875
b) Special reserve under Article 10 (3) KfW Law	14,755	12,971
c) Statutory reserve under Section 17 (4) D-Mark Balance Sheet Act[1]	48	48
Fund for general banking risks under Section 340g HGB	200	600
Total	**29,816**	**28,431**

1) To be adjusted by the special loss account shown on the assets side in accordance with Section 17 (4) of the D-Mark Balance Sheet Act (EUR 26 million).

Non-financial statements

Information on the “Combined non-financial statements of KfW as the parent company and of KfW Group” can be found in the separate Global Reporting Initiative (GRI) standard report of the 2021 Sustainability report. This can be accessed online at:

https://www.kfw.de/microsites/Microsite/nachhaltigkeitsbericht.kfw.de/downloads/KfW_Sustainability-Report_2021.pdf

Consolidated financial statements

	Notes	2021 EUR in millions	2020 EUR in millions
Interest income from the effective interest method		615	1,876
Other interest income		446	609
Interest income, total	(21)	**1,061**	**2,485**
Interest expense	(21)	–1,325	–62
Net interest income		**2,386**	**2,547**
Net gains/losses from risk provisions[1)]	(7), (22)	196	–781
Net interest income after risk provisions		**2,582**	**1,766**
Commission income	(10), (23)	647	599
Commission expense	(23)	24	26
Net commission income		**623**	**573**
Net gains/losses from hedge accounting	(8), (24), (56), (57)	–110	16
Net gains/losses from other financial instruments at fair value through profit or loss	(25)	767	–428
Net gains/losses from disposal of financial assets at amortised cost	(26)	–4	–1
Net gains/losses from investments accounted for using the equity method	(6), (27)	14	31
Administrative expense	(28)	1,466	1,342
Net other operating income or loss	(29)	–53	–14
Profit/loss from operating activities		**2,353**	**600**
Taxes on income	(30)	137	76
Consolidated profit		**2,215**	**525**

1) Net gains/losses from non-substantial contractual modifications are reported under Net gains/losses from risk provisions.

Consolidated statement of comprehensive income

	2021 EUR in millions	2020 EUR in millions
Consolidated profit	**2,215**	**525**
Other comprehensive income	**195**	**–233**
Change in own credit risk of liabilities designated at fair value through profit or loss	23	–114
Defined benefit pension obligations (before taxes)	182	–126
Deferred taxes on defined benefit pension obligations	–10	6
Consolidated comprehensive income	**2,410**	**292**

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. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Cash reserves	(33)	42,439	44,178
Financial assets at amortised cost	(7), (11), (34), (35), (36), (56), (57)	473,221	460,615
Financial assets at fair value	(7), (37), (58)	19,085	18,077
Value adjustments from macro fair value hedge accounting	(8), (38), (58)	4,609	12,220
Derivatives designated for hedge accounting	(8), (39), (56), (57), (58)	8,478	7,958
Investments accounted for using the equity method	(6), (40)	597	613
Non-current assets held for sale	(12), (41)	119	81
Property, plant and equipment	(15), (42)	971	999
Intangible assets	(16), (43)	144	172
Income tax assets	(44)	506	714
Other assets	(10), (45)	794	758
Total		**550,962**	**546,384**

Liabilities and equity

	Notes	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Financial liabilities at amortised cost	(7), (46), (56), (57)	496,385	483,867
Financial liabilities at fair value	(7), (47), (58), (60)	11,484	16,231
Value adjustments from macro fair value hedge accounting	(8), (48), (58)	37	57
Derivatives designated for hedge accounting	(8), (49), (56), (57), (58)	4,554	9,910
Provisions	(7), (18), (50)	3,576	3,543
Income tax liabilities	(51)	337	450
Other liabilities	(10), (52)	382	529
Equity	(19), (53)	34,207	31,797
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		22,026	19,411
Fund for general banking risks		200	600
Revaluation reserves	(7), (19)	–957	–1,151
Total		**550,962**	**546,384**

Consolidated statement of changes in equity

	Subscribed capital	Capital reserve	Reserve from the ERP Special Fund	Retained earnings	Fund for general banking risks	Revaluation 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. 2020	**3,300**	**8,447**	**1,191**	**18,742**	**600**	**–918**	**31,362**
Consolidated comprehensive income	0	0	0	525	0	–233	292
Consolidated profit	*0*	*0*	*0*	*525*	*0*	*0*	*525*
Other comprehensive income	*0*	*0*	*0*	*0*	*0*	*–233*	*–233*
Reclassifications within Equity	0	0	0	0	0	0	0
Changes in consolidated group	0	0	0	0	0	0	0
Other changes in share capital	0	0	0	144	0	0	144
As of 31 Dec. 2020	**3,300**	**8,447**	**1,191**	**19,411**	**600**	**–1,151**	**31,797**
Changes due to retrospective adjustments	0	0	0	0	0	0	0
Consolidated comprehensive income	0	0	0	2,215	0	195	2,410
Consolidated profit	*0*	*0*	*0*	*2,215*	*0*	*0*	*2,215*
Other comprehensive income	*0*	*0*	*0*	*0*	*0*	*195*	*195*
Reclassifications within Equity	0	0	0	400	–400	0	0
Changes in consolidated group	0	0	0	0	0	0	0
Other changes in share capital	0	0	0	0	0	0	0
As of 31 Dec. 2021	**3,300**	**8,447**	**1,191**	**22,026**	**200**	**–957**	**34,207**

The Reclassifications within Equity are due to the partial reversal of the fund for general banking risks in an amount of EUR 400 million recorded in KfW's financial statements in accordance with the provisions of the German Commercial Code (HGB) and result in a corresponding increase in Retained earnings. Other changes in share capital of EUR 144 million within Retained earnings in the previous year relate to the write-off of a liability to the Federal Government recognised directly in equity.

The difference to the consolidated comprehensive income is allocated to Other retained earnings or – if recognised directly in equity – to 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. 2020	**–40**	**–926**	**47**	**–918**
Consolidated comprehensive income	–114	–126	6	–233
Other comprehensive income	*–114*	*–126*	*6*	*–233*
Reclassifications within Equity	0	0	0	0
As of 31 Dec. 2020	**–153**	**–1,052**	**54**	**–1,151**
Consolidated comprehensive income	23	182	–10	195
Other comprehensive income	*23*	*182*	*–10*	*195*
Reclassifications within Equity	0	0	0	0
As of 31 Dec. 2021	**–131**	**–870**	**44**	**–957**

	2021 EUR in millions	2020 EUR in millions
Consolidated profit	**2,215**	**525**
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	42	990
Changes in provisions for pensions and similar commitments and Other provisions	359	143
Other non-cash expenses and income	88	59
Profit/loss from the disposal of assets	0	0
Other adjustments	–2,337	–2,531
Subtotal	**368**	**–814**
Changes in assets and liabilities from operating activities after adjustment for non-cash items:		
Financial assets at amortised cost	–12,555	–26,879
Financial assets at fair value	–955	201
Other assets relating to operating activities	7,227	1,454
Financial liabilities at amortised cost	12,519	35,659
Financial liabilities at fair value	–2,794	–636
Other liabilities relating to operating activities	–7,801	4,428
Interest and dividends received	1,061	2,485
Interest paid	1,325	62
Income tax paid	–49	–16
Cash flow from operating activities	**–1,655**	**15,943**
Property, plant and equipment/Intangible assets:		
Cash proceeds from disposals	3	2
Cash payments for acquisitions	–72	–95
Securities and investments (equity investments):		
Cash proceeds from disposals/Cash payments for acquisitions	–15	–12
Cash flow from investing activities	**–84**	**–105**
Cash proceeds from/Cash payments for capital increases/decreases	0	0
Changes from other financing activities	0	144
Cash flow from financing activities	**0**	**144**
Cash and cash equivalents as of the end of the previous period	**44,178**	**28,195**
Cash flow from operating activities	–1,655	15,943
Cash flow from investing activities	–84	–105
Cash flow from financing activities	0	144
Cash and cash equivalents as of the end of the period	**42,439**	**44,178**

income in the amount of EUR –2,386 million (2020: EUR –2,547 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 2021 (2020: EUR 11 million). The cash payments for the interest portion of lease liabilities are reported under Interest paid.

For more information on KfW Group's liquidity risk management, see the section on liquidity risk in the combined management report.

Notes

Main. KfW promotes sustainable improvement of economic, environmental and social conditions around the world, with an emphasis on the German economy.

The Executive Board of KfW is responsible for the preparation of the consolidated financial statements and the combined management report. After the recommendation of the Audit Committee, the consolidated financial statements and the combined management report are submitted to KfW's Board of Supervisory Directors for approval.

As of the reporting date, KfW Group comprises KfW and five subsidiaries that are fully consolidated. 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 2021 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 2021, except for some associated companies accounted for using the equity method, where financial statements as of 30 September 2021 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 2021

As a result of the change in reference rates in the course of the Benchmark Reform, the IASB has amended certain standards, including IFRS 9, IAS 39 and IFRS 7, to limit unintended effects on banks' financial statements. The IASB's standard-setting programme is split into two phases. Phase 1, which was already applied in financial year 2020, deals with issues affecting financial reporting in the period before the replacement of an existing interest rate benchmark with an alternative rate. Phase 2 deals with issues affecting financial reporting at the time an existing interest rate benchmark is replaced by an alternative rate.

defined by the International Swaps and Derivatives Association (ISDA) Protocol. In view of these developments, there is no longer any uncertainty with regard to the measurement of hedged risks. Consequently, the Phase 1 amendments are no longer applicable.

KfW assumes that there will be a transition to economically equivalent agreements with the counterparties. This is confirmed in the active transition of the derivatives portfolio currently in progress. The benchmark reform will only have a minor impact on the income statement due to the reference rate transition being largely present value neutral. KfW has not identified any cases which would call for the application of the simplifications concerning contractual modifications from Phase 2.

The reference rate transition as part of the Benchmark Reform entails changes to all of the bank's core processes. The impact on accounting will be particularly noticeable in hedge accounting, as well as in accounting measurement. The impact on results will be minimal in the case of a formal dissolution and redesignation of hedges in the context of the transition of derivatives to the new reference rates. The same is true in the event of the continuation of the hedging relationships when hedging instruments are adjusted to the new reference rates. The amortisation method ensures that the value adjustment from the hedged risk accrued until the transition is dissolved over the residual term. The transition does not change the hedged risk, as it continues to be represented by overnight interest rates.

KfW has set up a crossfunctional project structure, given in particular the diverse and complex methodological, procedural and IT implications of the reference rate transition. The reference rate transition was preceded by impact analyses, with the necessary procedural and system-related adjustments resulting therefrom having been largely implemented.

In June 2020, the IASB published amendments to IFRS 4 "Insurance Contracts" in which the expiry of the temporary exemption from the application of IFRS 9 in IFRS 4 was delayed to financial years beginning on or after 1 January 2023. The amendments were endorsed into European law in mid-December 2020 and are effective for financial years beginning on or after 1 January 2021. They do not have any impact on KfW Group's net assets, financial and earnings position.

At the end of May 2020, the IASB published amendments to IFRS 16 for COVID-19-related rent concessions. The lessee is exempted from assessing whether the rent concessions granted as a result of the coronavirus crisis constitute a lease modification. The amendments apply to rent concessions that reduced rent payments due on or before 30 June 2021. The standard is to be applied retrospectively for reporting periods beginning on or after 1 June 2020. The IASB published another amendment at the end of March 2021, extending the application period of the May 2020 amendments to IFRS 16 by a year, until 30 June 2022. The amendments are to be applied for financial years beginning on or after 1 April 2021. The amendment, which was endorsed into European law at the end of August and is effective immediately, does not affect KfW Group's net assets, financial and earnings position, as the group has not taken advantage of any rent concessions in relation to COVID-19.

		addition was made to IFRS 3 explicitly prohibiting recognition of acquired contingent assets.
IAS 37	1 Jan. 2022	The amendment to IAS 37 clarified that in determining an onerous contract, in addition to incremental costs, directly related costs are also to be taken into account.
IAS 16	1 Jan. 2022	The amendment to IAS 16 clarified that proceeds generated from the sale of any items produced while bringing an item of property, plant and equipment (“PPE”) into use must be directly recognised in profit or loss in the future. Such proceeds can no longer be deducted from the cost of the item of PPE.
Annual Improvements 2018–2020	1 Jan. 2022	Amendments were made to IFRS 1, IAS 41, IFRS 9 and IFRS 16 in May 2020, as part of the Annual Improvements to IFRS (2018–2020 Cycle). The aim of the Annual Improvements is to improve the quality of the standards by clarifying requirements or wording.
IFRS 17	1 Jan. 2023	IFRS 17 “Insurance Contracts” was issued in May 2017. This standard is intended to replace IFRS 4 “Insurance Contracts” in the future. 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.

KfW is not using the permitted option of early application of standard amendments. At present, the updates to the standards described above do not have any significant impact on KfW Group’s net assets, financial and earnings position.

		entity has a substantial right to defer settlement of the liability for at least 12 months after the reporting date. Further guidance on the interpretation of specific criteria and explanatory notes have also been included. The February 2021 amendments to IAS 1 and IFRS Practice Statement 2 specify the extent to which accounting policy information must be disclosed in IFRS financial statements (notes). This shifts the focus to company-specific information instead of standardised information and primarily affects the disclosure requirements set out in IAS 1.117. In the future, entities will be required to disclose material accounting policy information rather than their significant accounting policies; immaterial transactions, other events or conditions need not be disclosed. In applying the “materiality” concept, the type of related transactions, other events and conditions must be considered in addition to the absolute amount. The amendments also explain when an accounting policy is to be considered material.
IAS 8	1 Jan. 2023	The changes to IAS 8 focus solely on accounting estimates and are intended to facilitate the distinction between accounting policies and accounting estimates. The amendment for the first time includes a definition of “accounting estimate”. Moreover, accounting estimates based on changes and new developments or circumstances will not constitute errors requiring rectification.
IAS 12	1 Jan. 2023	The amendment to IAS 12 limits the scope of the initial recognition exemption, according to which no deferred tax assets or liabilities are to be recognised at the time the asset or liability is acquired. In the future, deferred taxes are to be recognised for transactions that give rise to equal taxable and deductible temporary differences. The amendment is particularly relevant for IFRS 16 applications.
IFRS 17	1 Jan. 2023	The amendments 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 can be applied to each individual instrument.

KfW does not intend to utilise any permitted options to apply standard amendments early. The amendments are likely to have only minor effects, if any, on KfW Group’s net assets, financial and earnings position.

income of the business sectors Mittelstandsbank & Private Kunden (SME Bank & Private Clients) and Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients). In the comparative figures for 2020, this resulted in an effect of EUR –36 million in Head office.

The same applies for the compounding effect on the present values of rate reductions contained in Interest expense, which in the past was, for simplicity's sake, allocated to the Promotional expense of Head office and in future will be allocated to the Promotional expense of the business sectors Mittelstandsbank & Private Kunden (SME Bank & Private Clients) and Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients).

There is no longer any segment reporting on the business sectors' economic capital ("ECAP") for 2021 as this is no longer planned in the context of group business sector planning at business sector level and no longer serves as the basis for the allocation of the imputed return on equity.

Changes made did not have any impact on total consolidated profit or total consolidated comprehensive income. The comparative figures as of 31 December 2020 have been adjusted accordingly.

The following table shows the reclassifications undertaken for the period from 1 January to 31 December 2020:

	millions	millions	millions	millions	millions	millions	millions	millions	millions
Net interest income (before promotional expense)	372	94	–1	767	402	356	610	1	2,601
Reclassification	55	6	1	43	21	8	–133	0	0
Adjusted net interest income (before promotional expense)	**427**	**100**	**–1**	**811**	**423**	**364**	**477**	**1**	**2,601**
Operating result before valuation (before promotional expense)	232	50	–9	540	194	261	586	1	1,855
Reclassification	55	6	1	43	21	8	–133	0	0
Adjusted operating result before valuation (before promotional expense)	**287**	**56**	**–8**	**583**	**214**	**269**	**453**	**1**	**1,855**
Profit/loss from operating activities (before promotional expense)	123	55	40	107	–423	270	516	–1	688
Reclassification	55	6	1	43	21	8	–133	0	0
Adjusted profit/loss from operating activities (before promotional expense)	**178**	**61**	**41**	**150**	**–402**	**278**	**383**	**–1**	**688**
Promotional expense	78	4	0	0	0	0	6	0	88
Reclassification	5	1	0	0	0	0	–6	0	0
Adjusted promotional expense	**83**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**88**
Consolidated profit	45	52	40	99	–425	270	444	–1	525
Reclassification	50	4	1	43	21	8	–127	0	0
Adjusted consolidated profit	**95**	**56**	**41**	**142**	**–404**	**278**	**318**	**–1**	**525**

equity.

(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 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 data 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 coronavirus pandemic was 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").

As in the previous year, the economic effects of the coronavirus pandemic were taken into account as of 31 December 2021 by adjusting the probabilities of default and by applying a more conservative treatment of loss ratios (inclusion of downturn components). The improved macroeconomic expectations compared to the previous year are primarily reflected in the point-in-time adjustment of probabilities of default, which resulted in a partial reversal of what were higher risk provisions for performing loans in the previous year due to COVID-19.

Subsequent assessment at fair value of equity investments is normally based on recognised standard valuation methods such as discounted cash flow ("DCF") or net asset value ("NAV"). The economic impact of the spread of COVID-19 continues to be taken into account in such assessment.

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. The resulting adjustments from hidden reserves and hidden burdens are treated 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. 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 as well as joint ventures is recognised as a separate 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.

Classification of financial assets at initial recognition determines their subsequent measurement. Classification and subsequent measurement of debt instruments is based on the business model and characteristics of the contractual cash flows (solely payments of principal and interest, or “SPPI” criterion). Equity instruments, on the other hand, must always be measured at fair value.

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 at KfW)
4. At fair value through other comprehensive income (“FVTOCI”) with recycling into profit or loss (not used at KfW)

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. A criterion does not affect classification if its effect on the contractual cash flows of the financial asset is only minor (de minimis). KfW employs group-wide rules and a consistent classification of contractual ancillary agreements in assessing the SPPI criterion. A threshold value is defined for the assessment of de minimis.

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 KfW 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 mentioned below). Moreover, the group’s lending business is largely consistent with the definition of a basic lending arrangement, and thus meets the SPPI criterion. The two exceptions to the “hold to collect” business model in the lending business are as follows:

– 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 placement 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 KfW’s liquidity portfolio as well. As KfW 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, KfW securities portfolios are largely measured at amortised cost using the effective interest method, as is its lending business.

KfW’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. KfW does not exercise the option of FVTOCI for equity instruments.

Consequently, KfW only applies the first two categories for financial assets: amortised cost and FVTPL.

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 at KfW solely for hedging purposes 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 KfW Group. Financial liabilities are derecognised if the obligations specified in the contract have been discharged or cancelled, or have expired.

For transactions mandated by the German Federal Government in accordance with Article 2 (4) of the KfW Law, the group's general recognition procedures for the relevant financial instruments are applied. Measurement is based on the relevant individual contractual terms and conditions concerning risk allocation.

Financial instruments are initially recognised at fair value.

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.

B. Impairments

At KfW 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").

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 KfW’s business model. The bank 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.

KfW takes a nuanced approach to assignment to stages that takes both rating and qualitative information into account.

The bank uses the rating at initial recognition, taking account of the migration expected until the time of measurement (initial forward rating) to assess whether a transaction can migrate from stage 1 to stage 2. This rating, which is relevant for pricing, is compared with the rating at the time of measurement. This ensures that only transactions for which there is a significant deviation from the originally expected migration 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.

KfW 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 taken into account in backward migration. The periods of good conduct are generally based on regulatory requirements (e.g. definition of 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").

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.

In the case of a write-off, the gross carrying amount is reduced by the amount of the write-off. Current provisions for loan losses are utilised first, and any remaining amount is written off directly. Similar to recoveries on loans already written off, this direct write-off is also reported through profit or loss in the Net gains/losses from risk provisions item.

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 general IFRS 9 classification criteria. Derecognition resulting from substantial modification is not relevant for the “hold to collect” business model. In the case of substantial modification of credit-impaired financial assets (non-performing loans – “NPLs”), the impairment loss is adjusted at derecognition. The amount of adjustment is the difference between the previous net carrying amount of the derecognised asset and the fair value of the newly recorded asset. The reduction in loan loss provisions is then recorded as utilisation at the time of derecognition. There are no further gains or losses resulting from the derecognition.

There is no write-off for non-substantial contractual modifications that do not result in (partial) derecognition. A revaluation of the gross carrying amount of the modified financial instrument is performed instead. The resulting valuation difference is recognised in profit or loss as a modification gain or loss. The modification gain or loss reflects the effects on net present value of the contractually agreed upon change in cash flows. The original effective interest rate is applied for discounting cash flows. Then, on subsequent reporting dates, the original effective interest rate is applied to what is at that time the current (modified) cash flow for discounting. An amortisation result is calculated as the delta to the amortised costs of the previous reporting date on the basis of the amortised costs calculated using this method. This result is reported as a component of Net interest income. This therefore yields an amortisation amount that partially represents the original premium/discount but also includes amortisation of the modification gain/loss.

The modification list serves as the group-wide basis for identification of relevant contractual modifications. Differentiation between substantial and non-substantial modifications is made by means of qualitative analysis based on the cash flow criterion:

– If a contract modification does not fulfil the cash flow criterion, it is classified as substantial. This includes contractual modifications such as agreement on performance-related interest payments or payments after successful restructuring. Such contractual modifications are typically made in the context of intensive and problem loan management as part of complex restructuring.
– Changes in borrowers and currency without a contractual currency change option are also deemed substantial modifications.
– Any other contractual modifications that fulfil the cash flow criterion are not deemed substantial. These include less complex contractual modifications, such as interest rate adjustments, principal repayment deferrals, interest and repayment forbearance (interest rate unchanged).

Since a substantial modification usually means failure to fulfil the cash flow criterion, the newly recorded financial assets are subsequently measured at fair value and reported under the statement of financial position item Financial assets at fair value.

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. 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.

At KfW Group, modification gains and losses with no related derecognitions are reported net in a separate sub-item under the Net gains/losses from risk provisions item.

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).

If the financial instrument is not quoted in an active market, valuation techniques are used. The valuation techniques applied include, in particular, the discounted cash flow ("DCF") method and option pricing models, as well as a comparison to the fair value of a financial instrument with almost identical characteristics (e.g. multiple-based models). The valuation techniques take account of all input parameters 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.

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 fair value taking into account observable market parameters. The input parameters include, in particular, changes in creditworthiness and risk-free interest rates, but they also take into account general and financial instrument-specific tightening of the market due to lower liquidity.

In measuring OTC derivatives, KfW determines valuation adjustments for counterparty risks (credit valuation adjustments – "CVA"), own 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.

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 fund 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.

A financial guarantee contract is a contract that requires the guarantor to make specified payments that compensate the holder for a loss it incurs because a specified debtor fails to meet its contractual payment obligations. At initial recognition, a financial guarantee contract is to be measured at fair value, which is zero at contract conclusion, as the value of the premium on fair value contracts is equal to the value of the guarantee obligation. 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. KfW Group does not voluntarily designate financial guarantee contracts for measurement at fair value.

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 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:

at amortised cost	*Loans and advances to customers*	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

In addition, the items from the asset and liability sides of the statement of financial position, Value adjustments from macro fair value hedge accounting, Derivatives designated for hedge accounting, and Off-balance sheet transactions each form a separate class.

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 also be recognised in the financial statements through bifurcation of separable embedded derivatives on the liabilities side that are accounted for through profit or loss. In these cases, if the hedges are economically effective, the impact on the financial statements, with respect to the hedged risks, from the instruments used for hedging purposes and the hedged transactions will substantially offset each other, so that the group's income statement substantially reflects the risk-mitigating impact of these hedging relationships.

value hedge accounting for the measurement of the hedged risk related to the hedged item. The hedged risk in macro fair value hedge accounting 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 from 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 instruments are derecognised while the economic hedge based on non-derivative financial instruments remains, the related fair value adjustments from the hedged portfolios are amortised in Net interest income.

If the strict hedge accounting requirements for the designation of hedging relationships between derivatives and financial assets/liabilities are not fulfilled within KfW Group, the fair value option is used in certain circumstances. The fair values of the corresponding hedging instruments are presented in Financial assets at fair value or Financial liabilities at fair value and the changes – if not due to changes in KfW’s own credit risk – 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”).

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. 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) 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.

(10) 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 of developing countries and emerging economies, fees for the administration of certain programmes subsidised by the Federal Government, and fees for debt collection on certain loans. KfW also charges fees for administrative services for other mandate agreements as well as for processing services and to a limited extent for services for lending and trust activities. Individual services may be grouped together into a bundle of services that qualifies as a separate performance obligation within the meaning of IFRS 15. The value of the transaction is therefore not broken down.

Based on the credit rating and short remaining life, no expected credit loss is calculated.

(11) 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.

(12) 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 requirements are not applied if they relate to financial assets. In this case, the IFRS 9 measurement requirements continue to apply instead.

reverse repos. The securities received (spot purchases) are not recognised or measured. Interest is recorded in Interest income in accordance with the respective conditions of the reverse repurchase agreements.

(14) Government grants

With regard to the pandemic-induced special programmes, KfW funds its activities, among other sources, via the ECB's TLTRO. KfW raised EUR 13.4 billion in June 2020 via TLTRO III operation 4, and EUR 1.4 billion in March 2021 via TLTRO III operation 7. The maximum term of TLTRO III transactions is three years. Participants whose eligible net lending in a prescribed reporting period is equal to or higher than their individual benchmark will receive an interest rate reduced by 50 bp (financing of overall –1%) for a specified period.

These additional reduced-interest grants must be accounted for in accordance with the accounting policies of IAS 20 "Accounting for Government Grants and Disclosure of Government Assistance". The negative interest rate benefit due to the grant may not be recognised until there is reasonable assurance that KfW will meet the related conditions and that the grants will be issued. The targets for the reporting period March 2020 to March 2021 were met and the reduced interest rate for the interest period June 2020 to June 2021 taken into account. KfW Group received a total of EUR 34 million in reduced interest grants in accordance with IAS 20 in 2021. The reduced interest grant was thus recognised in Net interest income on an accrual basis over the period in which the funding expenses to be compensated by the reduced rate grant were reported. KfW Group used the gross method for this purpose.

The bank repaid tranche 4 under TLTRO III in December 2021.

Funding via the TLTRO tranches resulted in positive effects from interest expense totalling EUR 109 million in financial year 2021.

(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.

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 12 months, KfW utilises the relief provided for in IFRS 16.18 and does not recognise them.

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) 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 KfW 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.

KfW 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.

The amount of the benefits promised under the existing pension plans at KfW 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 KfW Group, so the related special accounting rules do not apply. Provisions for pensions and similar obligations are financed in-house with sufficient 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 Arising from 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.

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.

(20) 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 particularly concerns loans and equity investments to support developing countries under German Financial Cooperation, as well as measures to promote future technologies in the context of the Future Fund (*"Zukunftsfonds"*). The Federal Government provides the necessary funding, and implementation of the measures is underwritten by the German federal budget.

Fees from trust activities are recognised under Commission income.

(21) Net interest income

Analysis of Net interest income

	2021 EUR in millions	2020 EUR in millions
Interest and similar income from loans and advances to banks and customers	4,092	5,186
Similar income from off-balance sheet transactions	25	28
Interest income from securities and investments	58	110
Interest income from hedges recognised in the statement of financial position	–3,350	–3,304
Other interest income	–210	–143
Interest income from the effective interest method	**615**	**1,876**
Interest and similar income from loans and advances to banks and customers	–40	–25
Interest income from securities and investments	73	58
Interest income from Other derivatives	412	576
Other interest income	**446**	**609**
Interest income, total	**1,061**	**2,485**
Interest and similar expense for liabilities to banks and customers	–200	15
Interest expense for certificated liabilities	3,652	5,228
Interest expense from hedges recognised in the statement of financial position	–4,761	–5,171
Interest expense from Other derivatives	–180	–229
Other interest expense	164	95
Interest expense, total	**–1,325**	**–62**
Net interest income	**2,386**	**2,547**

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 144 million (2020: EUR 54 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 200 million (2020: EUR 243 million).

Interest income from stage 3 loan receivables in the amount of EUR 33 million (2020: EUR 37 million) is reported under Interest and similar income from loans and advances to banks and customers.

Interest expense from hedges recognised in the statement of financial position for related financial assets or liabilities.

The group generates an atypical interest expense from liability hedges (floating rate liabilities), largely comprising certificated liabilities with corresponding swap transactions. This atypical interest expense was not allocated to the negative interest to be separately reported, as the hedged item contributes atypical interest expense. Due to the persistent low interest rate environment, the interest expense of the hedged items is overcompensated by the interest income from the corresponding hedging instruments, resulting in the total interest expense for financial year 2021 being atypical.

Interest income or expense from hedged items and derivatives being included in hedge accounting (means that), the 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

	2021 EUR in millions	2020 EUR in millions
Interest income (gross)	1,421	2,758
Negative interest from financial assets	–360	–273
Interest expense (gross)	–679	326
Negative interest from financial liabilities	–647	–389
Net interest income	**2,386**	**2,547**

The negative interest contributions included in Interest income resulted from balances with central banks, loans and advances to banks and 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.

	2021 EUR in millions	2020 EUR in millions
Expenses for risk provisions for lending business (Loans and advances to banks/customers and off-balance sheet lending transactions)	898	1,610
Expenses for additions to risk provisions	865	1,581
Direct write-offs	33	29
Expenses for risk provisions for securities and investments	12	12
Expenses for additions to risk provisions	12	12
Direct write-offs	0	0
Expenses for risk provisions	**910**	**1,622**
Income from risk provisions for lending business (Loans and advances to banks/customers and off-balance sheet lending transactions)	1,143	811
Income from the reversal of risk provisions	1,060	751
Income from recoveries of amounts previously written off	83	60
Income from risk provisions for securities and investments	13	7
Income from the reversal of risk provisions	13	7
Income from recoveries of securities and investments previously written off	0	0
Income from risk provisions	**1,155**	**819**
Net gains/losses from non-substantial contractual modifications	**–22**	**–22**
Other risk provisions for lending business	**–27**	**44**
Total	**196**	**–781**

(23) Net commission income

Analysis of Commission income

	2021 EUR in millions	2020 EUR in millions
Revenue from contracts with customers	**637**	**589**
From mandate contractual arrangements with the Federal Government[1]	582	540
Fee income from mandate agreements, processing activities and services	16	14
Fee income from the lending business	39	36
Other commission income	**10**	**10**
Financial guarantee contracts	0	0
Other	10	9
Commission income, total	**647**	**599**

1) Includes commission income in the amount of EUR 74 million (2020: EUR 68 million) from mandate contractual arrangements with the Federal Government in trust activities.

2021	standsbank & Private Kunden *(SME Bank & Private Clients)*	finanzie-rung & Öffentliche Kunden *(Customised Finance & Public Clients)*	Capital	and project finance	developing countries and emerging economies	markets	office	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Commission income	**310**	**36**	**6**	**33**	**259**	**0**	**3**	**647**
of which Federal Government	307	33	6	0	236	0	0	582
%	99%	92%	100%	0%	91%	0%	0%	90%

Commission income by segment in financial year 2020

2020	Mittel-standsbank & Private Kunden *(SME Bank & Private Clients)*	Individual-finanzie-rung & Öffentliche Kunden *(Customised Finance & Public Clients)*	KfW Capital	Export and project finance	Promotion of developing countries and emerging economies	Financial markets	Head office	KfW Group
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Commission income	**281**	**42**	**0**	**28**	**244**	**0**	**2**	**599**
of which Federal Government	278	38	0	0	224	0	0	540
%	99%	89%	0%	0%	91%	0%	0%	90%

Out-of-period income

	2021	2020
	EUR in millions	EUR in millions
Revenue in current period resulting from services performed in the previous period(s)	31	17

	EUR in millions	EUR in millions
Commission expense for lending business	10	10
Commission expense for credit derivatives	0	0
Other commission expense	14	16
Commission expense	**24**	**26**

(24) 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 include cases of hedge ineffectiveness
	2021 EUR in millions	2020 EUR in millions	
Micro fair value hedges	**–5**	**–25**	Net gains/losses from hedge accounting
Interest risk	14	–27	–
Interest-currency risk	–19	2	–
Macro fair value hedges	**–105**	**41**	Net gains/losses from hedge accounting
Interest risk	–105	41	–
Total	**–110**	**16**	Net gains/losses from hedge accounting

Analysis of Net gains/losses from micro fair value hedge accounting by hedged item

	2021 EUR in millions	2020 EUR in millions
Hedging of securities and investments	4	5
Hedging of liabilities to banks and customers	–1	–29
Hedging of certificated liabilities	–8	–1
Subtotal: Effectiveness of hedges	**–5**	**–25**
Amortisation of value adjustments	0	0
Total	**–5**	**–25**

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Hedging of securities and investments	–510	514	4
Hedging of liabilities to banks and customers	481	–482	–1
Hedging of certificated liabilities	8,628	–8,637	–8
Total	**8,600**	**–8,605**	**–5**

Gross analysis of valuation gains/losses from micro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2020

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Hedging of securities and investments	180	–175	5
Hedging of liabilities to banks and customers	–88	59	–29
Hedging of certificated liabilities	–4,412	4,411	–1
Total	**–4,320**	**4,295**	**–25**

Gross analysis of net gains/losses from macro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2021

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Net gains/losses from macro fair value hedge accounting	**–7,412**	**7,307**	**–105**

Gross analysis of net gains/losses from macro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2020

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Net gains/losses from macro fair value hedge accounting	**1,797**	**–1,756**	**41**

instruments from the underlying portfolios as well as the pull-to-par effect of the hedging derivatives.

(25) Net gains/losses from other financial instruments at fair value through profit or loss

Analysis of Net gains/losses from other financial instruments at fair value through profit or loss

	2021 EUR in millions	2020 EUR in millions
Loans and advances to banks/customers	28	2
Loans and advances	28	2
Miscellaneous receivables (money market transactions, promissory note loans and Other receivables)	0	0
Securities and investments	752	–312
Bonds and other fixed-income securities	0	0
Shares and other non-fixed income securities	0	0
Equity investments	752	–312
Liabilities to banks and customers	78	8
Certificated liabilities	536	–238
Other derivatives	–620	112
Financial derivatives not qualifying for hedge accounting	–620	112
Credit derivatives	0	0
Foreign currency translation	–7	0
Total	**767**	**–428**

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 1 million in financial year 2021 (2020: EUR 18 million).

Net gains/losses from liabilities measured at fair value include 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 embedded derivatives from financial liabilities that are bifurcated; the net gains/losses from the valuation of the associated hedging derivatives are thus compensated for.

	2021	2020
	EUR in millions	EUR in millions
Borrowings	614	–230
Hedging instruments	–716	294
Total (effectiveness of economic hedges)	**–102**	**63**

(26) Net gains/losses from disposal of financial assets at amortised cost

	2021	2020
	EUR in millions	EUR in millions
Income from the disposal of financial assets at amortised cost	0	0
Expense from the disposal of financial assets at amortised cost	4	1
Total	**–4**	**–1**

Income and expense from the disposal of financial assets at amortised cost resulted from the sale of loans on the secondary market.

(27) Net gains/losses from investments accounted for using the equity method

	2021	2020
	EUR in millions	EUR in millions
Net gains/losses from investments accounted for using the equity method	14	31

	2021 EUR in millions	2020 EUR in millions
Wages and salaries	657	591
Social security contributions	98	94
Expenses for pension provision and other employee benefits	88	85
Personnel expense	**842**	**770**
Other administrative expenses	499	440
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	125	131
of which impairments of rights of use arising from leases	10	22
Non-personnel expense	**624**	**572**
Total	**1,466**	**1,342**

Current impairments of rights of use arising from leases includes an impairment of rights of use in the amount of EUR 0 million (2020: EUR 10 million).

(29) Net other operating income or loss

Analysis of Net other operating income or loss

	2021 EUR in millions	2020 EUR in millions
Other operating income	34	26
Other operating expense	86	41
Total	**–53**	**–14**

Other operating income primarily includes income from the reversal of other provisions in the amount of EUR 12 million (2020: EUR 10 million).

The Other operating expense item includes contributions payable by KfW IPEX-Bank to the restructuring fund for banks in the amount of EUR 14 million (2020: EUR 14 million). KfW is not obligated to contribute to the fund in accordance with Section 2 of the Restructuring Fund Act (*Restrukturierungsfondsgesetz – "RStrukFG"*). This item also includes expenses of EUR 13 million (2020: EUR 0 million) from the increase in KfW Stiftung's foundation capital.

	2021 EUR in millions	2020 EUR in millions
Current taxes on income	49	16
Deferred taxes	88	59
Total	**137**	**76**

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

	2021 EUR in millions	2020 EUR in millions
Profit/loss from operating activities (before taxes)	2,353	600
Group income tax rate	0%	0%
Calculated income tax expense in the financial year	**0**	**0**
Effects of tax rate differentials within the group	129	–131
Effect of tax rate changes	0	0
Effects of previous year taxes recorded in the reporting year	6	–9
Effects of non-deductible taxes on income	2	3
Effects of non-deductible business expenses	4	3
Effects of tax-free income	–67	1
Trade tax add-ons/reductions	1	1
Permanent accounting differences	111	30
Effects of changes in recognised deferred tax assets	–49	178
Reported taxes on income	**137**	**76**

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%.

(31) Segment reporting by business sector

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 KfW 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
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
Promotion of developing countries and emerging economies	– Promotion of developing countries and emerging economies on behalf of the Federal Government with budget funds and complementary market funds raised by KfW – Financing provided by DEG – Deutsche Investitions- und Entwicklungs-gesellschaft mbH (private sector promotion)
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 line 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 interest rate and spread management. 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.

Bank & Private Clients) and Individualfinanzierung & Öffentliche Kunden (*Customised Finance & Public Clients*) that have a positive impact on the achievement of KfW's promotional objectives. Promotional expense primarily consists of additions of the interest rate reductions 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 for the processing of small and micro loans (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 for promotional grants awarded as a supplement to the lending business (included in Other operating expense).

- 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.

- 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 11 for details of 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.

	Mittel-stands-bank & Private Kunden *(SME Bank & Private Clients)*	Individual-finanzie-rung & Öffentliche Kunden *(Customised Finance & Public Clients)*	KfW Capital[1)]	Export and project finance[1)]	Promotion of developing countries and emerging economies[1)]	Financial markets	Head office	Reconci-liation/ consoli-dation	KfW Group
	EUR in millions	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**	**EUR in millions**
Volume of new commitments	**72,980**	**9,465**	**502**	**13,644**	**10,145**	**527**	**0**	**–212**	**107,050**
Net interest income (before promotional expense)	463	107	0	797	413	347	405	0	2,531
Net commission income (before promotional expense)	309	35	6	33	253	–4	2	0	634
Administrative expense (before promotional expense)	430	77	11	289	497	97	50	0	1,452
Operating result before valuation (before promotional expense)	**342**	**65**	**–6**	**540**	**169**	**246**	**357**	**0**	**1,712**
Risk provisions for lending business	–2	5	0	94	102	–4	0	0	196
Valuation result (before promotional expense)	1	63	211	29	471	21	–163	0	633
Profit/loss from operating activities (before promotional expense)	**341**	**133**	**205**	**663**	**742**	**263**	**194**	**–1**	**2,541**
Promotional expense	182	6	0	0	0	0	0	0	188
Taxes on income	0	0	0	40	5	0	92	0	137
Consolidated profit	**159**	**127**	**205**	**622**	**737**	**263**	**102**	**–1**	**2,215**

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 16.4 million, Export and project finance EUR –8.3 million and Promotion of developing countries and emerging economies EUR 6.1 million.

	Mittelstandsbank & Private Kunden *(SME Bank & Private Clients)*	Individualfinanzierung & Öffentliche Kunden[1], [2] *(Customised Finance & Public Clients)*	KfW Capital[1], [2]	Export and project finance[1], [2]	Promotion of developing countries and emerging economies[1], [2]	Financial markets[1]	Head office[1]	Reconciliation/ consolidation	KfW Group
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Volume of new commitments	**86,274**	**19,213**	**871**	**16,584**	**12,394**	**400**	**0**	**–468**	**135,269**
Net interest income (before promotional expense)[1]	427	100	–1	811	423	364	477	1	2,601
Net commission income (before promotional expense)	281	41	0	27	236	–5	2	0	584
Administrative expense (before promotional expense)	422	85	8	255	444	91	26	0	1,330
Operating result before valuation (before promotional expense)[1]	**287**	**56**	**–8**	**583**	**214**	**269**	**453**	**1**	**1,855**
Risk provisions for lending business	–109	–26	0	–414	–233	5	0	0	–777
Valuation result (before promotional expense)	0	31	49	–19	–383	4	–70	–1	–390
Profit/loss from operating activities (before promotional expense)[1]	**178**	**61**	**41**	**150**	**–402**	**278**	**383**	**–1**	**688**
Promotional expense[1]	83	5	0	0	0	0	0	0	88
Taxes on income	0	0	0	8	2	0	65	0	76
Consolidated profit[1]	**95**	**56**	**41**	**142**	**–404**	**278**	**318**	**–1**	**525**

1) Adjusted prior-year figures due to change in internal reporting (see Note 3)
2) The valuation result of the business sectors includes the following net gains/losses from investments accounted for using the equity method: Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*) EUR –9.8 million, KfW Capital EUR 1.0 million, Export and project finance EUR 31.3 million and Promotion of developing countries and emerging economies EUR 8.3 million.

The reconciliation/consolidation column includes all adjustments that were necessary to reconcile segment information with the aggregated information for KfW Group. The consolidation effects reported for "Volume of new commitments" relate to commitments for programme loans 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.

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 2021

	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	1,343	423	620	0	2,386
Net commission income	343	32	247	0	623
Segment income	**1,687**	**455**	**867**	**0**	**3,009**

Segment reporting by region for financial year 2020

	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	1,472	419	656	1	2,547
Net commission income	319	30	224	0	573
Segment income	**1,791**	**449**	**880**	**1**	**3,120**

The reconciliation/consolidation column includes all adjustments that were necessary to reconcile segment information with the aggregated information for KfW Group. The amounts in this column result solely from minimal consolidation effects.

(33) Cash reserves

Analysis of Cash reserves

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Cash	0	0
Balances with central banks	42,439	44,178
Total	**42,439**	**44,178**

(34) Financial assets at amortised cost

Analysis of Financial assets at amortised cost by class

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Loans and advances to banks		
Money market transactions	5,510	2,782
Loans and advances	301,759	287,687
Promissory note loans	22	21
Other receivables	1,197	5,277
Loans and advances to customers		
Money market transactions	0	680
Loans and advances	129,278	128,539
Promissory note loans	1,205	1,616
Other receivables	420	364
Securities and investments		
Bonds and other fixed-income securities	35,784	35,790
Total gross	**475,175**	**462,756**
Less risk provisions for		
Loans and advances to banks	–238	–306
Loans and advances to customers	–1,705	–1,824
Securities and investments	–10	–11
Total net	**473,221**	**460,615**

The receivables from reverse repurchase agreements (reverse “repos”) and cash collateral pledged are included in Loans and advances to banks – Other receivables.

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Direct loans	73,170	72,833	118,608	120,533
On-lent customer loans with full underwriting borne by the on-lending commercial bank	201,027	193,036	0	0
On-lent customer loans with partial underwriting borne by the on-lending commercial bank	27,894	22,289	0	0
On-lent customer loans without underwriting borne by the on-lending commercial bank	0	0	8,205	5,736
Customer loans on-lent through insurance companies with full underwriting borne by the on-lending insurance company	0	0	1,210	888
Direct and on-lent subordinated loans	279	266	1,287	1,428
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	–610	–737	–32	–46
Total	**301,759**	**287,687**	**129,278**	**128,539**

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.

	Financial year 2021				Financial year 2020			
	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.	**294,009**	**1,522**	**235**	**295,766**	**281,429**	**265**	**209**	**281,902**
Transfer from stage 2 and stage 3 to stage 1	544	–544	0	0	–2	2	0	0
Transfer from stage 1 and stage 3 to stage 2	–843	849	–5	0	–1,153	1,168	–15	0
Transfer from stage 1 and stage 2 to stage 3	–464	–72	536	0	–165	–18	183	0
Additions – New business and increased utilisation[1)]	101,850	397	23	102,270	320,273	284	33	320,590
Disposals	–90,135	–281	–168	–90,584	–305,292	–160	–170	–305,623
of which financial assets written off	*–90,135*	*–281*	*–160*	*–90,576*	*–305,292*	*–160*	*–160*	*–305,613*
of which default on receivables	*0*	*0*	*–8*	*–8*	*0*	*0*	*–10*	*–10*
Changes from non-substantial contractual modification	–13	0	2	–11	–8	0	–1	–10
Exchange rate and other changes	1,013	8	26	1,047	–1,073	–17	–4	–1,094
As of 31 Dec.	**305,962**	**1,880**	**648**	**308,489**	**294,009**	**1,522**	**235**	**295,766**

1) Additions of recently purchased or issued financial assets and current business will be disclosed together with effect from financial year 2021 (see Note 3)

	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.	**100,069**	**12,474**	**18,656**	**131,199**	**97,755**	**4,708**	**17,335**	**119,798**
Transfer from stage 2 and stage 3 to stage 1	2,041	–2,015	–26	0	679	–678	–1	0
Transfer from stage 1 and stage 3 to stage 2	–5,123	19,969	–14,846[2)]	0	–10,845	10,878	–33	0
Transfer from stage 1 and stage 2 to stage 3	–953	–813	1,766	0	–1,742	–651	2,393	0
Additions – New business and increased utilisation[1)]	26,151	714	117	26,982	32,149	1,103	269	33,522
Disposals	–22,383	–6,070	–1,253	–29,707	–16,236	–2,155	–1,149	–19,541
of which financial assets written off	*–22,379*	*–6,070*	*–1,123*	*–29,571*	*–16,234*	*–2,153*	*–955*	*–19,342*
of which default on receivables	*–4*	*–1*	*–131*	*–136*	*–2*	*–2*	*–194*	*–198*
Changes from non-substantial contractual modification	0	–13	0	–13	–10	–3	1	–12
Exchange rate and other changes	1,796	528	116	2,440	–1,681	–729	–158	–2,567
As of 31 Dec.	**101,598**	**24,773**	**4,531**	**130,902**	**100,069**	**12,474**	**18,656**	**131,199**

1) Additions of recently purchased or issued financial assets and current business will be disclosed together with effect from financial year 2021 (see Note 3)
2) The transfer from stage 3 to stage 2 is primarily due to a loan guaranteed by the Federal Government.

	Financial year 2021				Financial year 2020			
	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.	**35,725**	**0**	**65**	**35,790**	**34,440**	**0**	**77**	**34,517**
Additions – New business and increased utilisation[1)]	23,330	0	0	23,330	19,874	0	0	19,874
Disposals	–22,866	0	–65	–22,931	–18,617	0	–12	–18,629
of which financial assets written off	*–22,866*	*0*	*–65*	*–22,931*	*–18,617*	*0*	*–12*	*–18,629*
Exchange rate and other changes	–405	0	0	–406	28	0	0	28
As of 31 Dec.	**35,784**	**0**	**0**	**35,784**	**35,725**	**0**	**65**	**35,790**

1) Additions of recently purchased or issued financial assets and current business will be disclosed together with effect from financial year 2021 (see Note 3)

	Financial year 2021				Financial year 2020			
	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.	**102,790**	**5,103**	**257**	**108,151**	**84,151**	**667**	**310**	**85,128**
Transfer from stage 2 and stage 3 to stage 1	253	–225	–28	0	71	–71	0	0
Transfer from stage 1 and stage 3 to stage 2	–86	86	0	0	–448	448	0	0
Transfer from stage 1 and stage 2 to stage 3	–19	–35	53	0	–58	–9	68	0
Additions – New business and increased utilisation[1)]	1,233	51	3	1,287	1,180	54	5	1,239
Disposals	–718	–120	–18	–857	–826	–77	–36	–940
of which financial assets written off	*–718*	*–120*	*–18*	*–857*	*–826*	*–77*	*–36*	*–940*
Exchange rate and other changes	5,730	–136	45	5,640	18,721	4,092	–89	22,723
As of 31 Dec.	**109,184**	**4,725**	**312**	**114,220**	**102,790**	**5,103**	**257**	**108,151**

1) Additions of recently purchased or issued financial assets and current business will be disclosed together with effect from financial year 2021 (see Note 3)

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 253 million as of the reporting date (31 Dec. 2020: EUR 14 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.	**143**	**95**	**68**	**306**	**124**	**24**	**93**	**242**
Transfer from stage 2 and stage 3 to stage 1	27	–27	0	0	7	–7	0	0
Transfer from stage 1 and stage 3 to stage 2	–4	4	0	0	–24	24	0	0
Transfer from stage 1 and stage 2 to stage 3	–1	–6	7	0	–3	–3	6	0
Additions	46	16	38	99	99	71	39	208
Utilisation	0	0	–7	–7	0	0	–48	–48
Reversals	–111	–50	–11	–172	–56	–10	–23	–89
Net present value effect	0	0	3	3	0	0	2	2
Exchange rate and other changes	3	2	3	9	–4	–5	1	–8
As of 31 Dec.	**104**	**33**	**101**	**238**	**143**	**95**	**68**	**306**

Development of risk provisions for financial assets at amortised cost – Loans and advances to customers

	Financial year 2021				Financial year 2020			
	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.	**243**	**326**	**1,255**	**1,824**	**184**	**186**	**1,058**	**1,428**
Transfer from stage 2 and stage 3 to stage 1	88	–89	1	0	96	–96	0	0
Transfer from stage 1 and stage 3 to stage 2	–3	25	–21	0	–45	60	–15	0
Transfer from stage 1 and stage 2 to stage 3	–10	–78	88	0	–20	–67	87	0
Additions	149	249	242	641	257	406	521	1,184
Utilisation	–1	0	–171	–172	0	0	–238	–239
Reversals	–283	–169	–276	–727	–220	–141	–169	–530
Net present value effect	0	0	82	82	0	0	67	67
Exchange rate and other changes	8	11	39	57	–9	–23	–54	–86
As of 31 Dec.	**192**	**275**	**1,238**	**1,705**	**243**	**326**	**1,255**	**1,824**

	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**	**0**	**0**	**11**	**6**	**0**	**0**	**6**
Additions	12	0	0	12	12	0	0	12
Reversals	–13	0	0	–13	–8	0	0	–8
As of 31 Dec.	**10**	**0**	**0**	**10**	**11**	**0**	**0**	**11**

Development of Risk provisions for lending business (off-balance sheet lending transactions)

	Financial year 2021				Financial year 2020			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	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.	**49**	**58**	**19**	**126**	**36**	**28**	**10**	**73**
Transfer from stage 2 and stage 3 to stage 1	21	–21	0	0	22	–22	0	0
Transfer from stage 1 and stage 3 to stage 2	–2	2	0	0	–3	3	0	0
Transfer from stage 1 and stage 2 to stage 3	0	–13	13	0	–1	–2	3	0
Additions	60	59	5	125	87	83	18	188
Reversals	–98	–39	–23	–160	–90	–31	–12	–132
Exchange rate and other changes	1	2	0	3	–1	–2	0	–3
As of 31 Dec.	**32**	**48**	**15**	**94**	**49**	**58**	**19**	**126**

Provisions for losses on loans and advances also include money market investments and reverse repos.

In the reporting year, EUR 86 million (2020: EUR 69 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 62 million as of the reporting date (31 Dec. 2020: EUR 61 million).

	EUR in millions	EUR in millions
Loans and advances to banks – FVM		
Loans and advances	14	38
Other receivables	35	0
Loans and advances to customers – FVM		
Loans and advances	9,572	9,616
Securities and investments – FVM		
Equity investments	4,015	3,016
Shares in non-consolidated subsidiaries	68	48
Other derivatives – FVM		
Interest-related derivatives	3,122	4,751
Cross-currency derivatives	2,259	607
Total	**19,085**	**18,077**

Cross-currency swaps are presented under Cross-currency derivatives.

Other derivatives includes derivatives with positive fair values of EUR 21 million (31 Dec. 2020: EUR 11 million) attributable to embedded derivatives that are bifurcated.

(38) Value adjustments from macro fair value hedge accounting

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Value adjustments to assets under macro fair value hedge accounting	4,609	12,220

The fair values attributable to hedged risks in the hedged portfolios in the at amortised cost measurement category are included in this item.

(39) Derivatives designated for hedge accounting

Analysis of derivatives with positive fair values designated for hedge accounting by type of hedging relationship

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Micro fair value hedge accounting	8,449	7,934
Macro fair value hedge accounting	29	24
Total	**8,478**	**7,958**

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Interest-related derivatives	2,990	5,374
Cross-currency derivatives	5,488	2,584
Total	**8,478**	**7,958**

Only Interest-related derivatives are designated for macro fair value hedge accounting. Cross-currency swaps are presented under Cross-currency derivatives.

(40) Investments accounted for using the equity method

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Investments accounted for using the equity method	597	613
Total	**597**	**613**

The note regarding “Disclosures on shareholdings” includes a list of Investments accounted for using the equity method.

(41) Non-current assets held for sale

This item from the statement of financial position includes equity investments of DEG with a fair value of EUR 119 million (31 Dec. 2020: EUR 81 million) in the areas of banks and companies and the regions of Asia, Africa and North America in the current financial year, and Asia and Latin America in the previous financial year, 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 “Promotion of developing countries and emerging economies”. The equity investments are intended to be sold within the next twelve months.

It was not possible in 2021 to sell, as planned, two equity investments recognised as assets held for sale in the consolidated financial statements as of 31 December 2020. This was primarily due to the effects of the coronavirus pandemic. This decreased probability of sale resulted in an accounting reclassification, but had no impact on the earnings position.

	EUR in millions	EUR in millions
Land and buildings	839	857
Plant and equipment	80	81
Rights of use arising from leases	50	60
Other property, plant and equipment	2	1
Total	**971**	**999**

Additions to rights of use arising from leases amounted to EUR 0 million (2020: EUR 15 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 2021

	Acquisition/ production cost	Accumulated depreciation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 2021	**1,527**	**–528**	**999**
Additions/reversals of impairment losses	37	0	37
Disposals	–51	50	–1
Depreciation	0	–63	–63
Impairment losses	0	0	0
Carrying amount as of 31 Dec. 2021	**1,513**	**–541**	**971**

Development of Property, plant and equipment in financial year 2020

	Acquisition/ production cost	Accumulated depreciation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 2020	**1,487**	**–466**	**1,021**
Additions/reversals of impairment losses	57	0	57
Disposals	–17	15	–2
Depreciation	0	–67	–67
Impairment losses	0	–10	–10
Carrying amount as of 31 Dec. 2020	**1,527**	**–528**	**999**

	EUR in millions	EUR in millions
Software	135	122
Purchased software	*66*	*72*
Internally generated software	*69*	*50*
Other intangible assets	9	50
Total	**144**	**172**

Other intangible assets include, in particular, software under development.

Development of Intangible assets in financial year 2021

	Acquisition/ production cost	Accumulated amortisation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 2021	**498**	**–326**	**172**
Additions/reversals of impairment losses	35	0	35
Disposals	–87	85	–2
Amortisation	0	–60	–60
Impairment losses	0	–2	–2
Carrying amount as of 31 Dec. 2021	**446**	**–302**	**144**

Development of Intangible assets in financial year 2020

	Acquisition/ production cost	Accumulated amortisation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 2020	**466**	**–277**	**188**
Additions/reversals of impairment losses	38	0	38
Disposals	–5	5	0
Amortisation	0	–54	–54
Impairment losses	0	0	0
Carrying amount as of 31 Dec. 2020	**498**	**–326**	**172**

	EUR in millions	EUR in millions
Current income tax assets	16	15
Deferred income tax assets	490	698
Total	**506**	**714**

Current income tax assets result from creditable taxes (investment income tax/solidarity surcharge) and tax receivables from advance tax payments during financial year 2021.

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 2022–2025. As of 31 December 2021, the volume of deferred tax assets not recognised was EUR 111 million (31 Dec. 2020: EUR 45 million) relating to loss carryforwards, and EUR 22 million (31 Dec. 2020: EUR 133 million) relating to accounting issues.

Composition of deferred tax assets by statement of financial position item

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Financial assets (at amortised cost and at fair value)	105	91
Intangible assets	5	10
Financial liabilities at fair value – Other derivatives	270	425
Provisions	77	75
Other statement of financial position items	17	9
Tax loss carryforwards	16	88
Subtotal	**490**	**698**
Offset against deferred tax liabilities	0	0
Total	**490**	**698**

(45) Other assets

Analysis of Other assets

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Other assets and receivables	725	720
Prepaid expenses and deferred charges	69	38
Total	**794**	**758**

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

	2021 EUR in millions	2020 EUR in millions
As of 1 Jan.	**1**	**7**
Additions	2	1
Disposals	–1	–7
As of 31 Dec.	**2**	**1**

(46) Financial liabilities at amortised cost

Analysis of Financial liabilities at amortised cost by class

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Liabilities to banks		
Money market transactions	1,327	2,477
Promissory note loans	1,203	1,682
Other financial liabilities	10,968	18,145
Liabilities to customers		
Money market transactions	269	218
Promissory note loans	38,372	41,129
Other financial liabilities	5,053	5,872
Certificated liabilities		
Money market issues	49,992	41,293
Bonds and notes	389,202	373,051
Total	**496,385**	**483,867**

Liabilities from cash collateral received are included in Other financial liabilities.

New securities with a nominal volume of EUR 217.5 billion were issued during the reporting period (2020: EUR 215.0 billion), including money market instruments, which are to be measured at amortised cost. The volume of repayments due to maturity during the reporting period amounted to EUR 194.5 billion (nominal) (2020: EUR 215.4 billion) and the volume of early repurchases to EUR 0.7 billion (nominal) (2020: EUR 0.1 billion).

	EUR in millions	EUR in millions
Liabilities to banks – FVD		
Promissory note loans	255	266
Liabilities to customers – FVD		
Promissory note loans	1,003	1,300
Certificated liabilities – FVD		
Bonds and notes	8,416	10,924
Other derivatives – FVM		
Interest-related derivatives	877	1,271
Cross-currency derivatives	933	2,470
Total	**11,484**	**16,231**

As in the previous year, there were no new issues in the reporting period to be measured at fair value. The volume of repayments due to maturity during the reporting period amounted to EUR 2.6 billion (nominal) (2020: EUR 0.2 billion) and the volume of early repurchases to EUR 0.0 billion (nominal) (2020: EUR 0.0 billion).

Cross-currency swaps are presented under Cross-currency derivatives.

Other derivatives include derivatives with negative fair values of EUR 12 million (31 Dec. 2020: EUR 20 million) attributable to embedded derivatives that are bifurcated.

Value adjustments to liabilities under macro fair value hedge accounting	37	57

The fair values attributable to hedged risks in the hedged portfolios in the at amortised cost measurement category are included in this item.

(49) Derivatives designated for hedge accounting

Analysis of derivatives with negative fair values designated for hedge accounting by type of hedging relationship

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Micro fair value hedge accounting	2,181	5,750
Macro fair value hedge accounting	2,373	4,160
Total	**4,554**	**9,910**

Analysis of derivatives with negative fair values designated for hedge accounting by type of hedging instrument

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Interest-related derivatives	3,163	4,317
Cross-currency derivatives	1,390	5,594
Total	**4,554**	**9,910**

	EUR in millions	EUR in millions
Provisions for pensions and similar commitments	2,556	2,687
Provisions for credit risks	94	126
Other provisions	926	731
Total	**3,576**	**3,543**

Development of Provisions for pensions and similar commitments in financial year 2021

	Defined benefit obligations	Early retirement	Partial retirement	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2021	**2,616**	**60**	**11**	**2,687**
Additions	113	0	1	114
Current service cost	*86*	*0*	*1*	*87*
Interest cost	*27*	*0*	*0*	*27*
Actuarial gains and losses	–182	0	0	–182
Changes in demographic assumptions	*0*	*0*	*0*	*0*
Changes in financial assumptions	*–155*	*0*	*0*	*–155*
Changes in experience adjustments	*–27*	*0*	*0*	*–27*
Utilisation	–55	–8	–5	–68
Reversals	0	0	0	0
Contributions by members (recognised in equity)	5	0	0	5
As of 31 Dec. 2021	**2,496**	**53**	**7**	**2,556**

The average expected residual term of the defined-benefit pension obligations is 20.3 years as of 31 December 2021 (31 Dec. 2020: 21.1 years).

	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2020	**2,424**	**84**	**14**	**2,523**
Additions	113	0	1	114
Current service cost	*80*	*0*	*1*	*81*
Past service cost	*0*	*0*	*0*	*0*
Interest cost	*33*	*0*	*0*	*33*
Other additions	*0*	*0*	*0*	*0*
Actuarial gains and losses	126	0	0	126
Changes in demographic assumptions	*–1*	*0*	*0*	*–1*
Changes in financial assumptions	*168*	*0*	*0*	*168*
Changes in experience adjustments	*–41*	*0*	*0*	*–41*
Utilisation	–52	–9	–5	–66
Reversals	0	–14	0	–14
Transfers	0	0	0	0
Contributions by members (recognised in equity)	6	0	0	6
Changes in consolidated group	0	0	0	0
As of 31 Dec. 2020	**2,616**	**60**	**11**	**2,687**

Provisions for pensions and similar commitments are calculated on the basis of the 2018 G Heubeck actuarial tables and the following other actuarial assumptions:

Actuarial assumptions in % p. a.

	31 Dec. 2021	31 Dec. 2020
Technical discount rate	1.32	1.02
Rate of salary increases	2.20	2.20
Rate of pension increases	2.50	2.50
Rate of staff turnover	2.29	2.30

The technical discount rate as of 31 December 2021 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.

		EUR in millions		EUR in millions
Life expectancy	+1 year	120	–1 year	–120
Technical discount rate	+0.25%	–121	–0.25%	130
Rate of salary increases	+0.50%	15	–0.50%	–14
Rate of pension increases	+0.50%	176	–0.50%	–94
Rate of staff turnover	+1.00%	–2	–1.00%	3

Sensitivity of defined benefit pension obligations as of 31 December 2020

	Difference	Change in defined benefit obligations	Difference	Change in defined benefit obligations
		EUR in millions		EUR in millions
Life expectancy	+1 year	118	–1 year	–117
Technical discount rate	+0.25%	–133	–0.25%	144
Rate of salary increases	+0.50%	18	–0.50%	–17
Rate of pension increases	+0.50%	185	–0.50%	–100
Rate of staff turnover	+1.00%	–3	–1.00%	3

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”.

Development of Other provisions in financial year 2021

	Obligations to employees	Other provisions	Total
	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2021	**37**	**694**	**731**
Additions	4	254	258
Other additions	*4*	*253*	*257*
Utilisation	–4	–46	–50
Reversals	0	–12	–12
As of 31 Dec. 2021	**36**	**890**	**926**

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 Arising from Unification (*Bundesanstalt für vereinigungsbedingte Sonder-aufgaben – "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 2020

	Obligations to employees	Other provisions	Total
	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2020	**37**	**702**	**739**
Additions	3	53	57
Interest cost	*0*	*0*	*0*
Other additions	*3*	*53*	*56*
Utilisation	–3	–48	–52
Reversals	0	–13	–13
As of 31 Dec. 2020	**37**	**694**	**731**

	EUR in millions	EUR in millions
Current income tax liabilities	29	31
Deferred income tax liabilities	308	418
Total	**337**	**450**

Current income tax liabilities as of 31 December 2021 primarily consist of tax provisions at the level of taxable companies included in KfW 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. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Financial assets at fair value – Other derivatives	275	404
Other statement of financial position items	33	14
Total	**308**	**418**

(52) Other liabilities

Analysis of Other liabilities

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Other financial liabilities	273	401
Deferred income	50	57
Lease liabilities	59	72
Total	**382**	**529**

Development of liabilities from contractual obligations

	2021 EUR in millions	2020 EUR in millions
As of 1 Jan.	**38**	**37**
Additions	17	8
Disposals	–15	–11
As of 31 Dec.	**41**	**34**

(53) Equity

Analysis of Equity

	31 Dec. 2021 EUR in millions	31 Dec. 2020 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	22,026	19,411
Statutory reserve under Article 10 (2) KfW Law	*1,875*	*1,875*
Special reserve under Article 10 (3) KfW Law	*14,755*	*12,971*
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	*5,374*	*4,544*
Fund for general banking risks	200	600
Revaluation reserves	–957	–1,151
Valuation result from the change in own credit risk of liabilities designated at fair value through profit or loss	*–131*	*–153*
Actuarial gains and losses from defined-benefit pension obligations (after tax)	*–826*	*–998*
Total	**34,207**	**31,797**

Equity forms the basis for the capital available for covering risks, which are 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.

KfW’s net income amounting to EUR 1,784 million was used to increase the special reserve under Article 10 (3) of the KfW Law.

The different IFRS 9 measurement categories are abbreviated as follows in the Notes to financial instruments:

ACO = Financial instruments measured at amortised cost
FVM = Financial instruments measured at fair value
FVD = Financial instruments designated at fair value

(54) 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 2021

	Financial assets at amortised cost	Financial liabilities at amortised cost	Financial assets at fair value – FVM	Financial liabilities 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	3,764[1)]	0	326	120	0	–3,149	1,061
Interest expense	–145	–2,877	382	–203	–386	4,582	1,354
Net gains/losses from risk provisions	196	0	0	0	0	0	196
Commission income	8	0	0	0	0	0	8
Commission expense	–10	–4	–1	0	0	0	–15
Net gains/ losses from hedge accounting	–7,940	9,128	0	0	0	–1,297	–110
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	–389	549	614	0	774
Net gains/losses from disposal of financial assets at amortised cost	–4	0	0	0	0	0	–4
Net other operating income	0	0	0	0	0	0	0
Change in revaluation reserves	0	0	0	0	23	0	23
Total	**–4,131**	**6,247**	**318**	**465**	**251**	**137**	**3,286**

1) Includes interest income from financial guarantees of EUR 25 million.

	Financial assets at amortised cost	Financial liabilities at amortised cost	Financial assets at fair value – FVM	FVM	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	4,799[1)]	0	186	423	0	–2,923	2,485
Interest expense	–54	–4,408	428	–200	–462	4,793	96
Net gains/losses from risk provisions	–781	0	0	0	0	0	–781
Commission income	8	0	0	0	0	0	8
Commission expense	–10	–5	–2	0	0	0	–17
Net gains/ losses from hedge accounting	1,959	–4,482	0	0	0	2,539	16
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	460	–658	–230	0	–428
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	–114	0	–114
Total	**5,920**	**–8,896**	**1,072**	**–435**	**–806**	**4,409**	**1,263**

1) Includes interest income from financial guarantees of EUR 28 million.

(55) 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.

The fair value of the additional balances with central banks recognised in Cash reserves is their carrying amount.

	(statement of financial position) EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	carrying amount EUR in millions
Assets						
Financial assets at amortised cost						
Loans and advances to banks	308,251	0	6,270	305,404	311,675	3,424
Loans and advances to customers	129,197	0	0	133,323	133,323	4,126
Securities and investments	35,774	28,578	3,485	3,809	35,872	98
Financial assets at fair value						
Loans and advances to banks – FVM	49	0	0	49	49	0
Loans and advances to customers – FVM	9,572	0	9,437	135	9,572	0
Securities and investments – FVM	4,083	111	3,352	619	4,083	0
Other derivatives – FVM	5,381	0	4,765	616	5,381	0
Value adjustments from macro fair value hedge accounting	4,609	n.a.	n.a.	n.a.	n.a.	–4,609
Derivatives designated for hedge accounting	8,478	0	8,478	0	8,478	0
Non-current assets held for sale	119	0	68	51	119	0
Total	**505,512**	**28,690**	**35,855**	**444,007**	**508,552**	**3,040**
Liabilities and equity						
Financial liabilities at amortised cost						
Liabilities to banks	13,498	0	13,537	2	13,539	41
Liabilities to customers	43,694	0	43,694	42	43,736	43
Certificated liabilities	439,194	378,227	62,389	0	440,616	1,422
Financial liabilities at fair value						
Liabilities to banks – FVD	255	0	255	0	255	0
Liabilities to customers – FVD	1,003	0	1,003	0	1,003	0
Certificated liabilities – FVD	8,416	5,223	3,193	0	8,416	0
Other derivatives – FVM	1,810	0	1,723	86	1,810	0
Value adjustments from macro fair value hedge accounting	37	n.a.	n.a.	n.a.	n.a.	–37
Derivatives designated for hedge accounting	4,554	0	4,554	0	4,554	0
Total	**512,459**	**383,449**	**130,349**	**130**	**513,928**	**1,469**

	(statement of financial position) EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	carrying amount EUR in millions
Assets						
Financial assets at amortised cost						
Loans and advances to banks	295,460	0	7,654	298,567	306,221	10,760
Loans and advances to customers	129,375	0	680	134,465	135,145	5,770
Securities and investments	35,779	27,955	2,135	5,737	35,827	48
Financial assets at fair value						
Loans and advances to banks – FVM	38	0	0	38	38	0
Loans and advances to customers – FVM	9,616	0	9,425	191	9,616	0
Securities and investments – FVM	3,064	39	2,315	710	3,064	0
Other derivatives – FVM	5,359	0	4,182	1,177	5,359	0
Value adjustments from macro fair value hedge accounting	12,220	n.a.	n.a.	n.a.	n.a.	–12,220
Derivatives designated for hedge accounting	7,958	0	7,958	0	7,958	0
Non-current assets held for sale	81	0	23	59	81	0
Total	**498,951**	**27,995**	**34,372**	**440,943**	**503,309**	**4,358**
Liabilities and equity						
Financial liabilities at amortised cost						
Liabilities to banks	22,304	0	22,359	1	22,361	57
Liabilities to customers	47,219	0	47,289	35	47,323	104
Certificated liabilities	414,344	366,706	49,616	0	416,322	1,978
Financial liabilities at fair value						
Liabilities to banks – FVD	266	0	266	0	266	0
Liabilities to customers – FVD	1,300	0	1,300	0	1,300	0
Certificated liabilities – FVD	10,924	7,690	3,231	3	10,924	0
Other derivatives – FVM	3,741	0	3,722	18	3,741	0
Value adjustments from macro fair value hedge accounting	57	n.a.	n.a.	n.a.	n.a.	–57
Derivatives designated for hedge accounting	9,910	0	9,910	0	9,910	0
Total	**510,065**	**374,396**	**137,694**	**57**	**512,147**	**2,083**

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.

	to level 2 EUR in millions	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	0
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Non-current assets held for sale	0	0
Total	**0**	**0**

	to level 2 EUR in millions	to level 1 EUR in millions
Liabilities and equity		
Financial liabilities at fair value		
Liabilities to banks – FVD	0	0
Liabilities to customers – FVD	0	0
Certificated liabilities – FVD	38	0
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Total	**38**	**0**

Certificated liabilities in the amount of EUR 38 million (2020: EUR 229 million) were transferred to level 2 due to declining market liquidity.

	to level 2 EUR in millions	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	352	0
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Non-current assets held for sale	0	0
Total	**352**	**0**

	to level 2 EUR in millions	to level 1 EUR in millions
Liabilities and equity		
Financial liabilities at fair value		
Liabilities to banks – FVD	0	0
Liabilities to customers – FVD	0	0
Certificated liabilities – FVD	229	9
Other derivatives – FVM	0	0
Derivatives designated for hedge accounting	0	0
Total	**229**	**9**

	Loans and advances to banks – FVM	Loans and advances to customers – FVM	Securities and investments – FVM	Other derivatives – FVM	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. 2021	**38**	**191**	**710**	**1,177**	**59**	**2,174**
A. Changes recognised in the income statement						
Net interest and commission income	0	–1	0	10	0	9
Contracts still valid at year-end	*0*	*–1*	*0*	*10*	*0*	*9*
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	8	–5	53	–648	11	–581
Contracts still valid at year-end	*8*	*–8*	*39*	*–573*	*11*	*–523*
Total changes recognised in the income statement	**8**	**–6**	**53**	**–639**	**11**	**–573**
B. Changes recognised directly in equity						
Change of valuation method used	0	0	–149	0	–27	–177
Transfer from level 1 and level 2	0	0	64	0	8	72
Transfer to level 1 and level 2	0	0	–213	0	–36	–249
Additions	9	49	55	0	0	113
Disposals	–8	–104	–60	0	–7	–179
Total changes recognised directly in equity	**0**	**–55**	**–155**	**0**	**–35**	**–243**
Changes in consolidated group	0	0	0	0	0	0
Exchange rate changes	3	5	24	45	3	80
Other changes	0	0	–14	33	14	33
As of 31 Dec. 2021	**49**	**135**	**619**	**616**	**51**	**1,471**

	to banks – FVD	to customers – FVD	liabilities – FVD	derivatives – FVM	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2021	**0**	**0**	**3**	**18**	**21**
A. Changes recognised in the income statement					
Net interest and commission income	0	0	0	–1	–1
Contracts still valid at year-end	*0*	*0*	*0*	*–4*	*–4*
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	36	36
Contracts still valid at year-end	*0*	*0*	*0*	*6*	*6*
Total changes recognised in the income statement	**0**	**0**	**0**	**35**	**35**
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*
Change of valuation method used	0	0	–4	0	–4
Transfer from level 1 and level 2	0	0	0	0	0
Transfer to level 1 and level 2	0	0	–4	0	–4
Additions	0	0	0	2	2
Disposals	0	0	0	–3	–3
Total changes recognised directly in equity	**0**	**0**	**–3**	**–1**	**–4**
Exchange rate changes	0	0	0	1	1
Other changes	0	0	0	33	33
As of 31 Dec. 2021	**0**	**0**	**0**	**86**	**86**

	advances to banks – FVM	advances to customers – FVM	and investments – FVM	derivatives – FVM	assets held for sale	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2020	**9**	**185**	**842**	**837**	**0**	**1,874**
A. Changes recognised in the income statement						
Net interest and commission income	0	–3	0	20	0	18
Contracts still valid at year-end	*0*	*–3*	*0*	*21*	*0*	*18*
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	3	–3	–162	360	12	210
Contracts still valid at year-end	*3*	*–3*	*–138*	*366*	*2*	*229*
Total changes recognised in the income statement	**3**	**–5**	**–162**	**380**	**12**	**228**
B. Changes recognised directly in equity						
Change of valuation method used	0	0	179	0	–24	155
Transfer from level 1 and level 2	0	0	200	0	0	200
Transfer to level 1 and level 2	0	0	–21	0	–24	–45
Additions	30	74	9	0	0	113
Disposals	–4	–58	–36	0	–14	–112
Total changes recognised directly in equity	**27**	**16**	**151**	**0**	**–38**	**156**
Changes in consolidated group	0	0	0	0	0	0
Exchange rate changes	–1	–5	–35	–62	–2	–105
Other changes	0	0	–87	21	87	21
As of 31 Dec. 2020	**38**	**191**	**710**	**1,177**	**59**	**2,174**

	to banks – FVD	to customers – FVD	liabilities – FVD	derivatives – FVM	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2020	**0**	**0**	**16**	**49**	**66**
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	3	–34	–31
Contracts still valid at year-end	*0*	*0*	*0*	*–40*	*–39*
Total changes recognised in the income statement	**0**	**0**	**3**	**–34**	**–31**
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*
Change of valuation method used	0	0	–16	–17	–33
Transfer from level 1 and level 2	0	0	0	0	0
Transfer to level 1 and level 2	0	0	–16	–17	–33
Additions	0	0	0	–3	–3
Disposals	0	0	0	2	2
Total changes recognised directly in equity	**0**	**0**	**–16**	**–18**	**–34**
Exchange rate changes	0	0	0	0	0
Other changes	0	0	0	21	21
As of 31 Dec. 2020	**0**	**0**	**3**	**18**	**21**

Information on unobservable data as of 31 December 2021

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[1)]	Credit spread	–600 to +2,600 basis points
		Internal spread	–11 to +11 basis points
		Risk costs	+/– 10%
Securities and investments from equity finance business – FVM	Discounted cash flow method[2)]	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 risk-free customer margin	7% to 13%

1) If the credit spread and the internal spread could not be used for valuation purposes, the sensitivities were calculated on the basis of the cost of risk.
2) 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.

advances to customers – FVM	flow method[1]		basis points
		Internal spread	– 8 to +43 basis points
		Risk costs	+/– 10%
Securities and investments from equity finance business – FVM	Discounted cash flow method[2]	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 risk-free customer margin	7% to 13%
Certificated liabilities – FVD	Option pricing model	Correlations	+/– 500 basis points

1) If the credit spread and the internal spread could not be used for valuation purposes, the sensitivities were calculated on the basis of the cost of risk.
2) 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 2021

	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	52	49	47
Loans and advances to customers – FVM	146	135	123
Securities and investments – FVM	704	619	548
Other derivatives – FVM	622	616	610
Non-current assets held for sale	61	51	44
Total	**1,585**	**1,471**	**1,372**

	scenario EUR in millions	EUR in millions	scenario EUR in millions
Financial liabilities at fair value			
Certificated liabilities – FVD	0	0	0
Other derivatives – FVM	86	86	87
Total	**86**	**86**	**87**

Sensitivity analysis for the financial assets measured at fair value assigned to level 3 as of 31 December 2020

	Best case scenario EUR in millions	Reported value EUR in millions	Worst case scenario EUR in millions
Financial assets at fair value			
Loans and advances to banks – FVM	39	38	37
Loans and advances to customers – FVM	209	191	167
Securities and investments – FVM	795	710	637
Other derivatives – FVM	1,184	1,177	1,169
Non-current assets held for sale	74	59	47
Total	**2,302**	**2,174**	**2,057**

Sensitivity analysis for the financial liabilities measured at fair value assigned to level 3 as of 31 December 2020

	Best case scenario EUR in millions	Reported value EUR in millions	Worst case scenario EUR in millions
Financial liabilities at fair value			
Certificated liabilities – FVD	3	3	3
Other derivatives – FVM	18	18	18
Total	**21**	**21**	**22**

	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	28,636	94	1	Financial assets at amortised cost	–508
Interest currency risk					
Securities and investments – Bonds and other fixed-income securities	116	1	0	Financial assets at amortised cost	–3
Liabilities and equity					
Interest risk					
Liabilities to banks/customers – promissory note loans	30,537	18	2	Financial liabilities at amortised cost	481
Certificated liabilities	183,746	1,799	261	Financial liabilities at amortised cost	5,053
Interest currency risk					
Liabilities to banks/customers – promissory note loans	0	0	0	Financial liabilities at amortised cost	0
Certificated liabilities	120,051	939	1,309	Financial liabilities at amortised cost	3,576

	amount of hedged items	hedge fair value adjustment (fair value of the hedged risk for the hedged item)	value adjustment to be amortised (discontinued hedge relationships)	Statement of financial position items in which the hedged items are reported	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	28,007	601	0	Financial assets at amortised cost	177
Interest currency risk					
Securities and investments – Bonds and other fixed-income securities	194	4	0	Financial assets at amortised cost	2
Liabilities and equity					
Interest risk					
Liabilities to banks/customers – promissory note loans	30,717	500	3	Financial liabilities at amortised cost	–88
Certificated liabilities	180,822	6,966	271	Financial liabilities at amortised cost	–2,415
Interest currency risk					
Liabilities to banks/customers – promissory note loans	0	0	0	Financial liabilities at amortised cost	0
Certificated liabilities	104,712	5,594	–1	Financial liabilities at amortised cost	–1,997

	of hedging instruments	amount of hedging instruments	of financial position items in which the hedging instruments are reported	changes in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)	interest rate of hedging instruments[1]
	EUR in millions	EUR in millions		EUR in millions	%
Assets					
Interest risk					
Interest-related transactions: interest rate swap	183,537	2,961	Derivatives designated for hedge accounting	512	0.1
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	134,963	5,488	Derivatives designated for hedge accounting	3	0.2[2]
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	54,655	790	Derivatives designated for hedge accounting	–5,524	0.7
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	54,166	1,390	Derivatives designated for hedge accounting	–3,594	0.3[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.

	instruments	hedging instruments	position items in which the hedging instruments are reported	hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)	of hedging instruments[1]
	EUR in millions	EUR in millions		EUR in millions	%
Assets					
Interest risk					
Interest-related transactions: interest rate swap	191,649	5,350	Derivatives designated for hedge accounting	–173	0.9
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	97,459	2,584	Derivatives designated for hedge accounting	–2	2.2[2]
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	27,990	156	Derivatives designated for hedge accounting	2,471	0.6
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	76,933	5,594	Derivatives designated for hedge accounting	1,998	2.1[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.

Analysis of par values of hedging instruments by hedge relationship according to remaining terms as of 31 December 2021

Due	In up to one 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	177	3,075	31,063	88,042	61,180
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	5,336	11,898	22,248	81,928	13,553
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	576	765	3,323	25,216	24,774
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	730	5,464	6,760	34,848	6,365

Due	one month	1 and 3 months	3 months and 1 year	1 year and 5 years	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	1,849	11,251	114,200	64,349
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	0	5,533	16,336	63,407	12,183
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	556	880	2,818	17,668	6,067
Interest currency risk					
Currency-related transactions: cross-currency interest rate swap	1,020	9,292	11,120	48,232	7,269

(57) Disclosures on macro fair value hedge accounting

Disclosures on hedged items in macro fair value hedge accounting by risk type – 2021

	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	*222,782*	*4,609*	*195*	*Financial assets at amortised cost*	*Value adjustment from macro fair value hedge accounting*	*–7,430*
Liabilities and equity	*0*	*37*	*37*	*Financial liabilities at amortised cost*	*Value adjustment from macro fair value hedge accounting*	*18*

	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)	items in which the hedged items are reported		Fair value changes in hedged items to determine hedge ineffectiveness (income statement effect – hedged items)
				Carrying amount before value adjustment from macro fair value hedge accounting	Value adjustment from macro fair value hedge accounting	
	EUR in millions	EUR in millions	EUR in millions			EUR in millions
Interest risk						
Assets	*214,054*	*12,220*	*382*	*Financial assets at amortised cost*	*Value adjustments from macro fair value hedge accounting*	*1,779*
Liabilities and equity	*0*	*57*	*57*	*Financial liabilities at amortised cost*	*Value adjustments from macro fair value hedge accounting*	*18*

Disclosures on hedging instruments in macro fair value hedge accounting by risk type – 2021

	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	77,829	29	Derivatives designated for hedge accounting	2,003
Liabilities and equity				
Interest risk				
Interest-related transactions: interest rate swap	151,426	2,373	Derivatives designated for hedge accounting	5,304

	of hedging instruments	amount of hedging instruments	financial position items in which the hedging instruments are reported	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	7,970	24	Derivatives designated for hedge accounting	–178
Liabilities and equity				
Interest risk				
Interest-related transactions: interest rate swap	205,883	4,160	Derivatives designated for hedge accounting	–1,578

Analysis of par values of hedging instruments by remaining terms as of 31 December 2021

Due	In up to one 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	0	1,838	17,610	58,381
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	6,782	4,100	16,406	81,116	43,022

Due			1 year	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	400	0	4,550	2,039	982
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	721	1,621	14,547	99,339	89,655

(58) Additional disclosures on derivatives

Analysis of derivatives by type of hedge

	Par value		Fair value 31 Dec. 2021		Fair value 31 Dec. 2020	
	31 Dec. 2021	31 Dec. 2020	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	584,335	540,913	6,111	4,040	10,126	5,584
Cross-currency derivatives	165,569	156,986	7,727	2,311	3,180	8,047
Credit derivatives	0	0	0	0	0	0
Total	**749,904**	**697,898**	**13,838**	**6,351**	**13,306**	**13,631**

Cross-currency swaps are presented under Cross-currency derivatives.

	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021		31 Dec. 2020	
	EUR in millions	EUR in millions	positive EUR in millions	negative EUR in millions	positive EUR in millions	negative EUR in millions
OECD banks	737,960	685,952	13,222	6,261	12,125	13,580
Non-OECD banks	161	165	0	3	4	6
Other counterparties	11,676	10,824	598	85	1,149	18
Public sector	107	957	18	2	27	27
Total	**749,904**	**697,898**	**13,838**	**6,351**	**13,306**	**13,631**

The analysis includes financial and credit derivatives which are presented in the items Derivatives designated for hedge accounting and Other derivatives. Embedded derivatives that must be bifurcated are not included.

The economic hedge effect of financial derivatives with an aggregate principal amount of EUR 669.2 billion (31 Dec. 2020: EUR 627.3 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 2020, 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.

However, liquid collateral totalling EUR 829 million (31 Dec. 2020: EUR 4,909 million) was provided, which is recognised under Financial assets at amortised cost – Loans and advances to banks or customers.

Unchanged from 31 December 2020, 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 7,717 million (31 Dec. 2020: EUR 3,446 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:

	2021 EUR in millions	2020 EUR in millions
As of 1 Jan.	**–101**	**–104**
Addition	–20	–13
Reversal	18	11
Exchange rate changes	–5	5
As of 31 Dec.	**–108**	**–101**

The net gains/losses from financial derivatives not qualifying for hedge accounting includes amortisation effects in the amount of EUR 10 million (2020: EUR 9 million).

(59) Management of the transition to new reference rates

With respect to the transition to new alternative risk-free reference rates, KfW is relying on a group-wide project structure that was set up at an early stage and covers the main areas of focus. In addition to defining a transition strategy in line with supervisory requirements, the procedural and IT conditions have been established to widely satisfy the complex requirements of a transition of derivatives and spot transactions. These comprehensive adjustment measures result from the complex requirements relating to valuation models, risk management and accounting.

A large share of the derivatives referencing GBP, CHF and JPY LIBOR were actively converted in the second half of 2021 as planned. Derivative instruments indexed to the above reference rates, which had not been actively migrated by the end of 2021, are being passively transitioned into the new interest-rate environment via the ISDA fallback protocol. However, ISDA fallbacks will only be applied if active conversion is not possible.

Conversion of loans to alternative reference rates has already been tested in an operational environment and will be continued in 2022. This applies to transitioning to rates compounded overnight in arrears as well as to forward-looking term rates.

Key assumptions relating to benchmark reform

- KfW assumes that EURIBOR-based reference rates will be admissible for the foreseeable future. A transition is therefore not necessary for these instruments in the medium term.
- The main reference rates affected by the transition that are relevant for KfW’s financial instruments are:
  - USD LIBOR: transition to SOFR
  - GBP LIBOR: transition to SONIA
  - CHF LIBOR: transition to SARON
  - JPY LIBOR: transition to TONA

For the USD LIBOR and GBP LIBOR reference rates, derivatives were also designated for hedge accounting effective 31 December 2021.

The following holdings are affected by the benchmark reform:

Reference rate (floating leg)	Carrying amount	liabilities Carrying amount	designated for hedge accounting Nominal volumes (gross)	designated for hedge accounting Nominal volumes (gross)
	31 Dec. 2021	31 Dec. 2021	31 Dec. 2021	31 Dec. 2021
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
USD LIBOR	15,214	0	152,548	7,534
GBP LIBOR	2,316	0	1,837	2,009
CHF LIBOR	0	0	96	0
JPY LIBOR	39	31	0	31
EUR LIBOR	29	0	0	0

(60) Additional disclosures on financial liabilities at fair value

Disclosures on financial liabilities at fair value as of 31 December 2021

	Financial liabilities at fair value			
	Liabilities to banks	Liabilities to customers	Certificated liabilities	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Carrying amount	255	1,003	8,416	9,674
Repayment amount at maturity	245	1,187	9,330	10,762
Difference	**–10**	**184**	**915**	**1,088**
thereof borrowings for which the repayment amount builds up as a result of the capitalisation over time of interest due	**0**	**185**	**1,735**	**1,919**

Disclosures on financial liabilities at fair value as of 31 December 2020

	Financial liabilities at fair value			
	Liabilities to banks	Liabilities to customers	Certificated liabilities	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Carrying amount	266	1,300	10,924	12,490
Repayment amount at maturity	245	1,584	11,359	13,188
Difference	**–21**	**284**	**434**	**698**
thereof borrowings for which the repayment amount builds up as a result of the capitalisation over time of interest due	**0**	**287**	**1,608**	**1,895**

	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	9,614	1,332	40	1,876	709	13,572
Liabilities to customers	3,434	2,706	15,442	13,496	8,739	43,817
Certificated liabilities	17,813	33,326	69,178	215,374	109,035	444,726
Financial liabilities at fair value						
Liabilities to banks	0	0	1	5	249	255
Liabilities to customers	0	3	6	121	1,209	1,339
Certificated liabilities	38	8	203	1,122	10,054	11,425
Net obligations arising from derivative financial instruments	–621	–817	–2,819	–7,099	–5,979	–17,335
thereof Gross obligations arising from derivative financial instruments	*11,116*	*26,219*	*34,170*	*75,345*	*21,312*	*168,163*
Obligations arising from on-balance sheet financial instruments	**30,278**	**36,558**	**82,051**	**224,896**	**124,015**	**497,798**
Obligations arising from off-balance sheet transactions	**116,290**	**0**	**0**	**0**	**0**	**116,290**
Total	**146,568**	**36,558**	**82,051**	**224,896**	**124,015**	**614,088**

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.

	1 month	and up to 3 months	months and up to 1 year	and up to 5 years	5 years	
	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	4,854	2,498	135	13,156	1,467	22,110
Liabilities to customers	2,037	2,837	5,989	27,374	8,394	46,632
Certificated liabilities	26,755	30,277	49,606	214,226	92,694	413,557
Financial liabilities at fair value						
Liabilities to banks	0	0	1	5	250	256
Liabilities to customers	149	3	6	83	1,505	1,746
Certificated liabilities	14	6	2,604	973	10,112	13,709
Net obligations arising from derivative financial instruments	275	590	–571	–1,300	–5,333	–6,338
thereof Gross obligations arising from derivative financial instruments	*14,541*	*25,387*	*31,084*	*78,092*	*22,360*	*171,465*
Obligations arising from on-balance sheet financial instruments	**34,084**	**36,211**	**57,771**	**254,516**	**109,090**	**491,672**
Obligations arising from off-balance sheet transactions	**108,535**	**0**	**0**	**0**	**0**	**108,535**
Total	**142,618**	**36,211**	**57,771**	**254,516**	**109,090**	**600,207**

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. 2021 EUR in millions	31 Dec. 2020 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	2,086	13,913
Financial liabilities at amortised cost – Liabilities to banks (countervalue)	2,052	13,324

The fair value of interest-bearing securities sold under repo transactions that continue to be recognised in Securities and investments totalled EUR 2,088 million (31 Dec. 2020: EUR 13,905 million). The fair value of the corresponding repayment obligations was EUR 2,052 million (31 Dec. 2020: EUR 13,324 million).

Moreover, as in 2020, 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 2020, 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 2020, the group neither pledged nor accepted any liquid collateral.

Disclosures on reverse repo transactions

	31 Dec. 2021 EUR in millions	31 Dec. 2020 EUR in millions
Financial assets at amortised cost – Loans and advances to banks (countervalue)	0	50
Financial assets at amortised cost – Loans and advances to customers (countervalue)	0	0
Total	**0**	**50**

The fair value of interest-bearing securities purchased under reverse repos that are not recognised amounted to EUR 0 million (31 Dec. 2020: EUR 54 million).

Moreover, as in 2020, 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.

As in 2020, the group did not pledge any collateral (in the form of securities) under reverse repo transactions that can be resold or repledged at any time without payments being past due.

As in 2020, the group neither pledged nor accepted any liquid collateral.

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.

For securities repo transactions (reverse repos and repos) for which EUREX acts as the central counterparty, offsetting is performed for receivables and liabilities provided that relevant IFRS requirements are met.

In addition, framework agreements featuring netting agreements are in place between KfW and its business partners for OTC derivatives and securities repo transactions.

One form of netting is close-out netting, which provides for the extinction of all rights and obligations relating to individual transactions under the framework agreement upon termination of said framework agreement by the contractual partner, or upon the latter's insolvency, with the rights and obligations replaced by a single compensation claim (or obligation) in the amount of the net replacement costs of the terminated individual transactions. This does not represent a present legal claim for offsetting.

Close-out netting is not to be confused with the offsetting of payments in normal business. The same framework agreement provides for the latter case, 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.

KfW's framework agreements relating to bilateral OTC derivatives (not in central clearing) all 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.

	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	19,127	5,899[1)]	13,228	5,417	7,644	168
Reverse repos	0	0	0	0	0	0
Total	**19,127**	**5,899**	**13,228**	**5,417**	**7,644**	**168**

1) Thereof obligations from cash collateral for OTC derivatives with EUREX as the central counterparty in the amount of EUR 282 million.

Disclosures on financial liabilities with netting agreements as of 31 December 2021

	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	11,932	5,617	6,315	5,417	790	108
Repos	698	0	698	0	698	0
Total	**12,630**	**5,617**	**7,013**	**5,417**	**1,488**	**108**

The disclosures on financial instruments with netting agreements only include gross and net amounts for financial assets and financial liabilities with netting agreements. As of 31 December 2021, the Notes on the two classes Derivatives designated for hedge accounting and Other derivatives also include financial assets with a carrying amount of EUR 631 million (31 Dec. 2020: EUR 1,180 million) and financial liabilities with a carrying amount of EUR 49 million (31 Dec. 2020: EUR 53 million), in particular from bifurcated embedded derivatives and derivatives not subject to netting agreements.

The Note “Disclosures on repurchase agreements” also includes financial liabilities with a carrying amount of EUR 1,354 million (31 Dec. 2020: EUR 13,290 million) from funding via TLTRO III that is 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	21,008	8,871	12,137	8,500	3,417	220
Reverse repos	50	0	50	9	41	0
Total	**21,058**	**8,871**	**12,187**	**8,509**	**3,458**	**220**

Disclosures on financial liabilities with netting agreements as of 31 December 2020

	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	23,768	10,170[1)]	13,598	8,500	4,822	276
Repos	34	0	34	9	26	0
Total	**23,802**	**10,170**	**13,632**	**8,509**	**4,848**	**276**

1) Thereof receivables from cash collateral for OTC derivatives with EUREX as the central counterparty in the amount of EUR 1,299 million.

	EUR in millions	EUR in millions
Irrevocable loan commitments	111,640	105,282
Financial guarantee contracts	1,737	1,347
Contingent liabilities from financial guarantees	1,441	1,474
Other contingent liabilities	2,065	1,843
Total	**116,883**	**109,945**

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. 2021	31 Dec. 2020
	EUR in millions	EUR in millions
Loans and advances to banks	761	797
Loans and advances to customers	10,239	10,442
Securities and investments	8,056	6,576[1)]
Assets held in trust	**19,056**	**17,815**
Liabilities to banks	0	0
Liabilities to customers	19,056	17,815[1)]
Liabilities held in trust	**19,056**	**17,815**

1) The comparative figure was adjusted by EUR 332 million (see Note 3).

Government in accordance with Article 2 (4) of the KfW Law and are included in Securities and investments.

Moreover, KfW held guarantees of EUR 80 million (31 Dec. 2020: EUR 30 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. 2021	31 Dec. 2020
	EUR in millions	EUR in millions
Administered loans	20,189	18,383

(66) Leasing transactions as lessee

Disclosures on lessee agreements as of 31 December 2021

	Due within one year	Due in between one and five years	Due in more than five years	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Lease liabilities (undiscounted)	13	33	13	59

Disclosures on lessee agreements as of 31 December 2020

	Due within one year	Due in between one and five years	Due in more than five years	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Lease liabilities (undiscounted)	13	42	17	73

Female employees	3,740	3,578
Male employees	3,994	3,804
Total	**7,734**	**7,382**
Staff not covered by collective agreements	*5,047*	*4,795*
Staff covered by collective agreements	*2,276*	*2,146*
Staff in external offices	*411*	*442*

(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[1)]

	2021 EUR in thousands	2020 EUR in thousands
Members of the Executive Board	3,651.0[2)]	3,693.1[3)]
Former members of the Executive Board and their surviving dependants	4,474.5	4,540.1
Members of the Board of Supervisory Directors	197.4	204.1
Total	**8,322.9**	**8,437.3**

1) Amounts in the table are subject to rounding differences.
2) The following changes were made in the composition of the Executive Board in the reporting year:
– Dr Günther Bräunig stepped down from the Executive Board of KfW as of 31 October 2021.
– Stefan Wintels was appointed to the Executive Board of KfW with effect from 1 October 2021.
– Christiane Laibach was appointed to the Executive Board of KfW with effect from 1 June 2021.
3) Prof. Dr Joachim Nagel stepped down from the Executive Board of KfW as of 31 October 2020.

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		to pension provisions[2]	
	2021	2020	2021	2020	2021	2020	2021	2020
	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
Dr Günther Bräunig (Chief Executive Officer)[3]	665.3	785.3	22.3	28.3	687.6	813.6	1,311.7	291.5
Stefan Wintels (Chief Executive Officer)[4]	199.6	/	3.4	/	203.0	/	259.0	/
Dr Ingrid Hengster	574.3	564.9	39.5	37.8	613.8	602.7	305.2	774.8
Melanie Kehr	541.0	532.2	14.4	28.6	555.4	560.8	297.5	530.9
Christiane Laibach[5]	315.6	/	19.9	/	335.5	/	204.2	/
Bernd Loewen	640.0	629.5	25.7	36.1	665.7	665.6	–123.0	854.4
Prof. Dr Joachim Nagel[6]	/	451.8	/	15.5	/	467.3	/	–1,314.0[7]
Dr Stefan Peiß	574.3	564.9	15.7	18.2	590.0	583.1	–133.3	729.5
Total	**3,510.1**	**3,528.6**	**140.9**	**164.5**	**3,651.0**	**3,693.1**	**2,121.3**	**1,867.1**

1) Amounts in the table are subject to rounding differences.
2) The discount rate for pension obligations increased in 2021 due to the rise in long-term capital market rates, from 1.02% (31 December 2020) to 1.32% (31 December 2021).
3) Dr Günther Bräunig stepped down from the Executive Board of KfW as of 31 October 2021.
4) Stefan Wintels was appointed to the Executive Board of KfW with effect from 1 October 2021. Stefan Wintels served as Co-CEO with Dr Günther Bräunig from 1 October until 31 October 2021. Stefan Wintels has served as the sole CEO since 1 November 2021.
5) Christiane Laibach was appointed to the Executive Board of KfW with effect from 1 June 2021.
6) Prof. Dr Joachim Nagel stepped down from the Executive Board of KfW as of 31 October 2020.
7) Plus/minus sign adjustment.

Breakdown of other remuneration of the Executive Board in financial year 2021[1]

	Company car	Group accident insurance	Health insurance	Longterm care insurance	Cost of maintaining a second home	Total
	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
Dr Günther Bräunig (Chief Executive Officer)[2]	14.9	0.5	6.2	0.7	0.0	22.3
Stefan Wintels (Chief Executive Officer)[3]	1.9	0.1	1.2	0.2	0.0	3.4
Dr Ingrid Hengster	26.3	0.4	12.0	0.8	0.0	39.5
Melanie Kehr	9.3	0.4	4.2	0.5	0.0	14.4
Christiane Laibach[4]	6.9	0.2	2.6	0.2	10.0	19.9
Bernd Loewen	11.4	0.5	13.0	0.8	0.0	25.7
Dr Stefan Peiß	7.6	0.4	6.8	0.9	0.0	15.7
Total	**78.3**	**2.5**	**46.0**	**4.1**	**10.0**	**140.9**

1) Amounts in the table are subject to rounding differences.
2) Dr Günther Bräunig stepped down from the Executive Board of KfW as of 31 October 2021.
3) Stefan Wintels was appointed to the Executive Board of KfW with effect from 1 October 2021. Stefan Wintels served as Co-CEO with Dr Günther Bräunig from 1 October until 31 October 2021. Stefan Wintels has served as the sole CEO since 1 November 2021.
4) Christiane Laibach was appointed to the Executive Board of KfW with effect from 1 June 2021.

		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
Dr Günther Bräunig (Chief Executive Officer)	19.6	0.6	7.3	0.9	0.0	28.3
Dr Ingrid Hengster	24.4	1.5	11.1	0.8	0.0	37.8
Melanie Kehr	11.0	0.4	3.8	0.1	13.3	28.6
Bernd Loewen	22.0	1.5	11.9	0.8	0.0	36.1
Prof. Dr Joachim Nagel[2)]	12.7	0.0	2.6	0.2	0.0	15.5
Dr Stefan Peiß	10.3	0.4	6.6	0.9	0.0	18.2
Total	**100.0**	**4.4**	**43.3**	**3.7**	**13.3**	**164.5**

1) Amounts in the table are subject to rounding differences.
2) Prof. Dr Joachim Nagel stepped down from the Executive Board of KfW as of 31 October 2020.

Breakdown of remuneration of the Executive Board from secondary employment in financial years 2021 and 2020

	2021	2020
	EUR in thousands	EUR in thousands
Dr Günther Bräunig (Chief Executive Officer)[1)]	306.6	423.8
Stefan Wintels (Chief Executive Officer)[2)]	0.0	/
Dr Ingrid Hengster	21.5	83.3
Melanie Kehr	30.6	0.0
Christiane Laibach[3)]	0.0	/
Bernd Loewen	40.0	37.0
Dr Stefan Peiß	**0.0**	**0.0**

1) Dr Günther Bräunig stepped down from the Executive Board of KfW as of 31 October 2021.
2) Stefan Wintels was appointed to the Executive Board of KfW with effect from 1 October 2021. Stefan Wintels served as Co-CEO with Dr Günther Bräunig from 1 October until 31 October 2021. Stefan Wintels has served as the sole CEO since 1 November 2021.
3) Christiane Laibach was appointed to the Executive Board of KfW with effect from 1 June 2021.

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 16 December 2021.

purposes in accordance with applicable tax regulations. They are reimbursed under tax regulations for the cost of maintaining a second home for business reasons.

Executive Board members are insured under a group accident insurance policy. Allowances are provided for health and long-term care insurance. Executive Board members are 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 Executive Board members and by a supplemental legal expenses insurance policy. KfW Executive Board members acting in their management capacity are also 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 compensation including fringe benefits for the remainder of the contract, depending on which of the amounts is lower.

The full benefit entitlement totalled 49% of the final salary in the reporting year with different contractual arrangements. The retirement benefit entitlement amounted to 70% of the full entitlement for first-time appointment, with an increase per completed year of service of 0.98 to 1.53 percentage points depending on the contract (from an initial 34.3% to a maximum of 49% of the final salary).

Pension payments to former Executive Board members or their surviving dependants were as follows in 2021 and 2020:

Pension payments to former Executive Board members or their surviving dependants

	2021		2020	
	Headcount	EUR in thousands	Headcount	EUR in thousands
Former members of the Executive Board	19	3,673.3	18	3,549.4
Surviving dependants	8	801.2	8	990.7
Total	**27**	**4,474.5**	**26**	**4,540.1**

Provisions for pension obligations to former members of the Executive Board and their surviving dependants in the amount of EUR 74,578 thousand (31 Dec. 2020: EUR 69,287 thousand) were set up at the end of financial year 2021.

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 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 2021; 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.

		2021	Directors membership[2] EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
1.	Olaf Scholz	1 Jan. – 8 Dec.	0.0	0.0	0.0	0.0
2.	Christian Lindner	8 Dec. – 31 Dec.	0.0	0.0	0.0	0.0
3.	Peter Altmaier	1 Jan. – 8 Dec.	0.0	0.0	0.0	0.0
4.	Dr Robert Habeck	8 Dec. – 31 Dec.	0.0	0.0	0.0	0.0
5.	Doris Ahnen[3]	1 Jan. – 31 Dec.	5.1	0.6	0.2	5.9
6.	Annalena Baerbock	8 Dec. – 31 Dec.	0.0	0.0	0.0	0.0
7.	Sören Bartol	1 Jan. – 13 Dec.	5.1	1.8	0.8	7.8
8.	Dr Danyal Bayaz	8 Oct. – 31 Dec.	1.3	0.0	0.0	1.3
9.	Dr André Berghegger	1 Jan. – 31 Dec.	5.1	1.8	0.8	7.8
10.	Dr Holger Bingmann[5]	1 Jan. – 31 Dec.	5.1	0.6	1.4	7.1
11.	Volker Bouffier[3]	1 Jan. – 31 Dec.	5.1	1.2	0.4	6.7
12.	Ingeborg Esser[5]	1 Jan. – 31 Dec.	5.1	0.0	0.8	5.9
13.	Robert Feiger	6 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
14.	Albert Füracker[3]	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
15.	Verena Göppert	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
16.	Olav Gutting	1 Jan. – 31 Dec.	5.1	0.6	0.8	6.5
17.	Dr Louis Hagen	1 Jan. – 31 Dec.	5.1	1.2	1.4	7.7
18.	Reinhold Hilbers[3]	1 Jan. – 31 Dec.	5.1	1.8	1.0	8.0
19.	Reiner Hoffmann	6 Jan. – 31 Dec.	5.1	1.0	0.4	6.5
20.	Gerhard Hofmann	1 Jan. – 31 Dec.	5.1	1.2	1.2	7.5
21.	Dr Bruno Hollnagel	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
22.	Johannes Kahrs	1 Jan. – 19 Nov.	4.7	1.1	0.0	5.8
23.	Alois Karl[5]	1 Jan. – 31 Dec.	5.1	0.6	1.4	7.1
24.	Julia Klöckner	1 Jan. – 8 Dec.	0.0	0.0	0.0	0.0
25.	Andrea Kocsis[5]	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
26.	Stefan Körzell	6 Jan. – 31. Dec.	5.1	1.0	0.6	6.7
27.	Dr Joachim Lang	6 Jan. – 31 Dec.	5.1	1.0	0.2	6.3
28.	Steffi Lemke	8 Dec. – 31 Dec.	0.0	0.0	0.0	0.0
29.	Heiko Maas	1 Jan. – 8.Dec.	0.0	0.0	0.0	0.0
30.	Dr Gerd Müller	1 Jan. – 8 Dec.	0.0	0.0	0.0	0.0
31.	Rainer Neske	6 Jan. – 31 Dec.	5.1	0.6	1.2	6.9
32.	Cem Özdemir	8 Dec. – 31 Dec.	0.0	0.0	0.0	0.0
33.	Dr Hans-Walter Peters	6 Jan. – 31 Dec.	5.1	2.2	1.2	8.5
34.	Joachim Rukwied[5]	1 Jan. – 31 Dec.	5.1	0.6	0.6	6.3
35.	Andreas Scheuer	1 Jan. – 8 Dec.	0.0	0.0	0.0	0.0
36.	Helmut Schleweis	6 Jan. – 31 Dec.	5.1	2.2	0.0	7.3
37.	Svenja Schulze (until 8 Dec. BMU; from 8 Dec. BMZ)	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
38.	Holger Schwannecke	1 Jan. – 31 Dec.	5.1	1.8	0.4	7.4
39.	Edith Sitzmann[3]	1 Jan. – 11 May	2.1	0.0	0.0	2.1
40.	Peter Strobel[3]	1 Jan. – 31 Dec.	5.1	1.2	1.0	7.3
41.	Heike Taubert[3]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
42.	Michael Theurer[5]	1 Jan. – 15 Dec.	5.1	1.1	0.2	6.4
43.	Dr Martin Wansleben	1 Jan. – 31 Dec.	5.1	0.6	0.8	6.5
44.	Dr Volker Wissing	8 Dec. – 31 Dec.	0.0	0.0	0.0	0.0
Total			**151.3**	**26.7**	**19.4**	**197.4**

1) Amounts in the table are subject to rounding differences.
2) The amounts had not yet been paid out as of the reporting date 31 December 2021.
3) Amount governed by state law.
4) Amounts for financial year 2021 until the date of assessment. Any later claims will be included in the next report.
5) The daily allowance includes payments for 2020.

			Directors membership[2] EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
1.	Peter Altmaier	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
2.	Olaf Scholz	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
3.	Doris Ahnen[3]	1 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
4.	Sören Bartol	1 Jan. – 31 Dec.	5.1	1.8	1.4	8.3
5.	Dr André Berghegger	1 Jan. – 31 Dec.	5.1	1.7	0.6	7.4
6.	Dr Holger Bingmann	1 Jan. – 31 Dec.	5.1	0.6	1.0	6.7
7.	Volker Bouffier[3]	1 Jan. – 31 Dec.	5.1	1.1	0.6	6.8
8.	Ingeborg Esser	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
9.	Robert Feiger	1 Jan. – 31 Dec.	5.1	0.6	0.6	6.3
10.	Albert Füracker[3]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
11.	Verena Göppert	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
12.	Olav Gutting	1 Jan. – 31 Dec.	5.1	0.6	1.2	6.9
13.	Dr Louis Hagen	1 Jan. – 31 Dec.	5.1	1.1	1.8	8.0
14.	Reinhold Hilbers[3]	1 Jan. – 31 Dec.	5.1	1.7	1.4	8.2
15.	Reiner Hoffmann	1 Jan. – 31 Dec.	5.1	1.2	0.6	6.9
16.	Gerhard Hofmann	1 Jan. – 31 Dec.	5.1	1.1	1.8	8.0
17.	Dr Bruno Hollnagel	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
18.	Johannes Kahrs	1 Jan. – 31 Dec.	5.1	1.1	0.4	6.6
19.	Alois Karl	1 Jan. – 31 Dec.	5.1	0.6	1.0	6.7
20.	Julia Klöckner	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
21.	Andrea Kocsis	1 Jan. – 31 Dec.	5.1	0.0	0.0	5.1
22.	Stefan Körzell	1 Jan. – 31 Dec.	5.1	1.2	0.6	6.9
23.	Dr Joachim Lang	1 Jan. – 31 Dec.	5.1	1.2	0.0	6.3
24.	Heiko Maas	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
25.	Dr Gerd Müller	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
26.	Dr Hans-Walter Peters[5]	1 Jan. – 31 Dec.	5.1	2.5	1.6	9.2
27.	Eckhardt Rehberg[6]		0.0	0.0	1.4	1.4
28.	Dr Johannes-Jörg Riegler	1 Jan. – 31 Dec.	5.1	0.6	2.0	7.7
29.	Joachim Rukwied	1 Jan. – 31 Dec.	5.1	0.6	0.4	6.1
30.	Andreas Scheuer	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
31.	Helmut Schleweis	1 Jan. – 31 Dec.	5.1	2.5	0.0	7.6
32.	Svenja Schulze	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
33.	Holger Schwannecke	1 Jan. – 31 Dec.	5.1	1.8	0.6	7.5
34.	Edith Sitzmann[3]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
35.	Peter Strobel[3]	1 Jan. – 31 Dec.	5.1	1.1	1.0	7.2
36.	Heike Taubert[3]	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
37.	Michael Theurer	1 Jan. – 31 Dec.	3.8	0.9	0.4	5.1
38.	Dr Florian Toncar	1 Jan. – 31 Dec.	1.3	0.3	0.0	1.6
39.	Dr Martin Wansleben	1 Jan. – 31 Dec.	5.1	0.6	1.2	6.9
Total			**153.0**	**27.1**	**23.8**	**204.1**

1) Amounts in the table are subject to rounding differences.
2) The amounts had not yet been paid out as of the reporting date 31 December 2020.
3) Amount governed by state law.
4) Amounts for financial year 2020 until the date of assessment. Any later claims will be included in the next report.
5) The daily allowance includes payments for 2019.
6) Payments for meeting attendance from 2016 to 2018.

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. 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 related parties and KfW Group must be disclosed in accordance with IAS 24 requirements. KfW Group's related parties 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. Natural persons in key management positions considered to be related parties in accordance with IAS 24 include the members of the Executive Board, the Directors of KfW and the members of the Board of Supervisory Directors, members of the management boards and, if applicable, of the supervisory boards of all consolidated subsidiaries and their close family members. Transactions with related parties are concluded at arm's length as part of operating activities.

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 2021 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.

As of 31 December 2021, KfW Group reported receivables in the amount of EUR 19.9 billion (31 Dec. 2020: EUR 20.5 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. Securities and investments in the amount of EUR 3.9 billion (31 Dec. 2020: EUR 3.5 billion) includes notes from the liquidity portfolio. Under Other assets, KfW reported mainly claims for reimbursement from the Federal Government in the amount of EUR 643 million (31 Dec. 2020: EUR 641 million); these were offset in the same amount by liabilities relating to agency agreements. Assets are offset by liabilities of EUR 4.5 billion (31 Dec. 2020: EUR 5.4 billion), which include the liabilities from dividend income to be paid to the Federal Government. Interest rate swaps were also contracted with the Federal Government to hedge interest risk positions. In 2020, this resulted in a negative fair value of the hedging instruments of EUR 27 million.

As of 31 December 2021, irrevocable loan commitments of around EUR 12.4 billion (31 Dec. 2020: EUR 12.8 billion) were granted under the BAföG government loans. On the other hand, the group received loan commitments and guarantees from the shareholders in the amount of EUR 118.3 billion as of 31 December 2021 (31 Dec. 2020: EUR 112.5 billion), including for stabilisation measures through extensive liquidity assistance for businesses during

Transactions with shareholders resulted in Net interest income of EUR 19 million as of 31 December 2021 (31 Dec. 2020: EUR 32 million). This also included EUR 30 million (31 Dec. 2020: EUR 20 million) reimbursed by the Federal Government for interest not charged to end borrowers of student loans due to the coronavirus pandemic. The Federal Government will continue its reimbursements until 30 September 2022. 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 “Revenue from contracts with customers” (Note 10), “Net commission income” (Note 23) and “Trust activities” (Notes 20 and 65).

Transactions with interests held by the Federal Government

As of 31 December 2021, KfW maintained credit balances at Deutsche Bundesbank in the amount of EUR 42.4 billion (31 Dec. 2020: EUR 44.2 billion). This resulted in negative interest income of EUR 210 million (2020: EUR 145 million). Under liabilities to Deutsche Bundesbank, the group reported repo transactions in the amount of EUR 1.4 billion (31 Dec. 2020: EUR 13.3 billion) in connection with refinancing operations (TLTRO III) (see also Note 14 “Government grants”).

Funding for the KfW Special Programme 2020, with which KfW was mandated by the Federal Government to support the German economy during the COVID-19 crisis, was provided via the Economic Stabilisation Fund (“WSF”). The WSF is administered by the German Finance Agency, which also performs tasks in its own name. KfW reported coronavirus promissory note loans of EUR 35.7 billion (31 Dec. 2020: EUR 38.9 billion) under liabilities in this context. The funding advantages of the coronavirus promissory note loans compared to KfW’s funding spread benefit the Federal Government through the settlement of the coronavirus special programme.

Transactions with the remainder of the interests held by the Federal Government primarily include loans in the amount of EUR 638 million (31 Dec. 2020: EUR 658 million) in connection with corporate financing, securities and investments of EUR 0 million (31 Dec. 2020: EUR 26 million) in the form of notes from the liquidity portfolio and loan commitments and guarantees granted of EUR 0 million (31 Dec. 2020: EUR 29 million). This resulted in net interest income in the amount of EUR 6 million (2020: EUR 6 million).

Transactions with group companies

As of 31 December 2021, transactions with group companies resulted in loans of EUR 0 million (31 Dec. 2020: EUR 1 million). These were offset by other liabilities to tbg of EUR 57 million (31 Dec. 2020: EUR 44 million). Net interest income in the amount of EUR 0 million (2020: EUR 0 million) was reported from transactions with group companies.

Transactions with key persons

The business relationships between KfW and natural persons considered related parties are primarily determined by the KfW Bylaws and by applying the principles of the Federal Public Corporate Governance Code. Under its promotional mandate, KfW primarily disbursed financing grants for charging stations for electric cars and direct loans for education financing of EUR 53 thousand (31 Dec. 2020: EUR 56 thousand). 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.

Please refer to the remuneration report for details on remuneration of the Executive Board and the Board of Supervisory Directors.

	EUR in thousands	EUR in thousands
Audit	6,027	4,462
Other attestation services	1,067	973
Tax advisory services	0	0
Other services	0	0
Total	**7,095**	**5,435**

(71) Disclosures on unconsolidated structured entities

KfW 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 2021, the carrying amount of the positions held totalled EUR 5.8 billion (31 Dec. 2020: EUR 6.0 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 KfW 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. KfW 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 KfW Group supports these customers with pre-export financing structures.

As of 31 December 2021, the carrying amount of the positions held totalled EUR 2.4 billion (31 Dec. 2020: EUR 2.9 billion).

Structured entities in the business sector Promotion of developing countries and emerging economies

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 2021, the carrying amount of the positions held totalled EUR 0.2 billion (31 Dec. 2020: EUR 0.2 billion).

Maximum risk of loss as of 31 December 2021

	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	2,378	5,846	9	139
Risk and other provisions	46	1	0	0
Max. risk of loss	**2,332**	**5,845**	**9**	**139**

Maximum risk of loss as of 31 December 2020

	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	2,922	6,009	14	168
Risk and other provisions	117	1	0	1
Max. risk of loss	**2,805**	**6,008**	**14**	**167**

The maximum risk of loss is equal to the nominal amount for credit lines, (financial) guarantees and other liquidity facilities less the provisions for credit risks recognised in the statement of financial position. The maximum risk of loss relating to KfW Group's investments is their carrying amount (net). The maximum risk of loss does not include effects from KfW Group's hedging instruments used to reduce the maximum risk of loss.

No support is provided to structured entities in KfW Group beyond the respective financing.

In exceptional cases, KfW Group acts as the 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, KfW Group is considered as the sponsor of the structured entities because the entities were initiated and/or structured by KfW Group on behalf of the Federal Government.

Name/registered office	Capital share	Equity (IFRS) as of 31 Dec. 2021	Equity (IFRS) as of 31 Dec. 2020
	%	EUR in millions	EUR in millions
KfW IPEX-Bank GmbH, Frankfurt am Main, Germany	100.0	3,881	3,463
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany	100.0	2,987	2,351
KfW Beteiligungsholding GmbH, Bonn, Germany	100.0	3,082	3,177
Interkonnektor GmbH, Frankfurt am Main, Germany	100.0	95	76
KfW Capital GmbH & Co. KG, Frankfurt am Main, Germany	100.0	665	383

Associates included in the consolidated financial statements using the equity method

Name/registered office	Capital share	Equity as of 30 Sept. 2021	Equity as of 30 Sept. 2020
	%	EUR in millions	EUR in millions
Microfinance Enhancement Facility S. A., Luxembourg	16.5	472	431
Green for Growth Fund, Southeast Europe S. A., Luxembourg	10.2	524	480
coparion GmbH & Co. KG, Cologne, Germany	16.4	284	126
Name/registered office	**Capital share**	**Equity as of 31 Dec. 2021**	**Equity as of 31 Dec. 2020**
	%	EUR in millions	EUR in millions
DC Nordseekabel GmbH und Co. KG, Bayreuth, Germany	50.0	839	901

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 in Turkey (KfW's investment in GGF is also part of the business sector Promotion of developing countries and emerging economies).

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 Energy (BMWi) participates in young technology companies by offering venture capital, together with private lead investors.

Entities not included in the consolidated financial statements

Six subsidiaries, two joint ventures, six associated companies, and seven special purpose vehicles (including structured entities) of minor significance to the presentation of the net assets, financial position and results of operations of KfW Group have not been consolidated; instead, they are presented in the statement of financial position under Securities and investments or Loans and advances. These companies account for approximately 0.04% of KfW Group's total assets.

No.	Name	Place	Capital share in %	CU[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2021[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[6)]	Cologne	100.0	EUR	1.0000	2,506,622	215,585
2	Interkonnektor GmbH[6)]	Frankfurt am Main	100.0	EUR	1.0000	88,866	20,201
3	KfW Beteiligungsholding GmbH[6)]	Bonn	100.0	EUR	1.0000	1,651,613	72,243
4	KfW Capital GmbH & Co. KG[6)]	Frankfurt am Main	100.0	EUR	1.0000	487,101	0
B. Subsidiaries not included in the consolidated financial statements							
5	Finanzierungs- und Beratungsgesellschaft mbH[6)]	Berlin	100.0	EUR	1.0000	5,654	612
6	tbg Technologie-Beteiligungsgesellschaft mbH[6)]	Bonn	100.0	EUR	1.0000	67,173	13,013
C. Joint ventures not included in the consolidated financial statements							
7	Deutsche Energie-Agentur GmbH (dena)[5)]	Berlin	26.0	EUR	1.0000	6,072	499
D. Other shareholdings (only capital shares totalling at least 20%)							
8	Berliner Energieagentur GmbH[5)]	Berlin	25.0	EUR	1.0000	7,543	556
9	eCapital Technologies Fonds II GmbH & Co. KG[5)]	Münster	24.8	EUR	1.0000	13,044	–24
Shareholdings of KfW IPEXBank GmbH							
A. Subsidiaries not included in the consolidated financial statements							
1	Bussard Air Leasing Ltd. i. L.[5)]	Dublin, Ireland	100.0	USD	1.1326	–2,152	165
2	KfW IPEX-Bank Asia Ltd.[6)]	Singapore, Singapore	100.0	SGD	1.5279	1,465	27
3	Sperber Rail Holdings Inc.[5)]	Wilmington, USA	100.0	SGD	1.1326	69	–7
Shareholdings of KfW Beteiligungsholding GmbH							
A. Fully consolidated subsidiaries included in the consolidated financial statements							
1	KfW IPEX-Bank GmbH[6)]	Frankfurt am Main	100.0	EUR	1.0000	3,179,587	0

No.	Name	Place	Capital share in %	CU[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2021[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	[5]	[5]
B. Other shareholdings (only capital shares totalling at least 20%)							
2	Aavishkaar Frontier Fund	Mumbai, India	20.8	USD	1.1326	36,928	3,867
3	Ace Power Embilipitiya Pvt Ltd.	Colombo, Sri Lanka	26.0	LKR	230.7705	5,853,746	1,275,473
4	ACON Latin America Opportunities Fund IV-A L.P.	Washington, D.C., USA	39.9	USD	1.1326	50,197	–406
5	Acon Latin America Opportunities Fund-A L.P.	Washington, USA	40.0	USD	1.1326	18,930	–16
6	ACON Retail MXD L.P.	Toronto, Canada	100.0	USD	1.1326	9,647	–26
7	Adobe Social Mezzanine Fund I, L.P.	Mexico City, Mexico	32.9	USD	1.1326	6,584	–4,837
8	ADP Enterprises W.L.L.	Manama, Bahrain	23.3	EUR	1.0000	232,858	–10,274
9	ADP II Holding 11 S.A.R.L.	Munsbach, Luxembourg	33.3	USD	1.1326	30,497	–170
10	Advent Latin American Private Equity Fund III-B, L.P.	Wilmington, USA	100.0	USD	1.1326	819	–197
11	AEP China Hydro Ltd.	Ebène Cyber-City, Mauritius	30.2	USD	1.1326	[5]	[5]
12	AfricInvest III – SPV 1	Port Louis, Mauritius	21.8	EUR	1.0000	[5]	[5]
13	Agrofundo Brasil VI Fundo de Investimento em Participações Multiestratégia	São Paulo, Brazil	29.9	BRL	6.3101	[5]	[5]
14	AO Bucharagips	Kogon, Uzbekistan	24.9	UZS	12.252.8300	[5]	[5]
15	Apis Growth 2 Ltd.	Ebène Cyber-City, Mauritius	25.6	USD	1.1326	39,133	–4,361
16	Banque Nationale de Développement Agricole S. A.	Bamako, Mali	21.4	XOF	655.9570	64,230,493	8,197,166
17	Banyan Tree Growth Capital, LLC	Ebène Cyber-City, Mauritius	27.0	USD	1.1326	29,317	–281
18	Benetex Industries Ltd.	Dhaka, Bangladesh	28.3	BDT	97.5065	[5]	[5]
19	Berkeley Energy Wind Mauritius Ltd.	Ebène Cyber-City, Mauritius	25.8	EUR	1.0000	12,232	–36,352
20	CGFT Capital Pooling GmbH & Co. KG	Berlin, Germany	40.0	EUR	1.0000	6,044	–754
21	CoreCo Central America Fund I, L.P.	Wilmington, USA	22.0	USD	1.1326	19,318	–7,542
22	Crescera Investimentos Growth Capital Fund I-B, L.P.	Wilmington, USA	20.0	USD	1.1326	41,109	–5,035

			in %		= CU as of 31 Dec. 2021[2]		
Shareholdings of DEG – Deutsche Investitions-und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
23	Da Vinci Emerging Technologies Fund III L.P.	St. Peter, Guernsey	20.0	USD	1.1326	5)	5)
24	Darby Latin American Private Debt Fund IIIA L.P.	Toronto, Canada	37.6	USD	1.1326	19,918	981
25	ECP Africa Fund IV LLC	Ebène Cyber-City, Mauritius	34.6	USD	1.1326	57,280	–1,199
26	Elbrus Capital Fund III B S.C.Sp.	Luxembourg, Luxembourg	23.8	USD	1.1326	5)	5)
27	Emerald Sri Lanka Fund I Ltd.	Ebène Cyber-City, Mauritius	23.5	USD	1.1326	17,478	–910
28	EMF NEIF I (A) L.P.	Fareham, United Kingdom	28.1	USD	1.1326	28,349	–926
29	EMX Capital Partners L.P.	Mexico City, Mexico	20.1	USD	1.1326	60,724	–7,614
30	Evonik Lanxing (Rizhao) Chemical Industrial Co. Ltd.	Rizhao, China	41.0	CNY	7.1947	127,435	239
31	Fortio Co. Ltd.	George Town, Cayman Islands	46.2	USD	1.1326	3,000	0
32	Frontier Bangladesh II L.P.	George Town, Cayman Islands	20.0	USD	1.1326	18,844	3,742
33	Grand Bremner Corp Pte. Ltd.	Singapore, Singapore	24.7	USD	1.1326	54,910	–1
34	Grassland Finance Ltd.	Hong Kong, Hong Kong	24.9	CNY	7.1947	435,437	2,537
35	ICS OCN Total Leasing & Finance SA (TLF)	Amsterdam, Netherlands	25.0	EUR	1.0000	3,866	–41
36	Kandeo Fund II (A) L.P.	Bogota, Colombia	53.1	USD	1.1326	39,610	–3,107
37	Knauf Gips Buchara OOO	Bukhara, Uzbekistan	25.0	USD	1.1326	5)	5)
38	Knauf Gypsum Philippines Inc.	Makati, Philippines	25.0	PHP	57.7630	1,405,610	–141,499
39	Landsberg Investments S.L.	Barcelona, Spain	49.8	EUR	1.0000	11,450	–1,689
40	Leiden PE II L.P.	Toronto, Canada	26.6	USD	1.1326	84,681	–2,635
41	Lereko Metier REIPPP Fund Trust	Dunkeld, South Africa	32.3	ZAR	18.0625	968,793	78,491
42	Lereko Metier Solafrica Fund I Trust	Johannesburg, South Africa	47.5	ZAR	18.0625	153,267	24,163
43	Lombard Asia V L.P.	George Town, Cayman Islands	21.1	USD	1.1326	5)	5)
44	Lovcen Banka AD	Podgorica, Montenegro	25.1	EUR	1.0000	22,820	1,504

			in %		= CU as of 31 Dec. 2021[2]		
Shareholdings of DEG – Deutsche Investitions-und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
45	MC II Pasta Ltd.	Qormi, Malta	32.2	EUR	1.0000	17,996	–11
46	Metier Retailability Partnership	Sandhurst, South Africa	22.1	ZAR	18.0625	935,689	227,996
47	Navegar II (Netherlands) B.V.	Amsterdam, Netherlands	29.2	USD	1.1326	5)	5)
48	Novel Sky Global Limited	Road Town, Brit. Virgin Islands	25.0	USD	1.1326	5)	5)
49	OAO Belgips	Minsk, Belarus	50.0	BYN	2.9013	5)	5)
50	Onstar Galaxy SPV Pte. Ltd.	Singapore, Singapore	34.0	USD	1.1326	5)	5)
51	Operadora de Servicios Mega S.A. de C.V. SOFOM E.R.	Zapopan, Mexico	21.9	MXN	23.1438	1,495,652	600,220
52	Orilus Investment Holdings Pte. Ltd.	Singapore, Singapore	33.0	USD	1.1326	61,420	–22,269
53	Rent 2 Own Holdings Pte Ltd	Singapore, Singapore	21.2	USD	1.1326	5)	5)
54	Russia Partners Technology Fund L.P.	George Town, Cayman Islands	21.6	USD	1.1326	170,176	–2,631
55	SEAF Central and Eastern Europe Growth Fund LLC	Wilmington, USA	23.9	USD	1.1326	5)	5)
56	Sierra Madre Philippines I, L.P.	George Town, Cayman Islands	20.0	USD	1.1326	35,592	8,915
57	Siguler Guff Global Emerging Markets Co-Investment Opportunities (AIF) LP	London, United Kingdom	99.9	USD	1.1326	11,649	–667
58	Stratus SCP Fleet Fundo de Investimento em Participações – Multiestratégia	São Paulo, Brazil	39.7	BRL	6.3101	49,195	8,418
59	Stratus SCP II Investors – B LP	Edinburgh, United Kingdom	75.0	USD	1.1326	17,864	–3,020
60	Takura II Feeder Fund Partnership	Cape Town, South Africa	25.0	USD	1.1326	46,407	–527
61	Tolstoi Investimentos S.A.	São Paulo, Brazil	31.1	BRL	6.3101	5)	5)
62	TOO Isi Gips Inder	Inderborskij, Kazakhstan	40.0	KZT	494.1200	5)	5)
63	TOO Knauf Gips Kaptschagaj	Kapchagay, Kazakhstan	40.0	KZT	494.1200	5)	5)
64	Triple P SEA Financial Inclusion Fund LP	Singapore, Singapore	25.2	USD	1.1326	41,970	5,515
65	Vietnam Opportunity Fund II PTE. LTD.	Singapore, Singapore	32.0	USD	1.1326	5)	5)

			in %		= CU as of 31 Dec. 2021[2]		
Shareholdings of DEG – Deutsche Investitions-und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
66	Vinci Impact and Return IV A LP	Toronto, Canada	56.7	USD	1.1326	[5]	[5]
67	Whitlam Holding PTE. Ltd.	Singapore, Singapore	38.7	USD	1.1326	56,324	5,361
68	Worldwide Group Inc	Charlestown, Saint Kitts and Nevis	33.4	USD	1.1326	26,996	1,959
69	wpd Duqueco S.p.A.	Santiago de Chile, Chile	24.5	USD	1.1326	17,545	–586
70	wpd Malleco S.p.A.	Santiago, Providencia, Chile	24.5	USD	1.1326	80,046	–8,381
71	wpd Negrete S.p.A.	Santiago, Providencia, Chile	24.5	USD	1.1326	10,954	–1,520
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	419,593	12,275
B. Joint ventures not included in the consolidated financial statements							
2	DC Nordseekabel Beteiligungs GmbH	Bayreuth	50.0	EUR	1.0000	33	1
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	39	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 as of 31 December 2021 is available.
The data is based on the most recent annual financial statements of the investee (where available).

financial year 2022. In KfW's current assessment, the crisis particularly affects KfW's loan and equity investment exposures in Ukraine and Russia. KfW's direct exposure in Russia has been decreasing since 2014 and amounted to EUR 457 million as of 31 January 2022. It is partially secured by export and credit insurance, and amounts to EUR 153 million net. KfW's direct exposure in Ukraine is EUR 470 million and is largely covered by guarantees from the Federal Republic of Germany; that net exposure amount is EUR 48 million. Indirect effects of the conflict can also be expected on KfW's loan and equity investment exposures and therefore on the group's business performance and earnings position as well. For instance, there may be a negative impact on the energy and commodity markets, and consequences of being affected by the sanctions imposed. It is not really possible to give a precise forecast of the overall impact on KfW's net assets, financial and earnings position at present, given the dynamic development of the military conflict, particularly concerning uncertain further escalation or de-escalation steps. KfW will continue to closely monitor the development of the conflict and the consequences for its business.

No further events of particular impact on KfW's net assets, financial and earnings position occurred after the end of the financial year (as of 8 March 2022)[5].

[5] Date of Executive Board approval of publication.

fair review of the development and performance of the business and the position of KfW Group, together with a description of the principal risks and rewards associated with the expected development of KfW Group.

Frankfurt am Main, 1 March 2022

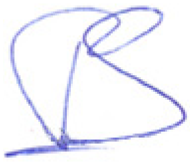
KfW
The Executive Board

Stefan Wintels
(Chief Executive Officer)

Melanie Kehr

Christiane Laibach

Bernd Loewen



Dr Stefan Peiß

Opinions

We have audited the consolidated financial statements of KfW, Frankfurt am Main and its subsidiaries (the Group), which comprise the consolidated statement of comprehensive income for the fiscal year from January 1, 2021 to December 31, 2021, the consolidated statement of financial position as at December 31, 2021, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from January 1, 2021 to December 31, 2021, and the notes to the financial statements including a summary of significant accounting policies. In addition, we have audited the group management report of KfW, which is combined with the management report of KfW, for the fiscal year from January 1, 2021 to December 31, 2021. In accordance with the German legal requirements, we have not audited the content of the sections “Declaration of compliance” and “Non-financial statements” of the group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e 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 December 31, 2021 and of its financial performance for the fiscal year from January 1, 2021 to December 31, 2021, and

- the accompanying group management report as a whole provides an appropriate view of the Group’s position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the sections “Declaration of compliance” and “Non-financial statements” of the group management report.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s responsibilities for the audit of the consolidated financial statements and of the group management report” section of our auditor’s report. We are independent of the Group entities in accordance with the requirements of 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 opinions on the consolidated financial statements and on the group 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.

Directors" of the Annual Report, which are expected to be made available to us after that date.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon. In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Board and the Board of Supervisory Directors for the consolidated financial statements and the group management report

The Executive Board is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec 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 Board is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Executive Board is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the Executive Board is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, the Executive Board is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The 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 group management report.

HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the Executive Board and the reasonableness of estimates made by the Executive Board and related disclosures.

- Conclude on the appropriateness of the Executive Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other legal and regulatory requirements

Report on the assurance in accordance with Sec. 317 (3a) HGB on the electronic reproduction of the consolidated financial statements and the group management report prepared for publication purposes

Reasonable assurance opinion

We have performed assurance work in accordance with Sec. 317 (3a) HGB to obtain reasonable assurance about whether the reproduction of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the attached electronic file "KfW_KA_ZusLB_ESEF-2021-12-31.zip" [Hash: sha256: 77e1ce0e271f8d342f9983ad5c3c7924e9675eed27a808026118881d372718b8] and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance only extends to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained in this reproduction nor to any other information contained in the above-mentioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the group management report contained in the above-mentioned attached electronic file and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the above-mentioned file beyond this reasonable assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from January 1, 2021 to December 31, 2021 contained in the "Auditor's report on the consolidated financial statements and on the group management report" above.

Basis for the reasonable assurance opinion

We conducted our assurance work on the reproduction of the consolidated financial statements and the group management report contained in the above-mentioned attached electronic file in accordance with Sec. 317 (3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410) (10.2021). Accordingly, our responsibilities are further described below in the "Group auditor's responsibilities for the assurance work on the ESEF Documents" section. Our audit firm has applied the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the Executive Board and the Board of Supervisory Directors for the ESEF documents

The Executive Board is responsible for the preparation of the ESEF documents including the electronic reproduction of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

unintentional non-compliance with the requirements of Sec. 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.

- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls

- Evaluate the technical validity of the ESEF documents, i.e., whether the electronic file containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815 on the technical specification for this electronic file.

- Evaluate whether the ESEF documents enables a XHTML reproduction with content equivalent to the audited consolidated financial statements and to the audited group management report.

- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Other matter – use of the auditor's report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be published in the Bundesan-zeiger [German Federal Gazette] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

Eschborn/Frankfurt am Main, 8 March 2022

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Koch Wirtschaftsprüfer (German Public Auditor)	Hölscher Wirtschaftsprüfer (German Public Auditor)

/s/ Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

Eschborn, Germany
May 12, 2022

May 12, 2022

By: /s/ DR. MARKUS HÖRMANN

Name: Dr. Markus Hörmann

Title: Regierungsdirektor (Head of Division)
Ministry of Finance