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, 2020

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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EXPLANATORY NOTE

This annual report on Form 18-K for the fiscal year ended December 31, 2020 is filed by KfW, also known as Kreditanstalt für Wiederaufbau, an institution organized under public law of the Federal Republic of Germany (the "Federal Republic"). This annual report on Form 18-K, as subsequently amended, is intended to be incorporated by reference into the prospectus dated July 30, 2020 of KfW and any future prospectus filed by KfW with the Securities and Exchange Commission to the extent such prospectus indicates that it intends this report to be incorporated by reference.

In this annual report, references to "€," "euro" and "EUR" are to the single European currency of the member states of the European Union participating in the euro, including the Federal Republic. References to "U.S. dollars," "$" or "USD" are to United States dollars.

FORM 18-K

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

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

   Not applicable.

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

   Not applicable.

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

   Not applicable.

KfW

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

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

   The total principal amount of internal funded debt of KfW, which is defined as euro denominated debt with an initial maturity of more than one year (bonds and other fixed-income securities, other borrowings, and subordinated liabilities), outstanding as of December 31, 2020 was EUR 280.8 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, 2020)," p. 39 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, 2020)," p. 39 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.

As of December 31, 2020, KfW held own debt securities (registered and non-registered) in a principal amount of EUR 5.02 billion. The amount of registered debt securities included in these holdings did not exceed 3% of the total volume of outstanding registered debt securities, and thus, is not substantial.

(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.

(3) Total amount otherwise outstanding.

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, 2020 was EUR 7.79 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, 2020 was:

Currency	Principal amount outstanding in currency	Equivalent in euro with conversion rate as of December 31, 2020
AUD	2,029,999,999.99	1,277,050,830.39
GBP	387,800,000.00	431,353,792.42
JPY	18,570,999,999.85	146,817,930.27
USD	46,970,700,000.02	38,277,809,469.50
CNY	1,890,000,000.01	235,587,410.41
ZAR	5,500,000,000.29	305,184,248.07
HKD	5,564,999,999.66	584,915,179.38
Total		41,258,718,860.44

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 "Group 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, 59, 66 to 90 and 91 to 100 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 2020.

(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 2020.

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 registrant, and of any further gold stocks held by the registrant.

   Not applicable.

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.

   Not applicable.

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, 2020 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, 2020 was EUR 1,158.84 billion (Source: Monthly Report of the Federal Ministry of Finance, January 2021, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2020", page 99, (https://www.bundesfinanzministerium.de/Monatsberichte/2021/01/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-45 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-45 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.

(3) Total amount otherwise outstanding.

Not applicable.

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

Not applicable.

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

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

The total amount of internal floating indebtedness of the Federal Republic, which is defined as euro denominated debt with an initial maturity of less than one year, outstanding as of December 31, 2020 was EUR 113.14 billion (Source: Monthly Report of the Federal Ministry of Finance, January 2021, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2020", page 99 (https://www.bundesfinanzministerium.de/Monatsberichte/2021/01/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-38 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 2020.

(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 2020.

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.

See “The Federal Republic of Germany—The Economy—International Economic Relations—Balance of Trade,” pp. G-23 and G-24 of Exhibit (d), which are hereby incorporated by reference herein.

10. The balances of international payments of the Federal Republic 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 the Federal Republic has published balances of international payments.)

    See “The Federal Republic of Germany—The Economy—International Economic Relations—Balance of Payments,” pp. G-23 of Exhibit (d), which is hereby incorporated by reference herein.

This annual report comprises:

(a) Pages numbered 1 to 10, consecutively.

(b) The following exhibits:

Exhibit (a) - None.

Exhibit (b) - None.

Exhibit (c) - The latest annual budget for the Federal Republic of Germany (pp. G-38 to G-44 of Exhibit (d) hereto).

Exhibit (d) - Description of KfW and the Federal Republic of Germany, dated May 17, 2021.

Exhibit (e) - KfW Financial Information 2020.

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.

EXHIBIT INDEX

Exhibit	Description
(c)	Latest annual budget for the Federal Republic of Germany (pp. G-38 to G-44 of Exhibit (d) hereto).
(d)	Description of KfW and the Federal Republic of Germany, dated May 17, 2021.
(e)	KfW Financial Information 2020.
(f)	Consent of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft.
(g)	Consent of the Federal Republic of Germany.

SIGNATURES

Pursuant to the requirements of the Securities and Exchange Act of 1934, the registrant KfW has duly caused this amendment to be signed on its behalf by the undersigned, thereunto duly authorized in Frankfurt/Main, Germany on May 17, 2021.

KfW

By: /s/ DR GÜNTHER BRÄUNIG
Name: Dr Günther Bräunig
Title: Chief Executive Officer

By: /s/ BERND LOEWEN
Name: Bernd Loewen
Title: Member of the Executive Board

Exhibit (d)

This description of KfW and the Federal Republic of Germany is dated May 17, 2021 and appears as Exhibit (d) to the Annual Report on Form 18-K of KfW for the fiscal year ended December 31, 2020.

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THIS DOCUMENT (OTHERWISE THAN AS PART OF A PROSPECTUS CONTAINED IN A REGISTRATION STATEMENT FILED UNDER THE U.S. SECURITIES ACT OF 1933) DOES NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY ANY SECURITIES OF KFW. THE DELIVERY OF THIS DOCUMENT AT ANY TIME DOES NOT IMPLY THAT THE INFORMATION HEREIN IS CORRECT AS OF ANY TIME SUBSEQUENT TO ITS DATE.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

In this description, references to "€", "euro" or "EUR" are to the single European currency of the member states of the European Union participating in the euro and references to "U.S. dollars", "$" or "USD" are to United States dollars. See "—The Federal Republic 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 14, 2021, the euro foreign exchange reference rate as published by the European Central Bank was EUR 1.00 = U.S. dollar 1.2123 (EUR 0.8249 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.

RECENT DEVELOPMENTS

KFW

KfW's Results for the Three Months Ended March 31, 2021

KfW is not required by law to prepare and publish interim financial statements in conformity with International Financial Reporting Standards as adopted by the European Union ("IFRS") applicable to interim financial reporting. Accordingly, KfW only prepares selected interim financial information rather than a full set of interim financial statements. The following information is based on this selected unaudited interim financial information prepared by KfW on the basis of the recognition and measurement principles of IFRS applicable to interim financial reporting. This information is not necessarily indicative of the figures of KfW Group for the full year ending December 31, 2021.

KfW Group's total assets increased by 2.6%, or EUR 14.1 billion, from EUR 546.4 billion as of December 31, 2020 to EUR 560.5 billion as of March 31, 2021. KfW Group's operating result before valuation and promotional activities amounted to EUR 468 million for the three months ended March 31, 2021, compared to EUR 435 million for the corresponding period in 2020. The main driver for KfW Group's operating result before valuation and promotional activities during the three months ended March 31, 2021, was net interest income. KfW Group's operating result before valuation and promotional activities is before (i) risk provisions, (ii) net gains/losses from securities and investments, (iii) net gains/losses from hedge accounting and other financial instruments at fair value through profit or loss, and (iv) expenses relating to promotional activities. These valuation effects consisted mainly of the following:

- Income from risk provisions for lending business in an amount of EUR 60 million for the three months ended March 31, 2021, compared to expenses in an amount of EUR 385 million for the corresponding period in 2020;
- Positive effects in an amount of EUR 178 million as market values of securities and equity investments increased in the three months ended March 31, 2021, compared to negative effects of EUR 610 million for the corresponding period in 2020;
- Net losses in an amount of EUR 75 million for the three months ended March 31, 2021 due to fair value changes of derivatives used exclusively for hedging purposes in closed risk positions, compared to net losses in an amount of EUR 75 million for the corresponding period in 2020[1]; and
- Expenses relating to promotional activities in an amount of EUR 22 million for the three months ended March 31, 2021, compared to expenses in an amount of EUR 24 million for the corresponding period in 2020.

KfW Group's consolidated profit for the three months ended March 31, 2021 amounted to a profit of EUR 569 million, compared to a loss of EUR 592 million for the corresponding period in 2020.

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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.

Promotional Business Volume

The following table sets forth a breakdown of commitments by business sector for the three months ended March 31, 2021, compared to the corresponding period in 2020.

PROMOTIONAL BUSINESS VOLUME BY BUSINESS SECTOR

	Three months ended March 31,		Year-to-Year
	2021	2020	% change
	(EUR in millions)		(in %)
SME Bank & Private Clients (Mittelstandsbank & Private Kunden)	**16,992**	**11,887**	**43**
Customized Finance & Public Clients (Individualfinanzierung & Öffentliche Kunden)	**2,670**	**1,615**	**65**
Equity Financing (KfW Capital)	**74**	**69**	**7**
Export and Project Finance (KfW IPEX-Bank)	**3,363**	**5,666**	**-41**
Promotion of developing countries and emerging economies	**1,174**	**542**	**>100**
of which KfW Entwicklungsbank	*925*	*315*	*>100*
of which DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	*249*	*227*	*10*
Financial Markets	**240**	**77**	**>100**
Total Promotional Business Volume (1)	**24,513**	**19,806**	**24**

(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 program-based global loans to the *Landesförderinstitute* and global funding facilities to *Landesförderinstitute*, commitments represent the actual volume of funds disbursed in the relevant period.

KfW's total promotional business volume increased to EUR 24.5 billion for the three months ended March 31, 2021, compared to EUR 19.8 billion for the corresponding period in 2020. While commitments in KfW's business sectors SME Bank & Private Clients, Customized Finance & Public Clients, Promotion of developing countries and emerging economies as well as Financial Markets increased significantly, this increase was partially offset by a substantial decrease in commitments in the business sector Export and Project Finance.

Commitments in the SME Bank & Private Clients business sector amounted to EUR 17.0 billion for the three months ended March 31, 2021, compared to EUR 11.9 billion for the corresponding period in 2020. This significant increase was attributable to higher commitments in SME Bank, mainly under the KfW Special Program 2020, which was introduced as part of a government package of measures to mitigate the economic impact of the ongoing COVID-19 pandemic in Germany. Commitments in SME Bank under the KfW Special Program 2020 amounted to EUR 3.4 billion for the three months ended March 31, 2021. In addition, commitments in Private Clients under KfW's Energy-efficient Construction and Refurbishment program increased to EUR 7.8 billion for the three months ended March 31, 2021, compared to EUR 5.0 billion for the corresponding period in 2020.

Commitments in the business sector Customized Finance & Public Clients amounted to EUR 2.7 billion for the three months ended March 31, 2021, compared to EUR 1.6 billion for the corresponding period in 2020. This increase was primarily driven by increases in global loans to selected financial institutions and in the program for the refinancing of export loans.

Commitments related to KfW's Equity Financing (KfW Capital) business sector increased to 74 million for the three months ended March 31, 2021, compared to EUR 69 million for the corresponding period in 2020. In the three months ended March 31, 2021, in addition to commitments of EUR 57 million via the ERP Venture Capital Fund investment program, commitments in Equity Financing (KfW Capital) business sector reflected a fiduciary commitment of EUR 16 million that was made by KfW Capital under the Corona Matching Facility (together with the European Investment Fund), which is part of the Federal Government's COVID-19 support package for start-ups and small enterprises. Funding through the Corona Matching Facility, which is guaranteed by the Federal Government, is refinanced by KfW.

Commitments in KfW's Export and Project Finance business sector for the three months ended March 31, 2021 amounted to EUR 3.4 billion, compared to strong commitments of EUR 5.7 billion for the corresponding period in 2020. This decrease was mainly due to significantly lower commitments made by KfW IPEX-Bank in the sectors Basic industries and a Commercial Interest Reference Rate (CIRR) scheme for bank refinancing (ship + ERP finance).

Commitments related to KfW's Promotion of developing countries and emerging economies business sector amounted to EUR 1,174 million for the three months ended March 31, 2020, compared to EUR 542 million for the corresponding period in 2020. This significant increase was mainly driven by higher commitments of KfW Entwicklungsbank with respect to Financial Cooperation Development Loans (*FZ-Entwicklungskredite*), Financial Cooperation Promotional Loans (*FZ-Förderkredite*) and Mandates. The commitments of private sector contributions by DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH increased slightly compared to the same period in 2020.

Commitments in KfW's Financial Markets business sector increased to EUR 240 million for the three months ended March 31, 2021, compared to EUR 77 million for the corresponding period in 2020, 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 four months ended April 30, 2021 totaled EUR 40.7 billion, of which 48.6% was raised in euro, 34.7% in U.S. dollar and the remainder in 11 other currencies.

Capitalization and Indebtedness of KfW Group as of March 31, 2021

	(EUR in millions)
Borrowings	
Short-term funds	50,803
Bonds and other fixed-income securities	391,754
Other borrowings	72,366
Total borrowings	514,922
Equity	
Paid-in subscribed capital (1)	3,300
Capital reserve	8,447
Reserve from the ERP Special Fund	1,191
Retained earnings	19,980
Fund for general banking risks	600
Revaluation reserve	-973
Total equity	32,545
Total capitalization	**547,467**

(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, 2021, 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, 2021 is not necessarily indicative of its capitalization to be recorded as of December 31, 2021.

KfW Group's total equity as of March 31, 2021 was EUR 32,545 million, compared to EUR 31,797 million as of December 31, 2020. The increase of EUR 747 million in total equity reflected:

(i) KfW Group's consolidated profit of EUR 569 million for the three months ended March 31, 2021; and

(ii) an increase of EUR 178 million of revaluation reserves due to valuation results recognized directly in equity relating to pensions and own credit risk.

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

Based on the results for the three months ended March 31, 2021, KfW’s total capital ratio amounted to 24.9% and its Tier 1 capital ratio according to Article 92 of the CRR amounted to 24.8%, in each case as of March 31, 2021 (excluding the interim profit of the year to date)[1]. The increase of the total capital ratio and the Tier 1 capital ratio compared to December 31, 2020, when the total capital ratio amounted to 24.3 % and the Tier1 Capital ratio amounted to 24.1%, was mainly due to the recognition of the profit for the year ended December 31, 2020.

Other Recent Developments

Equity Financing (KfW Capital)

On March 24, 2021, the German Federal Government mandated KfW in principle to implement and administer a bundle of different measures to promote future technologies, referred to as “Future Fund” (*Zukunftsfonds*), pursuant to and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*). Under the mandate, KfW is fully covered by the Federal Republic against any economic risks resulting from its role in relation to the Future Fund. The details regarding the various measures bundled under the Future Fund with an aggregate volume of up to EUR 10 billion over the next ten years have yet to be agreed between KfW and the Federal Government. Focus will be on financing start-ups in their growth phase that have substantial capital requirements. To add to and supplement these measures, KfW Capital will make own equity investments in an expected amount of up to EUR 2 billion over the next ten years in the German venture capital market. Together with the existing programs, this increases the aggregate annual investment amount of KfW Capital to approximately EUR 400 million.

Strategic Shareholdings

HENSOLDT AG. In March 2021, KfW accepted a mandate by the Federal Government 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 German stock corporation with its registered seat in Taufkirchen, Germany, which focuses on electronic sensor solutions and optronics. The transaction has not closed yet. Under the mandate, KfW is fully covered by the Federal Republic of Germany against any economic risks resulting from its investment in Hensoldt.

Executive Board

On March 24, 2021, KfW’s Board of Supervisory Directors appointed Christiane Laibach as new sixth member of KfW’s Executive Board. Christiane Laibach is expected to take office on June 1, 2021, and will be in charge of International Finance.

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[1] According to Article 26(2) CRR.

THE FEDERAL REPUBLIC OF GERMANY

Overview of Key Economic Figures

The following economic information regarding the Federal Republic is derived from the public official sources cited below. Certain of the information is preliminary.

Gross Domestic Product (GDP)

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 2020	-2.0	-2.2
2nd quarter 2020	-9.7	-11.3
3rd quarter 2020	8.7	-3.8
4th quarter 2020	0.5	-3.3
1st quarter of 2021	-1.7	-3.0

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

In price, seasonal and calendar-adjusted terms, GDP declined by 1.7% in the first quarter of 2021 compared with the fourth quarter of 2020. After the German economy had recovered slightly in the second half of 2020 (by +8.7% in the third quarter and +0.5% in the fourth quarter, according to most recent calculations), the COVID-19 pandemic caused another decline in economic performance at the beginning of 2021. This affected household consumption in particular, while exports of goods supported the economy.

GDP was down a price- and calendar-adjusted 3.0% in the first quarter of 2021 compared with the first quarter of 2020. Compared with the fourth quarter of 2019, the quarter before the COVID-19 pandemic began, GDP was 4.9% lower in the first quarter of 2021.

Source: Federal Statistical Office, Gross domestic product in the 1st quarter of 2021 down 1.7% on the previous quarter, press release of April 30, 2021 (https://www.destatis.de/EN/Press/2021/04/PE21_211_811.html).

Inflation Rate

INFLATION RATE

(based on overall consumer price index)

Reference period	Percentage change on the previous month	Percentage change on the same month in previous year
April 2020	0.4	0.9
May 2020	-0.1	0.6
June 2020	0.6	0.9
July 2020	-0.5	-0.1
August 2020	-0.1	0.0
September 2020	-0.2	-0.2
October 2020	0.1	-0.2
November 2020	-0.8	-0.3
December 2020	0.5	-0.3
January 2021	0.8	1.0
February 2021	0.7	1.3
March 2021	0.5	1.7
April 2021	0.7	2.0

The inflation rate in Germany, measured as the year-on-year change in the consumer price index, stood at +2.0% in April 2021, a level last recorded in April 2019. The inflation rate increased for the fourth month in a row after the temporary value added tax cut had ended on December 31, 2020.

The total prices of goods increased by 2.6% between April 2020 and April 2021. Energy product prices were 7.9% higher in April 2021 compared to April 2020, after +4.8% in March 2021. In addition to the CO2 charge introduced at the beginning of the year, the low level of energy product prices in April 2020 had an impact on the inflation rates (base effect). Compared with April 2020, in April 2021 higher prices were recorded especially for motor fuels (+23.3%) and heating oil (+21.1%), while electricity prices declined slightly (-0.2%). Food prices rose by 1.9% in April 2021 in a year-on-year comparison, with higher prices being recorded, for example, for confectionery (+3.1%) and dairy products and butter (+2.5%). Marked price rises were observed for plants and flowers (+7.5%), coffee products (+5.1%) and tobacco products (+4.5%). Notable price decreases were recorded for mobile phones (-8.3%). The year-on-year increases in energy product prices had a clear upward effect on the inflation rate. Excluding energy prices, the inflation rate would have been +1.4% in April 2021 compared to April 2020; excluding the prices of heating oil and motor fuels, it would have been only +1.2%.

The total prices of services increased by 1.6% in April 2021 compared with April 2020, with net rents exclusive of heating expenses, which are important as they account for a large part of household final consumption expenditure, rising by 1.3%. Considerably higher prices had to be paid, for instance, for hairdresser services and other services for personal care (+6.1%), services of social facilities (+5.9%) and financial services (+5.6%), while the prices of telecommunication services, for example, were down by 1.0%.

Compared with March 2021, the consumer price index rose by 0.7% in April 2021. Food prices increased by 1.3%, with consumers having to pay more especially for fresh vegetables (+9.0%) compared with March 2021. The prices of energy products went down slightly (-0.1%), with heating oil prices, in particular, decreasing by 2.2%.

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 +2.0% in April 2021, press release of May 12, 2021 (https://www.destatis.de/EN/Press/2021/05/PE21_225_611.html).

Unemployment Rate

UNEMPLOYMENT RATE

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

Reference period	Original percentages	Adjusted percentages (2)
April 2020	4.3	4.0
May 2020	4.4	4.2

June 2020	4.5	4.3
July 2020	4.4	4.4
August 2020	4.5	4.5
September 2020	4.4	4.5
October 2020	4.4	4.5
November 2020	4.4	4.6
December 2020	4.4	4.6
January 2021	4.6	4.5
February 2021	4.6	4.5
March 2021	4.6	4.5

(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 2020, the number of employed persons in March 2021 declined by approximately 628,000 or 1.4%. Compared to February 2021, the number of employed persons increased slightly in March 2021 by approximately 16,000 (after adjusting for seasonal fluctuations). On a seasonally adjusted basis, the number of employed persons in March 2021 was down by 1.7%, or 747,000, on February 2020, the month before restrictions were imposed in Germany due to the COVID-19 pandemic.

In March 2021, the number of unemployed persons increased by approximately 374,000, or 22.4%, compared to March 2020. Adjusted for seasonal and irregular effects, the number of unemployed persons in March 2021 stood at 1.98 million, reflecting a slight decrease of 0.9% compared to February 2021.

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, March 2021: employment slightly up on the previous month, press release of April 29, 2021 (https://www.destatis.de/EN/Press/2021/04/PE21_206_132.html); Federal Statistical Office, Genesis-Online Datenbank, Result 13231-0001, Unemployed persons, persons in employment, economically active population, unemployment rate: Germany, months, original and adjusted data (https://www-genesis.destatis.de/genesis/online?sequenz=tabelleErgebnis&selectionname=13231-0001&zeitscheiben=2&leerzeilen=false&language=en#abreadcrumb).

Current Account and Foreign Trade

CURRENT ACCOUNT AND FOREIGN TRADE

Item	(balance in EUR billion) (1) January–March 2021	January–March 2020
Trade in goods, including supplementary trade items	55.9	52.5
Services	3.6	-2.7
Primary income	27.5	26.9
Secondary income	-20.6	-14.4
Current account	**66.4**	**62.3**

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

Source: Federal Statistical Office, Exports in March 2021: +1.2% on February 2021, press release of May 7, 2021 (https://www.destatis.de/EN/Press/2021/05/PE21_217_51.html).

Other Recent Developments

General Considerations Relating to the COVID-19 Pandemic

According to the European Centre for Disease Prevention and Control ("ECDC"), as of May 9, 2021, while only a few countries reported increasing rates in terms of case notification and/or test positivity, cases in older age groups, hospital or intensive care unit ("ICU") admissions and/or hospital occupancy due to COVID- 19, and deaths, absolute values of several indicators, including for hospital and ICU occupancy, remain high, suggesting continued widespread transmission of COVID-19. However, trends for a number of indicators are stable or decreasing in several countries, while the median cumulative uptake of at least one vaccine dose among adults aged 18 years and above in Europe is 34.2% and increasing. However, in its most recent risk report, dated May 11, 2021, the ECDC notes that over the past eight weeks India and some surrounding countries have seen a sharp increase in the number of reported COVID-19 cases and deaths, which is associated with a rising proportion of sequenced viruses belonging to specific lineages, which have distinct mutation profiles and warrant individual assessment. While the United Kingdom has designated one of these lineages as a "variant of concern", in the rest of Europe there are indications that the frequency of detection of certain of these lineages is increasing. However, due to still only limited available data, with respect to their transmissibility, the ECDC states that the full impact of these lineages on public health is not yet possible to assess and that it therefore currently maintains its assessment of these lineages as "variants of interest" and will continue to actively monitor the situation. The ECDC also notes that the COVID-19 vaccine coverage remains at low levels in all European countries and that as such, it currently advises caution in the relaxation of current nonpharmaceutical measures including those related to travel.

In Germany, protective measures to contain the COVID-19 pandemic, which in particular aim to reduce contacts within the general population, continue to be in place. In the second half of April 2021, the *Bundestag* approved an amendment to the German Infection Protection Act (*Infektionsschutzgesetz*), which introduces a nationwide emergency brake providing for a large number of protective measures, such as, e.g., the use of facial masks, testing, restrictions on contacts, closure of and social distancing in shops, schools and daycare facilities, the imposition of curfews, remote working, all of which are targeted at significantly reducing contacts and slowing down the spread of COVID-19 when case numbers of COVID-19 infections exceed certain levels. The German population is already familiar with most of these measures, which had already been previously agreed upon by the Heads of Government of the 16 German federal states (*Länder*) and the Federal Chancellor to combat the pandemic in a number of earlier meetings.

To date, the European Commission has granted a conditional marketing authorization for four COVID-19 vaccines, following positive assessments by the European Medicines Agency, and is working closely with the industry to step up vaccine manufacturing capacity in the EU. The European Commission has also started work to anticipate and tackle new variants of the virus and to rapidly develop and produce on a large-scale vaccines effective against those variants.

According to the ECDC, as of May 12, 2021, the full vaccination uptake among adults aged 18 years and above in countries of the EU and the European Economic Area (with 30 countries reporting) was at a median of 13.3%. As of May 13, 2021, 10.6% of the German population had been fully vaccinated, whereas 35.9% have received at least one vaccine dose.

In mid-March 2021, the European Commission adopted a legislative proposal establishing a common framework for a "Digital Green Certificate", which is intended to constitute proof that a person has been vaccinated against COVID-19, received a negative test result or recovered from COVID-19. This proposed EU-wide approach aims to facilitate free movement within the EU, in compliance with fundamental EU rights such as the non-discrimination of EU citizens. The Digital Green Certificate should present an opportunity for EU Member States to adjust the restrictions imposed on public health grounds and to be taken into account by EU Member States to facilitate travel.

Sources: European Centre for Disease Prevention and Control, COVID-19 surveillance report, Week 18, 2021, produced on May 13, 2021 (https://covid19-surveillance-report.ecdc.europa.eu/); European Centre for Disease Prevention and Control, Threat Assessment Brief: Emergence of SARS-CoV-2 B.1.617 variants in India and situation in the EU/EEA, May 11, 2021 (https://www.ecdc.europa.eu/en/publications-data/threat-assessment-emergence-sars-cov-2-b1617-variants); The Federal Government, Infection Protection Act in the German Bundestag, Nationwide emergency brake passed, published on April 21, 2021 (https://www.bundesregierung.de/breg-en/news/nationwide-emergency-brake-1889136); European Centre for Disease Prevention and Control, COVID-19 Vaccine rollout overview, Week 18, 2021, produced on May 12, 2021 (https://covid19-vaccine-report.ecdc.europa.eu/); European Commission, Safe COVID-19 vaccines, accessed on May 14, 2021 (https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans_en#theeuvaccinestrategy); Bundesministerium der Gesundheit, Impf-Dashboard, Stand 14. Mai 2021 (https://impfdashboard.de/); The European Commission, COVID-19: Digital green certificates, accessed on May14, 2021 (https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/covid-19-digital-green-certificates_en); European Commission, Digital green certificate fact sheet, Fact Sheet dated March 17, 2021 (https://ec.europa.eu/commission/presscorner/detail/en/fs_21_1208).

KFW

GENERAL

Overview

KfW is a public law institution (*Anstalt des öffentlichen Rechts*) serving domestic and international public policy objectives of the Federal Government ("Federal Government") of the Federal Republic of Germany ("Federal Republic"). KfW promotes its financing activities under the umbrella brand name KfW Bankengruppe ("KfW Group").

With total assets of EUR 546.4 billion as of December 31, 2020, including loans and advances of EUR 425.9 billion, KfW is Germany's flagship promotional bank and ranks among Germany's largest financial institutions. KfW's promotional business volume amounted to EUR 135.3 billion in 2020. 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 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*;
- Equity Financing (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."

Shares in KfW's capital may not be pledged; they may not be transferred to entities other than the Federal Republic or the *Länder*. Capital contributions have been, and are expected to continue to be, made to KfW in such proportions as to maintain the relative shares of capital held by the Federal Republic and the *Länder*.

Legal Status

KfW is organized under the KfW Law as a public law institution with unlimited duration. As a public law institution serving public policy objectives of the Federal Government, KfW itself is not subject to corporate taxes (although certain of its subsidiaries are), and as a promotional bank, KfW does not seek to maximize profits. KfW does, however, seek to maintain an overall level of profitability that 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.

In the business sector of Export and Project Finance, the understanding with the European Commission required KfW to transfer to a legally independent subsidiary that portion of export finance and domestic and international project finance activities which the European Commission deemed to fall outside the scope of the promotional activities of KfW. The transfer of such activities was to be effected by December 31, 2007, and as from that date KfW has not been permitted to fund the subsidiary at other than market rates of interest or to extend to the subsidiary any benefits of *Anstaltslast* or the Guarantee of the Federal Republic.

KfW continues to be permitted, however, to engage directly in the following promotional export and project finance activities:

- implementation of international promotional programs, such as the interest-rate subsidized CIRR (Commercial Interest Reference Rate) and ASU (Aircraft Sector Understanding) schemes, which are recognized as promotional activities in accordance with the 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 corporation (*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 Energy, 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."

In addition to compliance with the financial reporting and auditing standards generally applicable to banks in Germany, KfW, under the KfW Law, is subject to special auditing standards for government-owned entities set forth in the Budgeting and Accounting Act (*Haushaltsgrundsätzegesetz*). These special auditing standards require that KfW's annual audit, above and beyond its normal scope, cover the proper conduct of KfW's business by its management. The resulting auditor's report is to enable the Board of Supervisory Directors, the responsible Federal Ministries and the Federal Court of Auditors (*Bundesrechnungshof*) to form their own opinion and to take action if required.

Finally, as a government-owned entity, KfW is subject to audits by the Federal Court of Auditors with regard to its economical use of funds pursuant to the Budgeting and Accounting Act.

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 para. 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 para. 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 according to article 92 of the CRR amounted to 24.3% and its Tier 1 capital ratio to 24.1%, both as of December 31, 2020 (not taking into account the interim profit of the year 2020)[1]. The increase of the total capital ratio as well as of the Tier 1 capital ratio compared to the figures as of December 31, 2019, which both amounted to 21.3%, was mainly due to the first-time application of the new regulatory authority-compliant evaluation system for credit risk. Until KfW receives full approval as an advanced IRBA institution, sub-portfolios that have not yet been approved will continue to be valued following the generally more capital-intensive standardized approach for credit risks.

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1 According to Article 26(2) CRR.

In connection with the application of the appropriate requirements of the capital adequacy regime, the overall capital requirement for KfW Group's total capital ratio as of December 31, 2020 was 16.2%, consisting of a total supervisory review and evaluation process capital requirement ("TSCR") of 13.0% plus a Capital Conservation Buffer, a buffer for Other Systemically Important Institutions (O-SIIs) in Germany ("OSII Buffer") and a Countercyclical Capital Buffer. The TSCR for KfW Group includes a 2.75% supervisory review and evaluation process ("SREP") surcharge. A SREP surcharge is generally meant to reflect the specific risk situation of an individual bank. In addition, the TSCR for KfW Group includes an additional surcharge in an overall amount of 2.25% for certain IT-, internal auditing- and 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 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.

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, 2020. KfW's capital ratios for 2020 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 will be part of the prudential requirements starting in June 2021.

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

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

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

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

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

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 has implemented a system to comply with these reporting and information requirements, KfW will provide the supervisory authorities with relevant reports and information, the form of which has been 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."

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

Sustainable Promotion

KfW Group has set sustainable promotion as its primary strategic objective and aims to improve economic, social and environmental conditions around the world, with an emphasis on promotion of the German economy. For more information on KfW's strategic objectives, see "Strategic Objectives 2025" on page 4 of 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 2020, the environmental ratio was 33% (compared to 38% in 2019), and would have been 50% (excluding COVID-19 related loan facilities). 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 2020 contributed to all 17 SDGs, the most significant contributions were made to SDG 7 "Affordable and Clean Energy", SDG 8 "Decent Work and Economic Growth", 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 project finance activities around the world, KfW regularly applies internationally recognized environmental and social standards (Environmental and Social Impact Assessment). KfW refuses to fund projects that could conceivably cause unacceptable environmental or social harm and the group-wide Exclusion List and Sectoral Guidelines of KfW Group apply to all new financing and promotional activities.

Sustainability also plays an important role in KfW's various capital market activities, be it in its role as a green bond issuer and investor or in connection with the sustainable management of its liquidity portfolio. For more information, see "Business—Financial Markets."

KfW is conscious of the fact that environmental and climate risks, as well as risks arising from poor governance and insufficient social 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 2019, which was published in April 2020, 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), KfW has for the first time added a special chapter to this report to outline its climate-related risks and associated processes in a transparent manner. KfW's Sustainability Report 2020 was published in April 2021.

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 financial statements included in Exhibit (e) to this annual report may differ substantially from financial statements prepared in accordance with U.S. GAAP.

Pursuant to the KfW Law, the annual financial statements of KfW are examined by a *Wirtschaftsprüfer* (Certified Public Accountant) who is appointed by the Federal Minister of Finance at the proposal of the Board of Supervisory Directors in consultation with the Federal Court of Auditors (*Bundesrechnungshof*). KfW's external auditor for the fiscal year ended December 31, 2020 is Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft ("EY").

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

The auditor's report of EY for the fiscal year ended December 31, 2020, dated March 2, 2021, refers to a group management report (Konzernlagebericht). The examination of, and the auditor's report upon, this group 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 group 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 on page 178 of Exhibit (e).

BUSINESS

Introduction

KfW conducts its business in the following business sectors:

- SME Bank & Private Clients (Mittelstandsbank & Private Kunden);
- Customized Finance & Public Clients (Individualfinanzierung & Öffentliche Kunden);
- Equity Financing (KfW Capital);
- 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, 2020	Year ended December 31, 2019	Year-to-Year % change
	(EUR in millions)		(in %)
SME Bank & Private Clients (*Mittelstandsbank & Private Kunden*)	**86,274**	**35,979**	**>100**
Customized Finance & Public Clients (*Individualfinanzierung & Öffentliche Kunden*)	**19,213**	**7,217**	**>100**
Equity Financing (KfW Capital**)**	**871**	**156**	**>100**
Export and project finance (KfW IPEX-Bank)	**16,584**	**22,080**	**-25**
Promotion of developing countries and emerging economies	**12,394**	**10,648**	**16**
of which KfW Entwicklungsbank	*10,983*	*8,801*	*25*
of which DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH	*1,411*	*1,847*	*-24*
Financial markets	**400**	**1,402**	**-71**
Total promotional business volume (1) (2)	**135,269**	**77,307**	**75**

(1) Total promotional business volume for the full year ended December 31, 2020 has been adjusted for commitments of EUR 468 million (2019: EUR 175 million) 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 2020. 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.

RELATIVE SIZE OF EACH BUSINESS SECTOR

	As of December 31, 2020	
	Commitments outstanding	Economic capital required (1)
SME Bank & Private Clients	54%	43%
Customized Finance & Public Clients	13%	3%
Equity Financing (KfW Capital)	0%	1%
Export and Project Finance (KfW IPEX Bank)	15%	4%
Promotion of Developing Countries and Emerging Economies (KfW Entwicklungsbank and DEG – *Deutsche Investitions- und Entwicklungsgesellschaft mbH*)	8%	6%
Financial Markets	9%	3%
Total (in EUR billions)	**572.7**	**15.8**

(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 "Group management report—Risk report—Risk management approach of KfW Group—Internal capital adequacy assessment process—Economic risk-bearing capacity" and note 30 to the financial statements, both 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 Equity Financing (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. In its domestic business sectors, KfW currently lends to approximately 170 banks. In 2020, 61% (2019: 59%) 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, however, and 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 German federal states (*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.

In recent years, KfW has modernized its application and approval process for loans with the aim of attaining a more efficient, automated and accelerated process. For this purpose, KfW has developed a digital online platform for its standardized loan programs. The online platform provides immediate feedback as to KfW's approval of loans in the form of electronic confirmations for most applications, and electronic confirmations after manual processing by KfW for more complex products (for instance, environmental programs for SMEs, municipal enterprises, businesses, and non-profit organizations). Since the beginning of 2020, all of KfW's standardized domestic, commercial and non-direct municipal products are offered exclusively via the online platform. All intermediate banks have access to the online platform and use it for their application processes.

KfW applies different pricing models for granting loans: a fixed-rate pricing model and a risk-adjusted pricing model. Under the fixed-rate pricing model, the commercial banks to which KfW lends are permitted to on-lend these funds at fixed spreads over the applicable 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 German federal state (*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 federal states (*Länder*) 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.

KfW also extends non-program-based global loans to selected financial institutions in Germany and elsewhere in Europe, which these institutions on-lend as individual loans and leases to finance SMEs, housing projects and energy efficiency projects.

KfW measures to mitigate the economic impact of the COVID-19 pandemic in Germany

KfW Special Program 2020. At the end of March 2020, KfW, in close coordination with the Federal Government, launched the KfW Special Program 2020 (*KfW-Sonderprogramm 2020*) with the primary goal of providing liquidity to enterprises in Germany affected by the COVID-19 pandemic, including companies of all sizes as well as self-employed and freelance professionals. Financings under the KfW Special Program 2020 are generally available to companies, which did not have liquidity issues as of December 31, 2019, but face temporary funding difficulties as a result of the COVID-19 pandemic. Companies may use funds received under the KfW Special Program 2020 for investments as well as for working capital requirements.

Initially, the KfW Special Program 2020 was implemented through three promotional loan programs: (1) the KfW Entrepreneurial Loan (*KfW-Unternehmerkredit*) for enterprises established on the market for more than 5 years, (2) the ERP Loan for Start-ups (*ERP-Gründerkredit – universell*) for enterprises established on the market for less than 5 years, and (3) the KfW Syndicated Loan (*Direktbeteiligung für Konsortialfinanzierung*) for larger-scale financings targeted at larger companies. The terms of these programs have been significantly modified in order to facilitate the approval and extension of loans by the commercial banks and other financing partners involved. 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 the additional 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%.

In April 2020, the Federal Government mandated KfW to launch an additional loan program under the KfW Special Program 2020 to react in a swift and targeted manner to the increasing negative economic impact of the ongoing COVID-19 pandemic, particularly on medium-sized companies in Germany. KfW loans under this program, which is referred to as KfW Instant Loan 2020 (*KfW-Schnellkredit* 2020), share certain features with the instruments under the KfW Special Program 2020 described above. For instance, financings are generally available to companies which did not have financial difficulties as of December 31, 2019, but now face temporary funding problems as a result of the COVID-19 pandemic, and funds received may be used for investments and working capital requirements. However, loans under 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 2020, 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 2020.

In view of the ongoing COVID-19 pandemic and associated governmental measures, the Federal Government has decided to extend the deadline for commitments under the KfW Special Program, including the KfW Instant Loan, from December 31, 2020 to December, 2021. From April 1, 2021, onwards, in accordance with EU state aid rules, the maximum loan amounts available to the various categories of borrowers have been increased considerably.

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.

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 December 31, 2021. Second, the group of applicants for the KfW Student Loan Program has temporarily been extended to all foreign citizens who meet the general eligibility criteria for the period from July 1, 2020 to March 31, 2021.

Pursuant to a separate guarantee declaration, the Federal Republic will bear the financial risks KfW incurs in connection with the temporary extension of the KfW Studen Loan Program to foreign applicants (excluding a portfolio of 300 loans).

SME Bank & Private Clients

KfW's SME Bank & Private Clients business sector supports SMEs, large-scale enterprises, business founders, start-ups and self-employed professionals, and offers financing for various purposes to companies in different stages of development. Additionally, this business sector extends housing-related loans and grants as well as financing for education to private individuals. Financing is provided primarily by means of loan programs (2020: EUR 81.9 billion, 2019: EUR 32.3 billion), mezzanine programs (2020: EUR 0.1 billion, 2019: EUR 0.2 billion) and grant-based programs (2020: EUR 4.3 billion, 2019: EUR 3.5 billion).

In 2020, SME Bank & Private Clients committed financing to improve social living conditions and to support the German economy in an amount of EUR 86.3 billion (2019: EUR 36.0 billion). The following table shows commitments by fields of promotional activity for each of the years indicated.

SME BANK & PRIVATE CLIENTS COMMITMENTS

	Year ended December 31,		Year-to-Year
	2020	2019	% change
	(EUR in billions)		(in %)
SME Bank	**48.1**	**15.3**	>100
Start-up financing and general investment	39.7	6.8	*>100*
Innovation	0.8	0.4	*100*
Environmental investment	7.6	8.1	*-6*
Private Clients	**38.2**	**20.6**	***85***
Housing investment programs	8.8	7.6	*16*
Education programs	2.5	1.9	*32*
Environmental investment	26.9	11.2	*>100*
Total commitments (1)	**86.3**	**36.0**	***>100***

(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 2020, commitments in SME Bank increased significantly compared to 2019. This increase was attributable to higher commitments in SME Bank, mainly under the new KfW Special Program 2020, which was introduced as part of a government package of measures to mitigate the economic impact of the ongoing COVID-19 pandemic in Germany. Another driver of the significant increase were higher commitments under KfW's energy-efficient construction and refurbishment program.

SME Bank

According to a representative KfW survey in the German SME sector, known as KfW SME Panel, Germany had an estimated 3.79 million SMEs (defined for the purposes of the survey as corporations with an annual group turnover of up to EUR 500 million) in 2019. During the same period, SMEs accounted for 2% of gross investment by the German corporate sector and employed 71% of the workforce.

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

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

Start-up Financing and General Investment Programs

SME Bank provides start-up financing and financial support for general investments for a wide range of purposes, such as investments in property and buildings, in plants or in machinery and equipment. In 2020, commitments in this field amounted to EUR 39.7 billion, representing a very significant increase compared to the previous year (2019: EUR 6.8 billion). The main contributors to this increase were financings extended under the KfW Special Program 2020, including the KfW Entrepreneurial Loan Corona (*KfW-Unternehmerkredit Corona*) with EUR 28.3 billion, the ERP Loan for Start-ups Corona (*ERP-Gründerkredit – Corona*) with EUR 1.4 billion and the KfW Instant Loan 2020 (*KfW-Schnellkredit* 2020) with 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. In order to increase the attractiveness of the ERP Promotion for Innovation and Digitalization program, KfW has also started to provide a grant element to borrowers eligible for this program in February 2020. Commitments in the field of innovation financing increased to EUR 0.8 billion in 2020 (2019: EUR 0.4 billion).

Environmental Investment Programs

SME Bank finances environmental protection projects, in particular for measures aiming at increasing energy efficiency, reducing greenhouse gas emissions, or intensifying the use of renewable energy sources. Commitments under SME Bank's environmental investment programs in 2020 remained approximately at the prior-year level (EUR 7.6 billion in 2020 compared to EUR 8.1 billion in 2019). In particular, the increased commitment volume under KfW's Renewable Energy Programme of EUR 3.7 billion (2019: EUR 2.9 billion) compensated for the discontinued Energy Efficiency Programme – Waste Heat (2019: EUR 1.0 billion). Disbursements under KfW's Renewable Energy Program, which promotes investments in projects for the use of wind energy, solar energy, biogas/biomass systems and hydropower, among others, are linked to KfW's green bond issuances (see "Business—Financial Markets—Funding").

In March 2020, KfW launched a new program, the "SME Climate Protection Facility" (*KfW-Klimaschutzoffensive für den Mittelstand*), for which commitments in 2020 amounted to EUR 82 million. Inspired by EU-Taxonomy criteria for sustainable finance, this program supports small and medium-sized enterprises in their transitional process to more sustainability. KfW offers a grant element to borrowers under this loan program.

Private Clients

Housing Investment Programs

Housing investment programs in Private Clients provide funds for the promotion of home ownership and for the improvement of the security of, and the accessibility to or within, existing homes. Some of these programs are subsidized through interest rate reductions paid for by federal funds. Commitments in 2020 amounted to EUR 8.8 billion (2019: EUR 7.6 billion), of which EUR 5.8 billion (2019: EUR 4.4 billion) were granted for home ownership promotion programs. Commitments under the *Baukindergeld* program, which aims to promote home ownership for families with children and for single parents, amounted to EUR 2.6 billion in 2020 (2019: EUR 2.7 billion).

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 the German federal states (*Länder*). In 2020, commitments increased to EUR 2.5 billion (2019: EUR 1.9 billion). The main contributor to this increase was the KfW Student Loan, which amounted to EUR 1.3 billion in 2020 (2019: EUR 0.7 billion) due to the conditions having been improved in order to provide financial bridging assistance during the COVID pandemic.

Environmental Investment Programs

The sector of energy efficiency registered a particularly significant increase. The improved promotional conditions at the beginning of 2020 for the energy-efficient construction and refurbishment programmes for Private Clients, which support investments in the construction of energy-efficient new buildings and the energy-efficient refurbishment of existing ones, led to a significant increase in commitments to EUR 26.8 billion in 2020 (2019: EUR 11.2 billion).

In November 2020, KfW launched a new grant-based program to support the purchase and installation of private charging stations for electric cars at residential buildings on behalf of the Federal Government. Funding is provided in the form of an investment grant of EUR 900 per charging point. Commitments in 2020 amounted to EUR 0.2 billion.

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 promotional institutes of the German federal states (*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
	2020	2019	% change
	(EUR in millions)		(in %)
Municipal infrastructure programs	4,769	3,868	*23*
Corporate loans and project finance	9,323	299	*>100*
Global funding facilities to *Landesförderinstitute*	3,177	1,254	*>100*
Global loans to support start-ups and small enterprises (1)	619	0	n.a.
Program for the refinancing of export loans	1,075	302	*256*
Global loans to selected financial institutions	250	1,495	*-83*
Total commitments (2)	**19,213**	**7,217**	***>100***

(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.

Commitments in the business sector Customized Finance & Public Clients increased to EUR 19.2 billion in 2020 from EUR 7.2 billion in 2019. This increase was primarily driven by commitments relating to COVID-19 support measures with a total volume of EUR 9.5 billion, primarily under the KfW Syndicated Loan program with a volume of EUR 8.4 billion.

Commitments in the other programs of the business sector increased by EUR 2.5 billion in 2020. This increase was primarily driven by the strong demand in global funding facilities to *Landesförderinstitute*, which was offset by a sharp decline 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 increased to EUR 4.8 billion in 2020 from EUR 3.9 billion in 2019. Increases in demand were at similar levels across all programs, while growth rates in the innovation programs were higher than in the infrastructure and energy transition programs, also due to the launch of the new digital infrastructure loan program with commitments of EUR 87 million in 2020. However, the largest increase of commitments was due to Global loans to refinance charitable and social organizations as part of the COVID-19 support measures, which had commitments of EUR 486 million in 2020. Commitments under those global loans are credited to the commitments of the municipal infrastructure programs.

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
	2020	2019	% change
	(EUR in millions)		(in %)
Global funding facilities to *Landesförderinstitute*	3,177	1,254	*>100*
Global loans to support start-ups and small enterprises (1)	619	0	*n.a.*
Global loans to refinance charitable and social organizations (1)	486	0	*n.a.*
Program-based global loans to *Landesförderinstitute*	546	637	*-14*
Non program-based global loans to selected financial institutions in Germany and Europe	250	1,495	*-83*
Total commitments (2)	**5,078**	**3,386**	*36*

(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.

Customized Finance & Public Clients also grants global loans to selected financial institutions in Germany in order to refinance leasing contracts to SMEs, as well as to selected financial institutions in Europe in order to cooperate in the field of SME financing in Europe. The financial institutions in turn break down the global loans and extend individual loans and leases to SMEs. In 2020, global loans to selected financial institutions in Germany and Europe decreased to EUR 0.3 billion (2019: EUR 1.5 billion). This amount is fully attributable to the refinancing of leasing contracts. The demand for the refinancing of leasing contracts in Germany dropped significantly in 2020. In addition, no global loan transaction with European financial institutions was closed in 2020. These developments were due to a reduced investment appetite in the SME sector and government-promoted loan-programs in several countries in connection with the COVID-19 pandemic.

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 2020, KfW made commitments of EUR 1.1 billion (2019: EUR 0.3 billion) under this program. Demand for the refinancing of export loans generally depends on the number of export projects completed. The increase of commitments in 2020 was mainly due to larger projects being completed.

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 increased from EUR 299 million in 2019 to EUR 9.3 billion in 2020. This significant increase was mainly driven by the high commitment volume of EUR 8.4 billion under the KfW Syndicated Loan program in connection with the COVID-19 support programs launched in 2020. In 2020, KfW also launched a syndicated loan program to support the expansion of fiber-optic networks in Germany.

Equity Financing (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. KfW Capital is a financial enterprise (*Finanzunternehmen*) pursuant to Section 1 para 3 of the KWG and as such subject to a 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 a period of ten years from its inception, the targeted average investment volume is EUR 200 million per year. KfW Capital intends to invest up to a maximum of EUR 25 million of a fund's capital and to acquire a maximum of 19.99% of a fund's capital and voting rights.

Commitments related to KfW's Equity Financing business sector increased to EUR 871 million in 2020 from EUR 156 million in 2019. In addition to commitments of EUR 184 million via the ERP Venture Capital Fund investment program, commitments in KfW's Equity Financing business sector primarily reflected a fiduciary commitment of EUR 685 million made by KfW Capital under the Corona Matching Facility (together with the European Investment Fund) and the Corona Liquidity Facility, which are part of the Federal Government's COVID-19 support package for start-ups and small enterprises. Funding through the Corona Matching Facility and the Corona Liquidity Facility, which are guaranteed by the Federal Government, is refinanced by KfW.

The following table shows the commitments of the business sector Equity Financing (KfW Capital) for each of the years indicated:

COMMITMENTS EQUITY FINANCING (KFW CAPITAL) BUSINESS SECTOR*

	Year ended December 31,		Year-to-Year
	2020	2019	% change
	(EUR in millions)		(in %)
High-Tech Start-up Funds	2	2	*0*
ERP Venture Capital Fund Investments	184	155	*19*
Corona Matching Facility / Corona Liquidity Facility	685	0	*n.a.*
Total commitments (1)	**871**	**156**	***>100***

* 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 29.6 billion as of December 31, 2020 (December 31, 2019: EUR 27.0 billion). Total outstanding loans and guarantees (including promotional activities) for KfW's business sector Export and Project Finance amounted to EUR 58.1 billion as of December 31, 2020 (December 31, 2019: EUR 56.5 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, 2020, KfW IPEX-Bank employed 852 persons, excluding managing directors but including temporary personnel (December 31, 2019: 775).

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."

KfW IPEX-Bank (controlled company) signed a profit transfer agreement with KfW Beteiligungsholding GmbH (controlling company) in order to form a corporate income tax ("CIT") fiscal unity. Under this profit transfer agreement, KfW IPEX-Bank is required to transfer its entire annual profit under applicable German commercial law to KfW Beteiligungsholding GmbH effective from the end of the fiscal year ended December 31, 2016.

Business

KfW IPEX-Bank focuses on supporting the internationalization and the competitiveness of internationally active German and European companies and offers project, export and trade financing. It provides medium and long-term investment and export financing in the form of amortizing loans, guarantees or leasing financing as well as project, object and acquisition financing. KfW IPEX-Bank also offers derivative instruments to allow its clients to hedge interest and currency risk and instruments for short-term trade financing, such as participations in letters of credit.

With the consent of the Federal Government, KfW delegated the mandate of the management of the Shipping CIRR Program and the ERP (European Recovery Program) Export Financing Program to KfW IPEX-Bank. Both programs are executed by KfW IPEX-Bank, applying strict "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 IPEX-Bank's principal customers are German and European corporations (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 2020, KfW IPEX-Bank refinanced loan commitments for export and project finance under KfW's promotional programs in an amount of EUR 468 million (2019: EUR 175 million).

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

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

A portion of export finance loans extended by KfW IPEX-Bank is guaranteed by the Federal Republic through HERMES, the official German export credit insurer. HERMES insurance covers up to 95% – in some instances even up to 100% – of KfW IPEX-Bank's export and project finance business risk, so that the risk of the portion covered is the equivalent of 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, 2020, outstanding loans and guarantees (including promotional activities) outside Germany for KfW's business sector Export and Project Finance amounted to EUR 44.6 billion, of which EUR 9 billion, or 20%, 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
	2020		2019		% change
	(EUR in millions)	(in % of total)	(EUR in millions)	(in % of total)	(in %)
Commercial business	13,832	*83*	13,107	*59*	*6*
Promotional business (conducted on behalf of KfW)	2,753	*17*	8,973	*41*	*-69*
Total commitments (1)	**16,584**	***100***	**22,080**	***100***	***-25***

(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 2020, total commitments of the Export and Project Finance business sector decreased to EUR 16.6 billion from EUR 22.1 billion in 2019, 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 2020 compared to 2019 was primarily driven by a decrease in commitments under the CIRR scheme for bank refinancing and in the maritime industries, with both segments being significantly impacted by the COVID-19 pandemic.

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

	Year ended December 31,		Year-to-Year
	2020	2019	% change
	(EUR in millions)		(in %)
Power, renewables and water	2,808	3,232	*-13*
Aviation, mobility and transport	2,686	2,297	*17*
Financial institutions, trade and commodity finance	2,509	2,600	*-4*
Basic industries	2,438	2,617	*-7*
Industries and services	2,306	2,851	*-19*
Infrastructure	1,684	1,905	*-12*
Maritime industries	1,453	3,123	*-53*
CIRR scheme for bank refinancing (ship + ERP finance) (1)	701	3,455	*-80*
Total commitments	**16,584**	**22,080**	***-25***

(1) Starting in 2017 the CIRR scheme for bank refinancing includes commitments under the new ERP Export Financing Program (ERP-CIRR) amounting to EUR 0.2 billion in 2020 and EUR 0.4 billion in 2019.

Commitments in export and project finance decreased compared to 2019 due to the impact of the COVID-19 pandemic on global trade, but overall remained roughly at prior year levels. Commitments (excluding those under the CIRR scheme for bank refinancing) amounted to EUR 15.9 billion in 2020 (2019: EUR 18.6 billion). The highest commitment volumes were achieved in the power, renewables and water sector with EUR 2.8 billion (2019: EUR 3.2 billion), followed by the aviation, mobility and transport sector with commitments of EUR 2.7 billion (2019: EUR 2.3 billion).

In 2020, commitments under the CIRR scheme for bank refinancing decreased to EUR 0.7 billion from EUR 3.5 billion in 2019, as a result of the impact of the COVID-19 pandemic on global trade.

Commitments by Geographic Area. KfW IPEX-Bank's commitments were reported for the following three regions in 2020: Germany; Europe (excluding Germany, but including Russia and Turkey); and the rest of the world. In 2020, KfW IPEX-Bank's commitments for project and export financing (excluding the CIRR scheme for bank refinancing) within Germany increased to EUR 5.2 billion from EUR 4.2 billion in 2019. In 2020, commitments in Europe (excluding Germany, but including Russia and Turkey) decreased to EUR 6.1 billion from EUR 6.9 billion in 2019. KfW IPEX-Bank's commitments in the rest of the world in 2020 decreased to EUR 4.6 billion compared to commitments of EUR 7.5 billion in 2019. Commitments under the CIRR scheme for bank refinancing (2020: EUR 0.7 billion; 2019: EUR 3.5 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
	2020	2019	% change
	(EUR in millions)		(in %)
Corporate transactions (for German or European export companies)	12,460	14,030	*-11*
Thereof			
Loans (term loans and bullet)	*7,049*	*8,443*	*-17*
Trade finance	*2,016*	*1,858*	*8*
Revolving credit facilities for cash drawings	*1,713*	*2,339*	*-27*
Guarantees	*1,477*	*1,304*	*13*
Lease finance	*205*	*85*	*>100*
Project finance (1)	2,565	4,204	*-39*
Asset finance (1)	275	145	*90*
Acquisition finance (1)	487	247	*97*
Loans to funds	95	0	*100*
CIRR scheme for bank refinancing (ship + ERP finance)	701	3,455	*-80*
Total commitments	**16,584**	**22,080**	***-25***

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

Funding

The funds for KfW IPEX-Bank's commitments are mainly provided by KfW through borrowings in the capital markets. KfW provides funding to KfW IPEX-Bank's international project and export finance business at market rates based on the ratings assigned to KfW IPEX-Bank by international rating agencies. For those areas of export finance which the European Commission has deemed to fall within the scope of the promotional activities of KfW, funds from the ERP Special Fund may also be used for subsidizing interest rates. In 2020, EUR 117 million of loan disbursements were supported by the ERP Special Fund (2019: EUR 234 million).

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

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,		Year-to-Year
	2020	2019	% change
	(EUR in millions)		(in %)
KfW Entwicklungsbank	10,983	8,801	*25*
DEG	1,411	1,847	*-24*
Total commitments (1)	**12,394**	**10,648**	***16***

(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 2020, approximately 37% 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 interest rates or grant funds are combined with funds from KfW that are refinanced in the capital markets. As of December 31, 2020, approximately 95% of outstanding commitments refinanced with KfW funds were guaranteed either by a special guarantee facility of the Federal Republic or by export credit agencies. Interest rates and related terms of Financial Cooperation Development Loans are significantly more favorable to the borrower than market terms and, therefore, meet the requirements for recognition as official development assistance ("ODA"); and
- Financial Cooperation Promotional Loans (*FZ-Förderkredite*), funded solely through funds raised by KfW in the capital markets. These loans may meet the requirements for recognition as ODA as they offer more favorable terms to the borrower than market terms. As of December 31, 2020, approximately 85% of outstanding Financial Cooperation Promotional Loans were guaranteed by a special guarantee facility of the Federal Republic.

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

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

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

KFW ENTWICKLUNGSBANK COMMITMENTS

	Year ended December 31,		Year-to-Year
	2020	2019	% change
	(EUR in millions)		(in %)
Loan commitments (1)	6,677	4,804	*39*
of which federal funds	*218*	*352*	*-38*
of which KfW's funds refinanced in the capital markets	*6,459*	*4,452*	*45*
Grant commitments	3,835	3,412	*12*
Mandates	471	585	*-20*
Total commitments	**10,983**	**8,801**	***25***

(1) Also includes equity investments (2020: EUR 25 million, 2019: EUR 25 million)

Total commitments of KfW Entwicklungsbank increased by 25% to EUR 11.0 billion in 2020 from EUR 8.8 billion in 2019, mainly due to the increased contribution made to the Federal Ministry for Economic Cooperation and Development's Emergency COVID-19 Support Program which is aimed at developing countries. The ministry mobilized substantial additional funds from the second supplementary federal budget of 2020 and mandated KfW Entwicklungsbank to commit them to partner countries. KfW Entwicklungsbank used these additional public funds to leverage market funds for its COVID-19-related commitments to developing countries. All additional COVID-19-related commitments were made under the usual established credit processes of KfW. The relative share of loan commitments that were refinanced in the capital markets increased slightly to 97% in 2020 from 93% in 2019.

In 2020, Asia accounted for 26% of KfW Entwicklungsbank's commitments (2019: 33%); Sub-Saharan Africa accounted for 19% (2019: 23%); Middle East/North Africa accounted for 29% (2019: 16%); Europe/Caucasus accounted for 10% (2019: 16%); Latin America accounted for 12% (2019: 10%); and trans-regional commitments accounted for 5% (2019: 2%).

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

	Year ended December 31,				Year-to-Year
	2020		2019		% change
	(EUR in millions)	(in % of total)	(EUR in millions)	(in % of total)	(in %)
Economic infrastructure	1,781	*16*	2,737	*31*	*-35*
Social infrastructure	4,842	*44*	3,350	*38*	*45*
Financial sector	2,443	*22*	880	*10*	*>100*
Production sector	506	*5*	667	*8*	*-24*
Others (1)	1,410	*13*	1,167	*13*	*21*
Total commitments	**10,983**	***100***	**8,801**	***100***	***25***

(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 corporation, 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, 2020, DEG maintained 13 representative offices in developing countries or emerging economies. In 2020, DEG employed an average of 640 persons (2019: 627). At year-end 2020, DEG's total assets (IFRS, before consolidation) amounted to EUR 6.3 billion (2019: EUR 6.9 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
	2020	2019	% change
	(EUR in millions)		(in %)
Loans	944	1,137	*-17*
Equity participations	275	582	*-53*
Mezzanine financing	192	128	*50*
Total commitments	**1,411**	**1,847**	***-24***

Financial Markets

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

Funding

KfW's principal sources of funds are the international financial markets and public funds, with the majority of lending in its business sectors being financed from funds raised by KfW in the international financial markets. KfW Group's consolidated balance sheet total assets at year-end 2020 were EUR 546.4 billion. EUR 496.4 billion, or 90.8% of this amount, was financed through borrowings (i.e., from financial market funds or public funds). In addition, at year-end 2020, KfW had EUR 17.5 billion in liabilities held in trust (i.e., for which the Federal Government 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, 2020, 73% 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, 2020, the percentage of capital-market funding outstanding out of total financial-market funds outstanding was 91%.

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 2020, benchmark bonds accounted for a funding volume of EUR 44.8 billion, or 67%, of KfW's total capital-market funding, while bonds placed publicly outside the benchmark programs accounted for EUR 8.4 billion, or 13%. The volume of bonds sold in private placements and of green bonds amounted to EUR 4.8 billion, or 7%, and EUR 8.3 billion, or 13%, respectively. Total capital-market funding in 2020 amounted to EUR 66.4 billion (2019: EUR 80.6 billion).

With respect to refinancing its funding requirements resulting from the KfW Special Loan Program, KfW, since July 1, 2020, has had access 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 totaled EUR 39.0 billion in 2020.

In 2020, KfW also participated in the targeted longer-term refinancing operations of the Eurosystem via TLTRO III, the conditions for which had been eased by the Governing Council of the ECB in the course of 2020 in response to the COVID-19 pandemic in order to support the extension of credit to SMEs. KfW's refinancing through TLTRO III in 2020 totaled EUR 13.4 billion.

KfW expects its volume of long- term funding to be raised in the capital markets in 2021 to be in a range of EUR 70 billion to EUR 80 billion.

In 2020, KfW conducted six new bond issuances as well as one re-opening of a 2014 bond issuance, one re-opening of a 2016 bond issuance, three re-openings of 2019 bond issuances and two re-openings of 2020 bond issuances (13 transactions in total in 2020) in an aggregate principal amount of EUR 32 billion, in each case under its euro benchmark program. Also in 2020, KfW conducted three new bond issuances in an aggregate principal amount of USD 14.0 billion under its U.S. dollar benchmark program.

KFW'S BENCHMARK BOND ISSUANCES IN 2020

	Aggregate principal amount in billions	Maturity at issuance (in years)	Interest rate in % per annum
KfW U.S. $-Benchmark I/2020	USD 5.0	3	1.625
KfW U.S. $-Benchmark II/2020	USD 5.0	5	0.375
KfW U.S. $-Benchmark III/2020	USD 4.0	3	0.250
KfW Euro-Benchmark I/2020	EUR 5.0	5	0.000
KfW Euro-Benchmark II/2020	EUR 5.0	7	0.000
KfW Euro-Benchmark III/2020	EUR 4.0	5	0.010
KfW Euro-Benchmark IV/2020	EUR 5.0	3	0.000

	Aggregate principal amount in billions	Maturity at issuance (in years)	Interest rate in % per annum
KfW Euro-Benchmark V/2020	EUR 3.0	10	0.000
KfW Euro-Benchmark VI/2020	EUR 3.0	7	0.000
KfW Euro-Benchmark III/2019 (re-opening)	EUR 1.0	3	0.000
KfW Euro-Benchmark II/2019 (re-opening)	EUR 1.0	5	0.000
KfW Euro-Benchmark IV/2019 (re-opening)	EUR 1.0	5	0.000
KfW Euro-Benchmark IV/2020 (re-opening)	EUR 1.0	3	0.000
KfW Euro-Benchmark I/2016 (re-opening)	EUR 1.0	7	0.375
KfW Euro-Benchmark III/2014 (re-opening)	EUR 1.0	10	1.500
KfW Euro-Benchmark III/2020 (re-opening)	EUR 1.0	5	0.010

In 2020, KfW's total new capital-market funding was raised in 14 different currencies and 172 separate capital markets transactions. KfW's core currencies are the euro and the U.S. dollar, which together accounted for 88% of KfW's total new capital-market funding in 2020 (2019: 78%). The percentage of new funds raised in euros increased from 52% in 2019 to 64% in 2020, making it the most significant funding currency, whereas the percentage of new funds raised in U.S. dollars decreased from 26% to 24% over the same period. The percentage of new funds raised in pounds sterling decreased from 13% in 2019 to 5% in 2020, which still made it KfW's third most significant funding currency in 2020.

KFW'S TOTAL NEW CAPITAL-MARKET FUNDING VOLUME 2020 BY CURRENCIES

	EUR in billions	In % of total
Euro (EUR)	42.6	*64.2*
U.S. dollar (USD)	15.9	*24.0*
Pound sterling (GBP)	3.3	*5.0*
Norwegian krone (NOK)	1.0	*1.5*
Australian dollar (AUD)	0.9	*1.4*
Japanese Yen (JPN)	0.3	*0.5*
Other currencies (1)	2.3	*3.5*
Total	**66.4**	***100***

(1) CNY, HKD, HUF, MXN, PLN, SEK, TRY and ZAR.

In connection with its green bond issuances, KfW has established a Green Bond Framework published on its website that reflects international best practices and which is aligned with the 2018 edition of the "Green Bond Principles" of the International Capital Market Association ("ICMA"). Through its green bond issuances, KfW aims to broaden its investor base by addressing socially responsible investors and to enhance capital markets' infrastructure for financing environmental projects that have the reduction of greenhouse gas emissions as their common objective. Net proceeds from the sale of its green bonds and requests for disbursements under the eligible environmental projects are tracked by KfW in an appropriate manner. KfW provides investors with information regarding the use of proceeds in terms of disbursements on a regular basis on its website. Unless otherwise indicated, information available on, or accessible through, KfW's website is not incorporated herein by reference. In 2020, KfW conducted eleven new green bond issuances in six currencies as well as two re-openings of 2020 bond issuances and one re-opening of a 2019 bond issuance. In total, green bonds accounted for a funding volume of EUR 8.3 billion, or 12.6%, of KfW's total capital-market funding. One USD green bond with an aggregate principal amount of USD 2.0 billion was issued as an SEC-registered global bond.

The most important sources of capital-market funding for KfW are bond and note issuances followed by promissory note loans. At year-end 2020, the amount of outstanding bonds and notes issued by KfW totaled EUR 384.0 billion, representing a EUR 11.6 billion decrease from EUR 395.6 billion outstanding at year-end 2019.

Of outstanding borrowings, promissory note loans continue to be KfW's second most important capital-market funding instrument, with a book value of EUR 44.4 billion at year-end 2020. Of this amount, EUR 42.8 billion was recognized as financial liabilities at amortised cost (of which EUR 1.7 billion as liabilities to banks and EUR 41.1 billion as liabilities to customers) and EUR 1.6 billion was recognized as financial liabilities at fair value (of which EUR 0.3 billion as liabilities to banks and EUR 1.3 billion as liabilities to customers). The increase of the book value of promissory note loans from EUR 5.5 billion by EUR 38.9 billion to EUR 44.4 billion is largely due to the new financing source via the WSF. Promissory note loans are a special instrument of the German capital markets, under which the lending entity (generally a bank, insurance company or public pension fund) receives a certificate evidencing its loan to the borrower and the terms of such loan. Maturities on promissory note loans range from one to 30 years, thereby providing a high degree of flexibility to both the borrower and the lender. Transferable only by way of assignment, promissory note loans have only limited liquidity in the interbank secondary market.

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

INFORMATION ON ISSUANCES OF FUNDED DEBT OF KFW GROUP
(AS OF DECEMBER 31, 2020)

Currency	Number of transactions	Interest type	Average interest rate in % per annum (1) (2)	Years of issue	Maturities	Average years to maturity (2)	Aggregate principal amount outstanding in applicable currency	Aggregate principal amount outstanding in EUR (3)
AUD	11	FIXED	4.22	2011-2019	2021-2028	2.41	15,749,999,999.82	9,908,152,994.35
BRL	1	FIXED	9.00	2016	2021	0.96	75,000,000.00	11,767,474.70
CAD	5	FIXED	3.72	2005-2019	2022-2037	3.81	2,457,200,000.00	1,571,803,236.74
CHF	2	FIXED	2.55	2005-2007	2025-2037	6.85	1,304,999,999.99	1,208,109,609.32
CNY	9	FIXED	2.54	2019-2020	2021-2023	1.93	4,598,000,000.11	573,138,049.25
DEM	1	FIXED	7.00	1993	2023	2.25	105,985,000.00	54,189,270.03
EUR	270	FIXED	0.54	1999-2020	2021-2050	4.61	277,791,147,812.49	277,791,147,812.49
EUR	24	FLOATING	0.94	2003-2019	2021-2052	3.65	2,990,674,449.47	2,990,674,449.47
GBP	23	FIXED	2.44	2000-2020	2021-2037	3.46	24,226,703,000.02	26,947,602,415.96
HKD	5	FIXED	1.15	2019-2020	2021-2022	1.07	1,399,999,999.91	147,148,472.80
HUF	1	FIXED	0.90	2020	2022	1.16	1,999,999,998.57	5,496,166.42
JPY	14	FIXED	2.25	2001-2020	2021-2038	7.62	158,672,999,999.94	1,254,431,180.33
JPY	222	FLOATING	1.61	2002-2020	2021-2049	14.01	140,633,999,996.75	1,111,819,116.11
MXN	3	FIXED	7.48	2017-2018	2021-2023	1.47	2,750,000,000.03	112,631,061.60
NOK	18	FIXED	1.89	2002-2019	2021-2036	2.29	42,350,000,000.55	4,044,774,266.31
NOK	2	FLOATING	1.86	2019	2022	1.15	5,500,000,000.06	525,295,359.26
NZD	3	FIXED	3.15	2016-2018	2021-2028	1.87	640,000,000.01	376,825,247.30
PLN	4	FIXED	1.94	2006-2020	2021-2025	1.59	672,597,246.05	147,509,100.61
SEK	12	FIXED	1.35	2010-2020	2021-2031	2.54	36,500,000,000.22	3,637,523,294.12
TRY	3	FIXED	11.46	2016-2020	2021-2023	1.39	327,000,000.05	35,882,411.04
USD	65	FIXED	2.09	2002-2020	2021-2047	2.98	106,029,784,415.12	86,406,800,110.11
USD	3	FLOATING	4.49	2012-2020	2021-2025	0.92	189,380,000.00	154,331,350.34
ZAR	7	FIXED	7.57	2017-2020	2021-2030	3.95	3,870,000,000.37	214,738,734.56
Total	**708**					**4.12**		**419,231,791,184.22**

(1) Interest rate of floating rate note means the applicable interest rate as of December 31, 2020. 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, 2020.

Money-Market Funding. KfW issues commercial paper under two commercial paper programs: the EUR 70 billion multicurrency commercial paper program and the USD 20 billion commercial paper program. The programme volume of the USD commercial paper programme was increased from USD 10 billion to USD 20 billion as of April 8, 2020. As of December 31, 2020, KfW Group's commercial paper outstanding totaled EUR 41.3 billion (December 31, 2019: EUR 40.6 billion).

Public Funds. As of December 31, 2020, the proportion of public funds in KfW Group's borrowings was 9%. The most important source of public funds for KfW is the budget of the Federal Republic. Total long-term and short-term borrowings from funds provided by the federal budget (excluding loans on a trust basis) amounted to EUR 43.3 billion as of December 31, 2020 (December 31, 2019: EUR 5.6 billion). This large increase is due to the new financing source via the WSF. KfW Group's long-term and short-term borrowings from the ERP Special Fund amounted to EUR 216 million as of December 31, 2020 (December 31, 2019: EUR 382 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 37% of the sources of funding for KfW Entwicklungsbank's commitments in 2020. Funds from the Federal Government involved in loan commitments and grants of KfW Entwicklungsbank do not, by their nature, appear on KfW's consolidated statement of financial position. For more information see "Business—Promotion of Developing Countries and Emerging Economies—KfW Entwicklungsbank (KfW Development Bank)."

Derivatives

KfW generally enters into derivatives transactions for hedging purposes in connection with its financing and funding activities. Accordingly, a substantial majority of its derivatives are interest- or currency-related derivatives. KfW Group does not enter into 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		Fair value		Fair value	
	As of December 31,		As of December 31, 2020		As of December 31, 2019	
	2020	2019	Positive	Negative	Positive	Negative
	(EUR in millions)		(EUR in millions)		(EUR in millions)	
Interest-related derivatives	540,913	490,412	10,126	5,584	8,134	5,188
Currency-related derivatives (1)	156,986	200,301	3,180	8,047	8,072	3,916
Credit derivatives as protection buyer	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Total derivatives (2) (3)	**697,898**	**690,714**	**13,306**	**13,631**	**16,205**	**9,104**
Embedded derivatives accounted for separately	—	—	11	20	37	23
Total balance sheet items "derivatives designated for hedge accounting" and "financial assets/liabilities at FV - other derivatives"	**697,898**	**690,714**	**13,317**	**13,651**	**16,243**	**9,127**

* 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,	
	2020	2019
	(EUR in millions)	
Total positive fair value before netting	**13,306**	**16,205**
Total positive fair value after netting (1)	**4,960**	**8,913**
Collateral received	3,419	8,849
of which cash collateral	*3,419*	*8,849*

	As of December 31,	
	2020	2019
	(EUR in millions)	
Total positive fair value after netting and collaterals	**1,541**	**64**

(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, 36, 38, 46, 48, 55, 56 and 57 to the financial statements included in Exhibit (e) to this annual report. For more information on interest and currency risks related to derivatives as well as counterparty default risks, see "Group management report—Risk report—Types of risk—Counterparty default risk" and "—Market price risk," respectively, included in Exhibit (e) to this annual report.

Asset Management

As of December 31, 2020, KfW Group held securities and investments in an amount of EUR 38.9 billion (December 31, 2019: EUR 37.8 billion). See "Group management report—Economic report—Development of net assets" included in Exhibit (e) to this annual report for more information concerning securities and investments. EUR 31.3 billion, or 80%, of all securities and investments were held in the form of fixed-income securities for liquidity purposes in KfW's liquidity portfolio. The remaining securities and investments were securities held as a surrogate for loans or as equity investments in the context of KfW Group's promotional business (e.g., KfW's ABS portfolio or DEG's direct investments). Equity participations held directly or indirectly by KfW made up only a very limited amount of KfW Group's securities and investments.

Liquidity Portfolio. KfW pursues a conservative liquidity management strategy. For this purpose, KfW holds financial assets in its liquidity portfolio in an amount of EUR 31.3 billion as of December 31, 2020 (December 31, 2019: EUR 28.3 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 now 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, 2020. In addition to these securities, as of December 31, 2020, KfW held money-market assets (overnight and term loans as well as reverse repurchase transactions) for liquidity management purposes in an amount of EUR 3.5 billion (December 31, 2019: EUR 16.2 billion).

As a signatory to the United Nations-supported "Principles for Responsible Investment" (PRI), KfW is committed to managing its liquidity portfolio in a sustainable manner. For KfW, this means integrating environmental, social and governance ("ESG") criteria in its investment approach. In 2020, the integration of ESG criteria was based on a best-in-class approach that stipulated that for its liquidity portfolio, 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, 2020, the promotional ABS portfolio volume amounted to EUR 770 million (December 31, 2019: EUR 3.0 billion). 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 2020, KfW provided EUR 400 million (2019: EUR 325 million) as part of its promotional activities for financing climate and environmental protection measures by investing in green bonds. 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 and the portfolio's targeted volume is EUR 2.0 billion. As of December 31, 2020, the volume of the portfolio had reached EUR 1.9 billion. The former target volume of the green bond portfolio of EUR 2.0 billion 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 German Federal Ministry for the Environment was extended accordingly.

Privatization Initiatives

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

At year-end 2020, KfW's total ownership interest in Deutsche Telekom remained unchanged compared to year- end 2019 with approximately 829.2 million ordinary shares. This represented a stake of approximately 17.4% in Deutsche Telekom (December 31, 2019: 17.4%). To KfW's knowledge, the stake of the Federal Republic amounted to approximately 14.5% as of December 31, 2020.

At year-end 2020, KfW's total ownership interest in Deutsche Post remained unchanged compared to year-end 2019 with approximately 253.9 million ordinary shares. This represented a stake of approximately 20.5% in Deutsche Post (December 31, 2019: 20.5%). To KfW's knowledge, the Federal Republic does not hold any shares directly 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, 2020, the total amount outstanding of this loan to Greece amounted to EUR 15.0 billion (December 31, 2019: EUR 15.2 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%) and Berliner Energieagentur GmbH (25%) are held directly by KfW. KfW's shareholding in Airbus SE (9.31%) 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 and CureVac N.V., 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.

Airbus SE

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

At the beginning of April 2013, France, Germany and Spain entered into a supplemental shareholders' agreement, which provided for the dissolution of the Dedalus consortium and for KfW and the remaining investors to hold their respective equity stakes in EADS directly and indirectly through Gesellschaft zur Beteiligungsverwaltung GZBV mbH & Co. KG ("GZBV"). At the end of 2013, GZBV increased its equity stake in EADS by buying approximately 1.87 million shares. In 2015, EADS transformed its legal form into a European company (*Societas Europaea*) and changed its legal name to Airbus Group SE. In April 2017, following approval by the annual general meeting, the legal name was changed into Airbus SE. As of December 31, 2020, KfW held, through GZBV, an equity stake of approximately 9.22% in Airbus SE. Together with the other investors' interests in GZBV, GZBV held a total equity stake of 10.93% in Airbus SE.

Eurogrid International CVBA/SCRL and Eurogrid GmbH

In July 2018, KfW was mandated by the Federal Government, 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. Eurogrid GmbH, incorporated in Berlin, Germany, is the 100% holding company of the German transmission system operator 50Hertz Transmission GmbH.

CureVac N.V.

In June 2020, KfW was mandated by the Federal Government 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 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 Dutch public company 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.

CAPITALIZATION

CAPITALIZATION OF KFW GROUP AS OF DECEMBER 31, 2020

	(EUR in millions)
Borrowings	
Short-term funds	43,988
Bonds and other fixed-income securities	383,975
Other borrowings (1)	68,394
Total borrowings	496,357
Equity	
Paid-in subscribed capital (2)	3,300
Capital reserve	8,447
Reserve from the ERP Special Fund	1,191
Retained earnings	19,411
Fund for general banking risks	600
Revaluation reserve	-1,151
Total equity	31,797
Total capitalization	**528,154**

(1) Includes long-term and short-term borrowings from the ERP Special Fund of EUR 216 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 2020, of which EUR 3,300 million has been paid in pro rata by the Federal Republic and the Länder.

MANAGEMENT AND EMPLOYEES

The bodies of KfW are the Executive Board (*Vorstand*) and the Board of Supervisory Directors (*Verwaltungsrat*).

Executive Board

The Executive Board is responsible for the day-to-day conduct of KfW's business and the administration of its assets. Typically, members of the Executive Board are initially appointed for a maximum of three years by the Board of Supervisory Directors. After the first term each member may be repeatedly reappointed for, or his or her term of office may be repeatedly extended by, up to five years by the Board of Supervisory Directors. Each member of the Executive Board is responsible for certain aspects of KfW's activities but shares 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 May 17, 2021, 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 66 to the financial statements included in Exhibit (e) to this annual report.

Dr Günther Bräunig

Age: 65

Dr Günther Bräunig became a member of KfW's Executive Board in October 2006. Dr Bräunig was appointed as Chief Executive Officer with effect as of January 1, 2018. Dr Bräunig's tenure will end in June 2021. He is in charge of the General Secretariat, Internal Auditing, and Group Development and Economics as well as Promotion of Developing Countries and Emerging Economies (KfW Entwicklungsbank) and Legal Affairs. He also acts as KfW Group's Chief Sustainability Officer.

Dr Bräunig joined KfW Group in September 1989 to head the International Capital Markets department. He subsequently held management positions in the Credit Affairs department and the Management Affairs department. In 1996, he became Senior Vice President and Head of Management Affairs. In May 2000, he was appointed Executive Vice President of KfW. In September 2017, he was named Deputy CEO of KfW. Between August 2007 and October 2008, he served as Chief Executive Officer of IKB Deutsche Industriebank AG, Düsseldorf, Germany, while this bank was bailed out and subsequently sold by KfW, which at that time was IKB's major shareholder. During the period of the latter appointment, Dr Bräunig temporarily ceased to perform his functions as a member of the Executive Board of KfW.

Dr Bräunig studied law at the Universities of Mainz, Germany, and Dijon, France, and obtained a doctorate in law at the University of Mainz, Germany. His professional career began in 1984 with COMMERZBANK Aktiengesellschaft, Frankfurt am Main, Germany, in the Investment Banking department. Between 1986 and 1989, he worked for Airbus Industrie S.A.S. as Sales Finance Director in Toulouse, France and Washington, D.C., USA.

Dr Bräunig serves as chairman of the supervisory board of pbb Deutsche Pfandbriefbank AG, Munich, Germany. In addition, he is a member of the supervisory boards of Deutsche Post AG, Bonn, Germany and of Deutsche Telekom AG, Bonn, Germany.

Dr Ingrid Hengster

Age: 60

Dr Ingrid Hengster became a member of KfW's Executive Board in April 2014. She is responsible for Domestic Promotional Business, Sales Digital Development, New Business Credit Service as well as Export and Project Finance (KfW IPEX-Bank), DEG and KfW Capital. Dr Hengster's tenure will end in March 2023.

Dr Hengster holds a Ph.D. in law from the University of Salzburg, Austria. Dr Hengster started her career as project manager at Oesterreichische Kontrollbank AG, Austria, in 1984. In 1986, she joined

COMMERZBANK Aktiengesellschaft, Frankfurt am Main, Germany, where she became Vice President in the privatization and project finance group. From 1995 to 1998, Dr Hengster served as Head of Acquisition Financing and Structured Financing in the German practice of UBS Deutschland AG. Subsequently, she worked as Managing Director of the investment banking arm of Credit Suisse First Boston. In 2005, she joined ABN AMRO Bank (Deutschland) AG as CEO and Country Executive & Head of Global Clients Germany and Austria. From 2008 to 2014, Dr Hengster was Country Executive Germany, Austria & Switzerland of The Royal Bank of Scotland and CEO of the management board of The Royal Bank of Scotland (Deutschland) AG.

Dr Hengster serves as chairwoman of the supervisory boards of KfW Capital, Frankfurt am Main, Germany and of KfW IPEX-Bank, Frankfurt am Main, Germany. In addition, Dr Hengster is a member of the supervisory boards of DEG-Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany, ThyssenKrupp AG, Essen, Germany, and Deutsche Bahn AG, Berlin, Germany.

Melanie Kehr

Age: 46

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. The tenure of Ms. Kehr on KfW's Executive Board will end in 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.

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

Bernd Loewen

Age: 55

Bernd Loewen joined KfW Group as a member of KfW's Executive Board in July 2009. He is in charge of Finance, Financial Markets. 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. Bernd Loewen's tenure will end in June 2024.

After graduating with a Business Administration degree from the University of Muenster, Germany, he started his professional career at an auditing firm where he also successfully 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, which involved relocating from New York to Warsaw, Poland.

Mr. Loewen is 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. The tenure of Dr Peiß will end in 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.

Dr Peiß is a member of the supervisory board of KfW IPEX-Bank, Frankfurt am Main, Germany and of KfW Capital, Frankfurt am Main, Germany.

Board of Supervisory Directors

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

The Federal Minister of Finance and the Federal Minister for Economic Affairs and Energy serve as Chairman and Deputy Chairman of the Board of Supervisory Directors on a year-by-year rotating basis, with the latter serving as Chairman for the year 2020. The term of office of all Federal Ministers on KfW's Board of Supervisory Directors corresponds to their term of office as Federal Minister, 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 May 17, 2021, the members of the Board of Supervisory Directors were:

Name	Position
Doris Ahnen	Minister of Finance of the State of Rhineland-Palatinate; appointed by the Bundesrat
Peter Altmaier	Federal Minister for Economic Affairs and Energy; Deputy Chair in 2021
Sören Bartol	Member of Parliament; appointed by the Bundestag
Dr André Berghegger	Member of Parliament; appointed by the Bundestag
Dr Holger Bingmann	President of the Federation of German Wholesale, Foreign Trade and Services (BGA) (retired); representative of the wholesale and foreign trade sector
Volker Bouffier	Minister President of the State of Hesse; appointed by the Bundesrat
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
Verena Göppert	Permanent Deputy of the Executive Director of the Association of German Cities; representative of the local municipalities
Olav Gutting	Member of Parliament; appointed by the Bundestag
Dr Louis Hagen	CEO of Muenchener Hypothekenbank eG; representative of the mortgage banks
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
Gerhard Hofmann	Member of the Board of Managing Directors of the National Association of German Cooperative Banks (BVR); representative of the cooperative banks

Dr Bruno Hollnagel	Member of Parliament; appointed by the Bundestag
Johannes Kahrs	Member of Parliament (retired); appointed by the Bundestag
Alois Karl	Member of Parliament; appointed by the Bundestag
Julia Klöckner	Federal Minister of Food and Agriculture
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
Heiko Maas	Federal Minister for Foreign Affairs
Dr Gerd Müller	Federal Minister for Economic Cooperation and Development
Rainer Neske	Chair of the Board of Managing Directors of Landesbank Baden-Wuerttemberg, representative of credit institutions prominent in the field of industrial credit
Dr Hans-Walter Peters	President of the Federal Association of German Banks (BdB); representative of the commercial banks
Joachim Rukwied	President of the German Farmers' Association (DBV); representative of the agricultural sector
Andreas Scheuer	Federal Minister of Transport and Digital Infrastructure
Helmut Schleweis	President of the German Savings Banks Association (DSGV); representative of the savings banks
Olaf Scholz	Federal Minister of Finance; Chair in 2021
Svenja Schulze	Federal Minister for the Environment, Nature Conservation and Nuclear Safety
Holger Schwannecke	Secretary General of the German Confederation of Skilled Crafts and Small Business (ZDH); representative of the skilled crafts sector
Edith Sitzmann	Minister of Finance of the State of Baden-Wuerttemberg; appointed by the Bundesrat
Peter Strobel	Minister of Finance and European Affairs of the State of Saarland; appointed by the Bundesrat
Heike Taubert	Deputy Minister President, Minister of Finance of the Free State of Thuringia; appointed by the Bundesrat
Michael Theurer	Member of Parliament; appointed by the Bundestag
Dr Martin Wansleben	Chief Executive of the Association of German Chambers of Commerce and Industry (DIHK); representative of the industry

For information concerning the remuneration of the Board of Supervisory Directors, see note 66 to the financial statements included in Exhibit (e) to this annual report.

Employees

In 2020, KfW Group employed an average of 7,382 persons (excluding members of the Executive Board and trainees, but including temporary personnel and local personnel in KfW's representative offices) (2019: 6,705 persons, excluding local personnel in KfW's representative offices). Approximately 30.9% of KfW's staff (excluding local personnel in KfW's representative offices) is covered by collective bargaining agreements. KfW provides employee benefits such as pensions to its employees.

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 65 to the financial statements included in Exhibit (e) to this annual report.

THE FEDERAL REPUBLIC OF GERMANY

The following information regarding the Federal Republic is derived from the public official documents cited below. Certain information is preliminary.

GENERAL

Area, Location and Population

The Federal Republic is situated in central Europe and comprises an area of approximately 358,000 square kilometers (about 138,000 square miles). Due to lower net immigration, higher mortality (partially due to the COVID-19 pandemic) and an expected slightly smaller number of births compared to 2019, the population is projected not to have grown in 2020 for the first time since 2011, amounting to 83.2 million people at the end of 2020. The projected stagnation is due to Germany's birth deficit (i.e., the negative difference between births and deaths), which is offset by the expected immigration surplus. Based on provisional results, the Federal Statistical Office estimates that net immigration amounted to between 180,000 and 240,000 persons in 2020. The migration surplus declined for the fifth consecutive year after the extremely strong inflow of foreigners in 2015. In 2020, travel restrictions imposed to mitigate the effects of the COVID-19 pandemic, in particular, are likely to have led to a decrease in migration. In 2019, 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 31.12.2019 (September 2020) (https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/02-bundeslaender.html); Statistisches Bundesamt, No population growth expected for 2020, press release of January 12, 2021 (https://www.destatis.de/EN/Press/2021/01/PE21_016_12411.html; German version: https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/01/PD21_016_12411.html); Statistisches Bundesamt, Städte (alle Gemeinden mit Stadtrecht) nach Fläche, Bevölkerung und Bevölkerungsdichte am 31.12.2019 (September 2020) (https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/05-staedte.html).

The following table shows selected key demographic figures for the Federal Republic for the years stated.

POPULATION

	2019	2018	2017 (1)	2016 (1)	2015
			(number of persons)		
Total population	83,166,711	83,019,213	82,792,351	82,521,653	82,175,684
Age distribution			(percent of total population)		
Under 20	18.4	18.4	18.4	18.4	18.3
20-40	24.6	24.6	24.6	24.5	24.5
40-60	28.4	28.8	29.1	29.4	29.8
60-80	21.7	21.7	21.7	21.6	21.6
80 and more	6.8	6.5	6.2	6.0	5.8
Growth rate			(percent change on the previous year)		
Total population	0.2	0.3	0.3	0.4	1.2
Under 20	0.2	0.3	0.2	1.0	2.2
20-40	0.1	0.5	0.7	0.6	2.6
40-60	-1.1	-0.8	-0.8	-0.9	-0.4
60-80	0.4	0.3	0.5	0.4	0.4
80 and more	5.4	4.6	4.2	4.5	4.1

(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.

Sources: Statistisches Bundesamt, Bevölkerung, Bevölkerungsstand, Bevölkerung nach Altersgruppen, Deutschland (https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsstand/Tabellen/liste-altersgruppen.html); Statistisches Bundesamt, Bevölkerung, Bevölkerungsstand, Bevölkerung nach Altersgruppen,Veränderungsraten zum Vorjahr in % (https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsstand/Tabellen/liste-altersgruppen.html).

Without the migration surplus, 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 increased aging of the population. According to the 14th coordinated population projection of the Federal Statistical Office covering the period until 2060, even a rising birth rate and sustained high net immigration can only slow down aging, but not prevent it. 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. 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: Statistisches Bundesamt, No population growth expected for 2020, press release of January 12, 2021 (https://www.destatis.de/EN/Press/2021/01/PE21_016_12411.html; German version: https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/01/PD21_016_12411.html); Statistisches 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); Statistisches Bundesamt, Bevökerungsvorausberechnung, 14. koordinierte Bevölkerungsvorausberechnung – Basis 2018 (https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsvorausberechnung/aktualisierung-bevoelkerungsvorausberechnung.html).

Government

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

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

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 24, 2017. The next general election is currently scheduled for 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. The Chancellor is elected by and is responsible to the Bundestag.

Political Parties

The political parties currently represented in the Bundestag are the Christian Democratic Union (CDU) and its Bavarian sister party, the Christian Social Union (CSU), the Social Democratic Party (SPD), the Alternative for Germany (AfD), the Free Democratic Party (FDP), the Left-Wing Party (Die Linke) and the Greens (Bündnis 90/Die Grünen).

Since 1949, the Federal Republic has been governed by eight Chancellors over 19 electoral periods. After prolonged negotiations, the most recent general election, held in September 2017, resulted in a coalition between the Christian Democrats (CDU/CSU) and the Social Democratic Party (SPD). On March 14, 2018, the Bundestag re-elected Dr. Angela Merkel (CDU) Chancellor for the fourth time. Dr. Merkel has been serving as Chancellor since 2005.

Sources: The Federal Returning Officer, Official final result of the 2017 Bundestag Election, press release of October 12, 2017 (https://www.bundeswahlleiter.de/en/info/presse/mitteilungen/bundestagswahl-2017/34_17_endgueltiges_ergebnis.html); Koalitionsvertrag zwischen CDU, CSU und SPD Ein neuer Aufbruch für Europa. Eine neue Dynamik für Deutschland. Ein neuer Zusammenhalt für unser Land, March 12, 2018 (https://www.bundeskanzlerin.de/Content/DE/_Anlagen/2018/03/2018-03-14-koalitionsvertrag.pdf?__blob=publicationFile&v=1); The Federal Chancellor, Angela Merkel re-elected Chancellor, news of March 14, 2018 (https://www.bundeskanzlerin.de/Content/EN/Artikel/2018/03_en/2018-03-14-wahl-im-bundestag_en.html); The Federal Returning Officer, Bundestag Election 20201, Election to the 20th German Bundestag on 26 September 2021 (https://www.bundeswahlleiter.de/en/bundestagswahlen/2021.html).

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

ELECTION RESULTS TO THE GERMAN BUNDESTAG

	2017 Elections		2013 Elections		2009 Elections		2005 Elections		2002 Elections	
	% of Votes	Seats	% of Votes	Seats	% of Votes	Seats	% of Votes	Seats	% of Votes	Seats
CDU/CSU	33.0	246	41.5	311	33.8	239	35.2	226	38.5	248
SPD	20.5	153	25.7	193	23.0	146	34.2	222	38.5	251
AfD	12.6	94	4.7	—	—	—	—	—	—	—
FDP	10.7	80	4.8	—	14.6	93	9.8	61	7.4	47
Die Linke. (1)	9.2	69	8.6	64	11.9	76	8.7	54	4.0	2
Bündnis 90/Die Grünen	8.9	67	8.4	63	10.7	68	8.1	51	8.6	55
Others	5.0	—	6.2	—	6.0	—	3.9	—	3.0	—
Total		**709**		**631**		**622**		**614**		**603**

(1) Results for the Party of Democratic Socialism (PDS) for all elections prior to 2005.

Sources: Der Bundeswahlleiter, Bundestagswahl 2017 (https://www.bundeswahlleiter.de/bundestagswahlen/2017/ergebnisse/bund-99.html), Statistisches Bundesamt, Statistisches Jahrbuch 2016, Tables 10.1.1 and 10.1.2; Statistisches Bundesamt, Statistisches Jahrbuch 2011, Tables 4.3.1, 4.3.2 and 4.6).

International Organizations

In addition to the European Union ("EU"), the Federal Republic is a member of various major multilateral institutions, including the United Nations, the International Monetary Fund ("IMF"), the International Bank for Reconstruction and Development and the International Development Association, the Council of Europe, the Organization for Economic Cooperation and Development and the 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, 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 a founding member 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 ("UK") 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"). See "—Political Integration" below for more information on the UK's decision to withdraw from the EU and the withdrawal process. According to provisional data, the aggregate population of the 27 EU Member States was approximately 447 million as of January 1, 2020. The composition of the EU is still evolving. Formal accession negotiations are currently being conducted with Montenegro and Serbia. Furthermore, while Turkey remains a candidate country and a key partner of the EU in many areas, its accession negotiations have effectively come to a standstill. In March 2020, it was decided to begin 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 a decision on accession negotiations can be taken.

Sources: European Union, The history of the European Union (http://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 Commission, Commission welcomes the green light to opening of accession talks with Albania and North Macedonia, press release of March 25, 2020 (https://ec.europa.eu/commission/presscorner/detail/en/IP_20_519).

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 new member countries and to introduce new areas of cooperation. Under the treaties, EU institutions can adopt legislation, which the EU Member States then implement.

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

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

On June 23, 2016, the citizens of the UK voted to leave the EU, and on March 29, 2017, the UK notified the European Council accordingly. After conclusion of the negotiations and ratification of the withdrawal agreement, the UK left the EU on January 31, 2020. A transition period was agreed between the EU and the UK, during which the UK still applied EU law and negotiations of the terms of the future cooperation between the UK and the EU were conducted, in each case until December 31, 2020. On December 24, 2020, the UK and the EU reached an agreement on future cooperation. On January 1, 2021, to minimize disruption, the Trade and Cooperation Agreement (the "Agreement") was provisionally enacted while it was pending approval by the European Parliament. Following the European Parliament's consent to the Agreement on April 27, 2021, and the Council's conclusion, the Agreement entered into force permanently on May 1, 2021.

Sources: European Council, Policies, Brexit (https://www.consilium.europa.eu/en/policies/eu-uk-after-referendum/); European Council, Policies, EU-UK negotiations on the future relationship (https://www.consilium.europa.eu/en/policies/eu-uk-negotiations-on-the-future-relationship/), European Parliament, Parliament formally approves EU-UK trade and cooperation agreement, press release of April 28, 2021 (https://www.europarl.europa.eu/news/en/press-room/20210423IPR02772/parliament-formally-approves-eu-uk-trade-and-cooperation-agreement).

Economic Integration

From its inception, the EU has had the fundamental objective, in line with its predecessors, of economic integration of its member states. Culminating 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 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 1,074.3 billion (at 2018 prices) in commitment appropriations. Together with the new temporary Next Generation EU recovery instrument (the "EU Recovery Instrument") of up to EUR 750 billion (at 2018 prices), 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 1.8 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 "— EU Response to the COVID-19 Pandemic." The 2021 EU budget, which was adopted by the Council and the European Parliament in December 2020, amounts to EUR 164 billion in commitment appropriations and EUR 166 billion in payment appropriations.

Sources: European Commission, Europe in 12 lessons by Pascal Fontaine (https://publications.europa.eu/en/publication-detail/-/publication/a5ba73c6-3c6a-11e8-b5fe-01aa75ed71a1); European Banking Authority, Topics, Passporting and supervision of branches (https://eba.europa.eu/regulation-and-policy/passporting-and-supervision-branches); European Council, Policies, EU budget (https://www.consilium.europa.eu/en/policies/the-eu-budget/); European Council, Policies, Long-term EU budget 2021-2027 and recovery package (https://www.consilium.europa.eu/en/policies/the-eu-budget/long-term-eu-budget-2021-2027/); European Commission, EU budget 2021: A kick-start of the European recovery, press release of December 18, 2020 (https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2489).

Trade The EU is responsible for trade matters with third-party countries. In the area of trade in goods, the EU has exclusive 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 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.

Sources: European Commission, Business, Economy, Euro, Trade with non-EU countries, EU trade policy-making (http://ec.europa.eu/trade/policy/policy-making); Federal Ministry for Economic Affairs and Energy, Topics, Trade Policy, European Trade Policy (http://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, EU treaties, Treaty on European Union – Maastricht Treaty (https://europa.eu/european-union/law/treaties_en); European Central Bank, Economic and Monetary Union (EMU) (http://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.

Stability and Growth Pact. To strengthen the monitoring and coordination of national fiscal and economic policies, the EU Member States established the Stability and Growth Pact ("SGP") in 1997. Every April, EU Member States are required to lay out their fiscal plans for the year based on economic governance rules set forth in the SGP. Euro Area Member States do this in documents known as "Stability Programs", while EU Member States whose currency is not the euro submit "Convergence Programs", which include additional information about monetary policies. In addition, to ensure the coordination of fiscal policies among Euro Area Member States, governments are required by European economic governance rules to submit their draft budgetary plans for the following year to the European Commission by October 15 of each year.

The preventive arm of the SGP binds EU Member States to their commitments towards sound fiscal policies and coordination by setting country-specific, medium-term budgetary targets. These budget deficit (or surplus) targets are defined in structural terms by taking into consideration business cycle swings and filtering out the effect of one-off and temporary measures. The corrective arm of the SGP consists of the excessive deficit procedure ("EDP"). The EDP ensures the correction of excessive budget deficits (defined as a deficit 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 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.

Upon proposal of the Commission this "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 crisis and provided them with the needed flexibility to take the measures necessary to support their health and civil protection systems and to protect the European economies. Preliminary analyses by the European Commission suggest that a continued application of the general escape clause would still be warranted in 2022. 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."

Sources: European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU economic governance (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, Commission presents updated approach to fiscal policy response to coronavirus pandemic, press release of March 3, 2021 (https://ec.europa.eu/commission/presscorner/detail/en/ip_21_884).

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 make preventive recommendations to the respective Member State at an early stage. In cases of a Member State with excessive macroeconomic imbalances, the corrective arm may open an excessive imbalance procedure, under which the Member State concerned will have to submit a corrective action plan and regular progress reports. The enforcement regime within the corrective arm comprises the option to decide upon financial sanctions, including fines of up to 0.1% of GDP, if a Euro Area Member State repeatedly does not comply with its obligations.

The 2021 surveillance cycle has been adjusted to coordinate it with the EU's response to the COVID-19 pandemic, in particular with the establishment and governance of the Recovery and Resilience Facility ("RRF") (see "— EU Response to the COVID-19 Pandemic" for more information on the RRF). The preparation of in-depth reviews in the context of the MIP has been postponed to mid-2021 and will be conducted only for the twelve EU Member States, including Germany, already identified as experiencing imbalances or excessive imbalances according to the findings of the previous in-depth reviews of February 2020. According to the 2020 in-depth review, Germany is experiencing macroeconomic imbalances. For more information, see "—The Economy—International Economic Relations—Germany's Current Account Surplus and the Macroeconomic Imbalance Procedure."

Sources: European Commission, Business, Economy, Euro, Economic and fiscal policy coordination, EU economic governance, Macroeconomic imbalance procedure, Dealing with macroeconomic imbalances (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/macroeconomic-imbalance-procedure/dealing-macroeconomic-imbalances_en); European Commission, European Semester 2021 – an exceptional cycle (https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/european-semester-timeline/european-semester-2021-exceptional-cycle_en#documents); European Commission, Alert Mechanism Report 2021, (https://ec.europa.eu/info/sites/info/files/economy-finance/alert_mechanism_report_2021.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 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 (http://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 (http://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 2020, the EFSF had outstanding loans to Ireland, Portugal and Greece of approximately EUR 172 billion backed by effective guarantees extended by the Euro Area Member States totaling EUR 724 billion. The Federal Republic has committed guarantees of approximately EUR 211 billion to the EFSF 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? (http://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/sites/default/files/20210406efsfesminvestorpresentation.pdf).

European Stability Mechanism. Since October 2012, the European Stability Mechanism ("ESM"), which was established as an intergovernmental organization under public international law by the Euro Area Member States, has been assisting in preserving the financial stability of the EMU. As of July 1, 2013, it assumed the tasks fulfilled by the EFSF and the EFSM and is currently the primary support mechanism for Euro Area Member States experiencing or threatened by severe financing problems, if such assistance is deemed essential to safeguard financial stability in the euro area as a whole. The ESM issues bonds or other debt instruments on the financial markets to raise capital to provide assistance to Euro Area Member States. Unlike the EFSF, which is based upon guarantees by Euro Area Member States, the ESM has total subscribed capital of EUR 705 billion provided by Euro Area Member States, which provides it with a lending capacity of EUR 500 billion. EUR 81 billion of the ESM's subscribed capital is in the form of paid-in capital with the balance of EUR 624 billion being callable capital. The contribution of each Euro Area Member State is based on the paid-in capital for the ECB. On this basis, the Federal Republic's contribution amounts to approximately 27% of the aggregate contributions to the ESM. The Federal Republic contributed approximately EUR 22 billion of paid-in capital to the ESM.

Financial assistance from the ESM is activated upon a request from a Member State to the chairperson of the ESM's board of governors and is provided subject to 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 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 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 April 2021, 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? (http://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/assistance/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/sites/default/files/20210406efsfesminvestorpresentation.pdf).

On 27 January and 8 February 2021, the Euro Area Member States signed an agreement amending the ESM Treaty. 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 Banking Union, which will help to protect financial stability (see "— European System of Financial Supervision and European Banking Union" for more information on the Banking Union and the SRF). According to the decision of the Eurogroup in November 2020, the backstop will be introduced in the beginning of 2022. The maximum amount of ESM loans to the SRF is set at EUR 68 billion. 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 from 2022 onwards, 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. In addition, the application process for ESM precautionary credit lines will become easier, and the instruments are expected to be more effective. Specifically, if a Euro Area Member State meets certain quantitative benchmarks and complies with qualitative conditions related to EU surveillance, it is eligible to request a precautionary credit line without the need to sign a memorandum of understanding. The reformed ESM Treaty will come into force once it has been ratified by the parliaments of all Euro Area Member States, which is currently expected to occur in 2022.

For information on the role of the ESM in connection with the EU's response to the COVID-19 pandemic, see "— 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); Eurogroup, Statement of the Eurogroup in inclusive format on the ESM reform and the early introduction of the backstop to the Single Resolution Fund, press release of November 30, 2020 (https://www.consilium.europa.eu/en/press/press-releases/2020/11/30/statement-of-the-eurogroup-in-inclusive-format-on-the-esm-reform-and-the-early-introduction-of-the-backstop-to-the-single-resolution-fund/?utm_source=dsms-auto&utm_medium=email&utm_campaign=Statement+of+the+Eurogroup+in+inclusive+format+on+the+ESM+reform+and+the+early

+introduction+of+the+backstop+to+the+Single+Resolution+Fund); European Union, Economic and Financial Committee, Collective Action Clauses in the Euro area, "Single-limb" CAC (the "2022 CAC"), accessed on May 14, 2021 (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), accessed on May 14, 2021 (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."

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, the European Commission adopted in March 2020 a temporary framework for state aid measures to support the economy in connection with the COVID-19 pandemic (the "Temporary Framework"), allowing EU Member States to provide certain types of direct support to companies and small enterprises significantly affected by the COVID-19 pandemic. 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), and additional flexibility to enable short-term export credit insurance to be provided by governments where needed. The aim of these measures is to ensure that businesses retain the means to keep operating, or to temporarily freeze activity without implicating long-term growth prospects. Currently, the Temporary Framework, which has been amended and extended several times, has been prolonged until December 31, 2021.

Safety Nets for Workers, Businesses and Sovereigns. On April 9, 2020, finance ministers of the Euro Area Member States, referred to as the "Eurogroup", decided on 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"), which was implemented by the Council of the EU in May 2020. SURE provides for financial assistance of up to EUR 100 billion in the form of loans from the EU, underpinned by a system of voluntary guarantees by EU Member States, to affected EU Member States. SURE seeks to address sudden increases in public expenditure for the preservation of employment, such as short-time work schemes and other similar measures put in place in response to the COVID-19 pandemic, in particular for self-employed persons. As of mid-March 2021, loans in a total amount of EUR 90.6 billion had been approved and loans in a total amount of EUR 62.5 billion had been disbursed under SURE. To finance SURE, the European Commission has been issuing social bonds since October 2020, with an aggregate amount of EUR 75.5 billion issued as of March 24, 2021. The European Investment Bank is offering the safety net for businesses by providing liquidity support to help hard-hit small and medium-sized enterprises throughout the EU with an emergency support package of up to EUR 200 billion in financing, 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.

European Recovery Plan. To help repair the economic and social damage caused by the COVID-19 pandemic, in December 2020, important legislative acts were adopted regarding a recovery plan 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 in an amount of up to EUR 750 billion (at 2018 prices), also referred to as Next Generation EU, together are designed to boost recovery in a total amount of approximately EUR 1.8 trillion. For additional information on the MFF, see also "— Economic Integration — EU Budget." The most important component of the European Recovery Plan is the RRF, with up to EUR 672.5 billion (at 2018 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 an initial payment 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. The balance of the funds under the European Recovery Instrument are being employed through existing EU instruments and assistance programs. To implement the EU Recovery Instrument, the EU's own resources decision (the "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, is required to be ratified by all EU Member States in accordance with their own constitutional requirements. Under the Own Resources Decision, the European Commission will be authorized, on an exceptional basis, to temporarily borrow up to EUR 750 billion (at 2018 prices) on the capital markets to address the consequences of the COVID-19 pandemic

EU Vaccination Strategy. The EU's vaccination strategy focuses on providing timely, equitable and affordable access to safe and efficient vaccines for all in the EU. For these purposes, the EU entered into advance purchase contracts with six vaccine manufacturers in the course of 2020 for the supply of up to 2.6 billion doses. For updated information on the EU's vaccination effort, the approval of vaccines for use in the EU and the proposed introduction of a digital green certificate to assist in restoring free movement throughout the EU expected to enter into force in June 2021, see " Recent Developments — Federal Republic of Germany — General Considerations Relating to the COVID-19 Pandemic."

Sources: EU #Coronavirus Response, presentation of March 2021 (https://ec.europa.eu/info/sites/info/files/2021_03_24_eu_response_to_covid_en.pdf); Eurogroup, Report on the comprehensive economic policy response to the COVID-19 pandemic, press release of April 9, 2020 (https://www.consilium.europa.eu/de/press/press-releases/2020/04/09/report-on-the-comprehensive-economic-policy-response-to-the-covid-19-pandemic/); European Commission, State Aid Cases – State Aid Actions, accessed on May 14, 2021 (https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic/state-aid-cases_en); European Commission, SURE, accessed on May 14, 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 May 14, 2021 (https://www.esm.europa.eu/content/europe-response-corona-crisis); European Commission, Recovery Plan for Europe, accessed on May 14, 2021 (https://ec.europa.eu/info/strategy/recovery-plan-europe_en); Council of the EU, Multiannual financial framework for 2021-2027 adopted, press release of December 17, 2020 (https://www.consilium.europa.eu/en/press/press-releases/2020/12/17/multiannual-financial-framework-for-2021-2027-adopted/); European Commission, Recovery and Resilience Facility, accessed on May 14, 2021 (https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en).

Statistical Standards

Statistical Standard for the National Accounts

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/imf-related-data/sdds-plus/sdds-plus-622326).

THE ECONOMY

Overview

Since 1945, the Federal Republic's economic system has developed into a social market economy, combining the free initiative of the individual with progressive social principles. The *Grundgesetz* guarantees freedom of private enterprise and private property, provided that these basic rights are not exercised against the public good. The state mainly has a regulatory function in the market economy, setting the general framework of conditions within which market processes take place.

Key Economic Figures

The German economy is one of the world's largest economies, with an annual GDP of EUR 3,332.23 billion in 2020. However, the COVID-19 pandemic has triggered a deep recession in 2020 that comes at the end of ten years of economic growth. Adjusted for price effects GDP in 2020 declined by 4.9% compared to 2019, but still exceeded the 1991 level by 38.5%. 1991 represents the first full year after German reunification on October 3, 1990. The growth in GDP since 1991 has been largely driven by productivity gains, as price-adjusted GDP per employee has risen by 20.2% since 1991. In calculating price-adjusted GDP, the Federal Statistical Office (*Statistisches Bundesamt*) uses a chain index based on the previous year's prices. In 2020, GDP per capita at current prices was EUR 40,072 while GDP per employee at current prices was EUR 74,410.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), 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 2020, services accounted for 70.3% 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 15.7% in 2020, compared to 16.1% in 1991, and "public services, education, health," accounting for 19.6% of gross value added in 2020, compared to 15.9% in 1991. The production sector (excluding construction) generated 22.9% of gross value added compared to 30.8% in 1991. Construction contributed 6.1% to gross value added in 2020, compared to 6.0% in 1991, and agriculture, forestry and fishing accounted for 0.7% of gross value added in 2020, compared to 1.2% in 1991.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 2.2.1.

In 2020, private final consumption expenditure totaled 51.3% of GDP in current prices, gross capital formation amounted to 20.4% and government final consumption expenditure equaled 22.5%. Exports and imports of goods and services accounted for 43.8% and 38.0% of GDP at current prices, respectively. The trade balance (according to national accounts) thus showed a surplus equal to 5.8% of GDP in 2020, which is the same as in the previous year (2019: 5.8% of GDP).

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 2.3.1.

The economic situation in Germany in 2020 was heavily affected by the COVID-19 pandemic. In connection with the measures to contain the COVID-19 pandemic, the second quarter of 2020 was characterized by a historical slump in economic output in almost all sectors, also due to parallel disruptions to supply chains in the international environment. Starting in the summer months and owing to lower infection rates, the economy started a strong recovery in the third quarter of 2020. However, this development was slowed down again in the last quarter of 2020 by a second wave of infections and a renewed lockdown, which severely restricted certain areas of the services sector. Overall, annual price-adjusted GDP in 2020 was 4.9% lower than in 2019. The GDP adjusted for both price and calendar effects declined by 5.3%. Economic output was negatively affected by all components of private demand, including household final consumption expenditure, which declined by a price-adjusted 6.1% year on year. Exports declined by 9.4%, while imports fell by 8.5%, all on a price-adjusted basis. The growth contribution of net exports was -0.9%. Gross fixed capital formation declined by 3.1%, in price-adjusted terms. Government final consumption expenditure, which increased by 3.3% on a price-adjusted basis, was the only stabilizing component of final demand.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 2.3.2; Statistisches Bundesamt, Bruttoinlandsprodukt 2020, Statement zur Pressekonferenz am 14. Januar 2021 (https://www.destatis.de/DE/Presse/Pressekonferenzen/2021/BIP2020/statement-bip.pdf?__blob=publicationFile).

The annual average rate of registered unemployment (as computed under the "national definition" of the Federal Employment Agency (*Bundesagentur für Arbeit*)) increased from 5.0% in 2019 to 5.9% in 2020. Based on the internationally comparable method of calculation promulgated by the International Labour Organization ("ILO"), which is referred to as the "ILO definition," the annual average unemployment rate rose from 3.0% in 2019 to 4.0% in 2020. For an explanation of the differences between the national definition and the ILO definition, see "—Employment and Labor." Inflation as measured by the percentage increase in the national consumer price index ("CPI") decreased to 0.5% in 2020, compared to 1.4% in 2019. Excluding energy prices, annual Inflation was at 1.1% in 2020. General government gross debt stood at EUR 2,325.5 billion at year-end 2020, compared to EUR 2,057.6 billion at year-end 2019.

Sources: Bundesagentur für Arbeit, Monatsbericht Februar 2021, Table 6.1 (https://www.arbeitsagentur.de/datei/arbeitsmarktbericht-februar-2021-_ba146877.pdf); Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 2.1.13; Statistisches Bundesamt, Fachserie 17, Reihe 7 (February 2021), Table 1.1 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

	2020	2019	2018	2017	2016
	(EUR in billions, unless otherwise indicated)				
GDP - at current prices	3,332.2	3,449.1	3,356.4	3,259.9	3,134.7
(change from previous year in %)	-3.4	2.8	3.0	4.0	3.6
GDP - price-adjusted, chain-linked index (2015=100), not adjusted for calendar effects	101.6	106.8	106.2	104.9	102.2
(change from previous year in %)	-4.9	0.6	1.3	2.6	2.2
GDP - price-adjusted, chain-linked index (2015=100), adjusted for calendar effects	101.4	107.0	106.4	105.0	102.0
(change from previous year in %)	-5.3	0.6	1.3	2.9	2.1
Unemployment rate (ILO definition) (in %) (1)	4.0	3.0	3.2	3.5	3.9
Rate of inflation (year-to-year change in consumer price index (CPI) in %)	0.5	1.4	1.8	1.5	0.5
Balance of payments - current account	231.9	258.6	264.2	254.9	266.7
General government gross debt (2)	2,325.5	2,057.6	2,074.1	2,122.9	2,172.3

(1) Unemployed persons, available and seeking work.

(2) Definition according to Maastricht Treaty.

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2—4. Vierteljahr 2020 (February 2021), 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 2021, Table XII.2; Deutsche Bundesbank, Time series BBK01.BJ9059: General government debt as defined in the Maastricht Treaty—Germany—overall (http://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, 2021, the Federal Government projects German price-adjusted GDP to rise by 3.5% in 2021, as the German economy recovers from the COVID-19 pandemic-induced recession in 2020. The recovery is expected to continue in 2022 with a real GDP growth rate of 3.6%. The Federal Government's projection assumes that social distancing measures can be gradually lifted over the course of the summer. Once the restrictions of public life have been lifted, domestic demand and private consumption expenditure are expected to start catching up. Private consumption expenditure in 2021 is forecast to increase by 0.8%, followed by strong growth of 5.5% in 2022. Manufacturing is expected to be a significant contributor to GDP growth in 2021, supported by strong external demand.

In line with the recovery of key international markets, German exports are forecast to rise by 9.2% in 2021 (2022: +4.5%). Due to subdued domestic demand in the first half of 2021, imports are expected to increase less strongly by 7.8% in 2021 (2022: +5.0%). Germany's current account surplus in relation to GDP is likely to increase slightly in 2021, before resuming its downward trend in 2022. Against the backdrop of significantly rising new orders, in particular from abroad, Germany's manufacturing sector is expected to expand its production capacities. The Federal Government thus forecasts capital formation in machinery and equipment to increase by 7.5% in 2021 (2022: +5.5%). Capital formation in construction is expected to be stimulated by the continuing low interest rate environment and to increase by 1.4% in 2021 (2022: +2.8%). General government consumption expenditure is expected to grow, in particular in the short term (2021: +5.2%, 2022: +0.3%).

The German labor market was negatively affected by the sudden slump in economic activity in 2020 but has nevertheless proven to be relatively resilient in the face of the recession, also due to the widely used instrument of short-time work (*Kurzarbeit*). The Federal Government anticipates the labor market to benefit from the economic recovery process in 2021 and 2022. However, although employment is expected to increase over the course of 2021, the annual average number of employed persons in 2021 is still forecast to decline by around 60,000 persons compared to 2020. According to the Federal Government's forecast, the recovery of the labor market will become visible in 2022, with an increase of 290,000 employed persons compared to 2021. Simultaneously, the number of short-time workers is projected to decline significantly from an average of 2.8 million in 2020 to an average of 1.7 million in 2021. For 2022, the Federal Government projects hardly any need for short-time work, if at all. The German unemployment rate (national definition) is expected to decrease to an annual average of 5.7% in 2021 and 5.3% in 2022.

Source: Bundesministerium für Wirtschaft und Energie, Altmaier: „Rechnen mit Wirtschaftswachstum von 3,5% in 2021 und 3,6% in 2022", press release of April 27, 2021 (https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/04/20210427-Altmaier-Rechnen-mit-Wirtschaftswachstum-von-3,5%25-2021-und-3,6%25-2022.html).

General Economic Policy

Dealing with the economic consequences of the COVID-19 pandemic was the central challenge for economic policy in 2020. In the face of the drastic economic slump, the Federal Government provided its citizens and companies with rapid and targeted support of a historical scale. 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 2020 (*KfW Sonderprogramm 2020*). 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. Self-employed and micro-enterprises have received support of EUR 13.6 billion (based on applications submitted by May 31, 2020) as part of the immediate emergency support extended in the first half of 2020. The emergency support, which was limited to three months, was followed by the bridging support to provide further targeted assistance to companies and self-employed persons particularly affected by the COVID-19 pandemic. In November and December 2020, special support was provided to businesses affected by the containment measures imposed for those months. Further measures adopted by the Federal Government to support companies' liquidity and increase their resilience include an expansion of the tax loss carryback, 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 for jobseekers in order to compensate for these losses. Self-employed persons can also benefit from these measures, provided that their livelihood is not otherwise secured, e.g., through rental income. Furthermore, in order to cushion losses for employees and prevent a massive rise in unemployment, the Federal Government has facilitated the access to short-time work compensation (*Kurzarbeitergeld*), extended its duration until the end of 2021 and opened up the instrument to temporary employees.

With the end of the first wave of the COVID-19 pandemic in the spring of 2020, the Federal Government adopted targeted measures to support the subsequent economic recovery in June 2020, which took the form of an economic stimulus package with a total budget of approximately EUR 180 billion for 2020 and 2021, including approximately EUR 40 billion in 2021 for the COVID-19 pandemic-related assistance to businesses. The top priorities of the stimulus package are to safeguard jobs and stabilize the economy. To this end, the Federal Government employed various instruments to support the financial situation of businesses and to strengthen the disposable income of private households. Measures to support private households in particular included a temporary reduction in the value-added tax ("VAT") rate, which was limited until the end of 2020, payment of a one-off child bonus of EUR 300 and an increase of the tax relief amount for single parents. In addition, the stimulus package also includes 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.

Recognizing climate protection as a fundamental global challenge, at the latest World Climate Conference in Paris in 2015, 197 states 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. To this end, the Federal Government has adopted a climate protection program for the period until 2030. The program provides for measures in all sectors and consists of four elements: a more comprehensive pricing of 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. Moreover, the Federal Government instructed a commission on "growth, structural change and employment" with representatives from various stakeholders to prepare recommendations for a phase-out of all coal-based power generation. At the beginning of 2019, the commission submitted its report, which suggests 2038 as the relevant end date for the phase-out and includes proposals for the structural development of coal regions. 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.

A modern digital infrastructure is of central importance for a successful and innovative economy. With the package for the future, the Federal Government therefore aims to drive forward improvements to the digital infrastructure, especially in rural areas, by providing additional funding for broadband expansion, mobile communications on rail networks and a high-performance mobile communications network in unserved areas. In this context, the Federal Government is building on its recent policy to achieve nationwide mobile communications coverage and coverage with a gigabit-capable fixed network by 2025. The Federal Government is also promoting the digitization of public administration and private businesses as part of the package for the future. To this end, the Federal Government intends to introduce improved depreciation options for digital assets. Support for future technologies such as artificial intelligence and quantum computing as well as for new communications technologies such as 5G/6G will also be expanded.

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

Sources: Bundesministerium für Wirtschaft und Energie, Jahreswirtschaftsbericht 2021 (https://www.bmwi.de/Redaktion/DE/Publikationen/Wirtschaft/jahreswirtschaftsbericht-2021.pdf?__blob=publicationFile&v=12); Die Bundesregierung, Bund-/Länder-Einigung zum Kohleausstieg, press release of January 16, 2020 (https://www.bundesregierung.de/breg-de/aktuelles/bund-laender-einigung-zum-kohleausstieg-1712774); Climate Action Plan 2050, Executive Summary (https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/klimaschutzplan_2050_kurzf_en_bf.pdf); Bundesministerium für Wirtschaft und Energie, Nationales Reformprogramm 2020 (https://www.bmwi.de/Redaktion/DE/Publikationen/Europa/nationales-reformprogramm-2020.pdf?__blob=publicationFile&v=12).

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

	2020	2019	2018	2017	2016	2020	2019	2018	2017
			(EUR in billions)				(change in %)		
Domestic uses	3,138.3	3,249.1	3,150.0	3,031.8	2,903.5	-3.4	3.1	3.9	4.4
Final private consumption	1,709.3	1,806.9	1,755.4	1,704.1	1,653.7	-5.4	2.9	3.0	3.0
Final government consumption	750.8	704.5	670.3	648.2	623.9	6.6	5.1	3.4	3.9
Gross fixed capital formation	735.5	748.0	709.3	666.0	636.3	-1.7	5.5	6.5	4.7
Machinery and equipment	213.9	240.1	235.6	224.5	214.1	-10.9	1.9	5.0	4.8
Construction	387.0	373.7	344.9	321.0	307.9	3.6	8.4	7.4	4.3
Other products	134.6	134.2	128.8	120.5	114.3	0.4	4.2	6.9	5.4
Changes in inventories (1)	-57.4	-10.3	15.0	13.6	-10.4	—	—	—	—
Net exports (1)	194.0	199.9	206.4	228.1	231.2	—	—	—	—
Exports	1,460.1	1,617.4	1,590.0	1,538.8	1,444.3	-9.7	1.7	3.3	6.5
Imports	1,266.1	1,417.4	1,383.6	1,310.7	1,213.0	-10.7	2.4	5.6	8.1
Gross domestic product	**3,332.2**	**3,449.1**	**3,356.4**	**3,259.9**	**3,134.7**	**-3.4**	**2.8**	**3.0**	**4.0**

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

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2020 (February 2021), Tables 3.1 and 3.9.

STRUCTURE OF GDP — ORIGIN

	2020	2019	2018	2017	2016	2020	2019	2018	2017
			(EUR in billions)				(change in %)		
Gross value added of all economic sectors	3,013.9	3,106.2	3,024.4	2,936.7	2,822.4	-3.0	2.7	3.0	4.0
Agriculture, forestry and fishing	22.1	24.9	22.3	26.9	21.9	-11.3	11.6	-17.2	23.0
Production sector (excluding construction)	690.3	754.2	770.5	758.7	731.7	-8.5	-2.1	1.6	3.7
Construction	182.5	166.8	148.3	138.1	132.5	9.4	12.4	7.4	4.2
Trade, transport, accommodation and food services	473.9	500.8	483.0	468.0	447.2	-5.4	3.7	3.2	4.6
Information and communication	155.4	153.2	145.5	135.4	129.8	1.4	5.3	7.5	4.3
Financial and insurance services	116.9	116.9	115.8	117.9	118.1	0.0	1.0	-1.8	-0.2
Real estate activities	334.4	327.2	317.8	310.9	305.7	2.2	3.0	2.2	1.7
Business services	337.6	361.3	351.7	336.9	316.9	-6.6	2.7	4.4	6.3
Public services, education, health	591.7	581.6	554.3	532.3	510.2	1.7	4.9	4.1	4.3
Other services	109.2	119.2	115.2	111.5	108.4	-8.4	3.4	3.4	2.9
Taxes on products offset against subsidies on products	318.3	342.9	332.0	323.2	312.3	-7.2	3.3	2.7	3.5
Gross domestic product	**3,332.2**	**3,449.1**	**3,356.4**	**3,259.9**	**3,134.7**	**-3.4**	**2.8**	**3.0**	**4.0**

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2020 (February 2021), 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 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 2020, the production sector's aggregate contribution to gross value added at current prices was 22.9% (excluding construction) and 29.0% (including construction), respectively. Its price-adjusted gross value added (excluding construction) decreased by 9.7% year-on-year in 2020.

Sources: Volkswirtschaftliche Gesamtrechnungen der Länder, Reihe 1, Länderergebnisse Band 1 (February 2021), Table 2.3; Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Tables 2.2.1 and 2.2.2. and 3.2.1.

OUTPUT IN THE PRODUCTION SECTOR (1)

	2020	2019	2018	2017
Production sector, total	**93.9**	**102.5**	**105.8**	**104.9**
Industry (2)	90.8	101.7	105.9	104.8
of which:				
Intermediate goods (3)	94.9	101.8	105.5	104.9
Capital goods (4)	85.4	101.4	106.0	105.0
Durable goods (5)	97.8	106.2	106.1	106.9
Nondurable goods (6)	96.4	101.0	106.9	103.0
Energy (7)	84.0	90.4	97.4	98.9
Construction (8)	116.5	112.7	108.9	108.7

(1) Adjusted for working-day variations.

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

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

(4) Including manufacture of motor vehicles and components.

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

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

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

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

Source: Deutsche Bundesbank, Monatsbericht März 2021, Table XI.2.

Services Sector

As in most other industrialized countries, the services sector, which comprises "trade, transport, accommodation and food services," "information and communication," "financial and insurance services," "real estate activities," "business services," "public services, education, health" as well as "other services," has expanded rapidly in recent years and is currently the largest contributor to gross value added. In 2020, the services sector's aggregate contribution to gross value added at current prices was 70.3%, 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 19.6% in 2020 after 18.7% in 2019.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Tables 2.2.1. and 3.2.1.

Employment and Labor

As economic output declined substantially in 2020, labor market conditions deteriorated. In 2020, the average unemployment rate according to the national definition was 5.9%, compared to 5.0% in 2019. Under the ILO definition, the average unemployment rate was 4.0% in 2020 compared to 3.0% in 2019, when it was at the lowest level of unemployment since 1991. The number of persons resident in Germany who were either employed or self-employed in 2020 was 44.7 million, a decrease of 1.0% compared to 2019.

Sources: Bundesagentur für Arbeit, Monatsbericht Februar 2021, Table 6.1 (https://www.arbeitsagentur.de/datei/arbeitsmarktbericht-februar-2021-_ba146877.pdf); Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 2.1.13.

The following table presents data with respect to employment and unemployment for each of the years indicated. Persons who are participating in programs such as vocational training, job creation plans or early retirement, which are designed to reduce unemployment, are not included in the unemployment rates shown below, as they are not treated as unemployed.

EMPLOYMENT AND UNEMPLOYMENT

	2020	2019	2018	2017	2016
Employed (in thousands)–ILO definition	44,676	45,123	44,727	44,141	43,559
Unemployed (in thousands)–ILO definition (1)	1,846	1,374	1,468	1,621	1,774
Unemployment rate (in %)–ILO definition	4.0	3.0	3.2	3.5	3.9
Unemployed (in thousands)–national definition (2)	2,695	2,267	2,340	2,533	2,691
Unemployment rate (in %)–national definition (3)	5.9	5.0	5.2	5.7	6.1

(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 2020, Table 10.1; Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2020 (February 2021), Table 1.11.

The following table presents data with respect to the employment rate broken down by gender and age for 2019 and 2009.

EMPLOYMENT RATE – BREAKDOWN BY GENDER AND AGE

	Total		Men		Women	
(Age in years)	2019	2009	2019	2009	2019	2009
	(Employed persons as a percentage of total population of same gender and age)					
15 to 19	27.7	28.0	30.0	30.9	25.3	24.9
20 to 24	67.3	63.3	69.0	64.7	65.4	61.7
25 to 29	80.7	74.5	84.0	77.6	77.1	71.3
30 to 34	83.7	79.1	89.6	86.0	77.4	72.2
35 to 39	85.5	81.9	91.0	89.1	80.0	74.6
40 to 44	87.2	83.9	91.3	89.1	83.1	78.5
45 to 49	88.0	83.0	91.2	87.6	84.8	78.4
50 to 54	86.7	79.3	90.1	84.0	83.2	74.6
55 to 59	81.8	69.9	85.6	76.9	77.9	63.1
60 to 64	61.8	38.4	66.6	46.7	57.1	30.3
65 and older	7.8	3.9	10.7	5.7	5.5	2.6
Total (15 and older)	**60.0**	**54.4**	**65.1**	**60.6**	**55.0**	**48.4**

Source: Statistisches Bundesamt, Erwerbsbeteiligung, Erwerbstätige und Erwerbstätigenquote nach Geschlecht und Alter 2009 und 2019, Ergebnis des Mikrozensus (https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erwerbstaetigkeit/TabellenArbeitskraefteerhebung/ET_ETQ.html).

The following table presents data with respect to the structure of employment by economic sector for 2020 and 2010.

STRUCTURE OF EMPLOYMENT – ECONOMIC SECTORS

	2020	2010
	(Percent of total)	
Agriculture, forestry and fishing	1.3	1.6
Production sector (excluding construction)	18.2	18.8
of which: manufacturing	*16.9*	*17.4*
Construction	5.7	5.7
Trade, transport, accommodation and food services	22.4	23.1
Information and communication	3.1	2.8
Financial and insurance services	2.4	3.0
Real estate activities	1.1	1.1
Business services	13.5	12.7
Public services, education, health	25.6	24.2
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 – 2020 (March 2021), 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

	2020	2019	2018	2017	2016
Gross wages and salaries per employee in EUR	36,957	36,979	35,922	34,817	33,950
Change from previous year in %	-0.1	2.9	3.2	2.6	2.5
Unit labor costs per hour worked					
Index (2015=100)	113.0	108.5	105.1	102.3	101.1
Change from previous year in %	4.2	3.2	2.8	1.1	1.1

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2020 (February 2021), Tables 2.17 and 2.20.

About one-sixth of the German work force consists of members of unions. The German Trade Union Federation (*Deutscher Gewerkschaftsbund*) serves as an umbrella organization for eight such unions. In 2020, approximately 5.9 million persons were members of a union under the umbrella of the Deutscher Gewerkschaftsbund, which is considerably less compared to the 11.8 million members in 1991, the first full year after German reunification. One major reason contributing to the strong decline since 1991 is the significant fall in manufacturing employment in the eastern Länder after reunification.

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

Sources: Deutscher Gewerkschaftsbund, DGB-Mitgliederzahlen ab 2010 (http://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen/2010); Deutscher Gewerkschaftsbund, Mitgliederzahlen 1950-1993 (http://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen/1950-1993); European Trade Union Institute, National Industrial Relations, Countries, Germany, Trade Unions (http://www.worker-participation.eu/National-Industrial-Relations/Countries/Germany); Bundeszentrale für politische Bildung, Tarifautonomie (http://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 arrangements (*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 retirement 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 retirement 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 exempted from mandatory participation in the statutory retirement 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 retirement pension insurance system by decreasing payments from the statutory retirement 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 may opt out of the statutory system and choose private health insurance coverage, which, in case of opting-out, is obligatory as well. Contributions to the statutory health insurance system are based solely on the insured person's income situation and are independent of the insured person's gender, age and medical risk. By contrast, contributions towards private health insurance coverage are mainly calculated based on age, medical risk and the desired level of coverage.

In 2020, social security revenue, as shown in the national accounts, amounted to EUR 717.6 billion, and expenditure was EUR 751.3 billion. The social security budget thus incurred a deficit of EUR 33.7 billion in 2020, after a surplus of EUR 8.7 billion in 2019. The balance has deteriorated rapidly since the start of the COVID-19 pandemic, as paid social benefits rose markedly due to increases in unemployment benefits, the large-scale payment of short-time work compensation as well as higher payments for pensions and children's allowance.

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), 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 (http://www.bmg.bund.de/themen/krankenversicherung/finanzierung/gesundheitsfonds.html); Bundesministerium für Arbeit und Soziales, Pensions from age 67 (http://www.bmas.de/EN/Our-Topics/Pensions/pensions-from-age-67.html).

International Economic Relations

International economic relations are of major importance to the German economy. In 2020, exports and imports of goods and services amounted to 43.8% and 38.0% of GDP at current prices, respectively. The Federal Republic supports the EU in pursuing a liberal foreign trade policy aimed at dismantling tariffs and other barriers to trade. The responsibility for trade matters (particularly WTO and free trade agreements) in the EU rests with the European Commission. For further information on the EU's responsibility for trade matters, see "—General—The European Union and European Integration—Economic Integration."

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), 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. A recent 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 (http://www.bmwi.de/Redaktion/DE/Dossier/ceta.html); Bundesministerium für Wirtschaft und Energie, Europäisches Parlament stimmt CETA zu, press release of February 15, 2017 (http://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2017/20170215-europaeisches-parlament-stimmt-ceta-zu.html); European Commission, CETA explained (http://ec.europa.eu/trade/policy/in-focus/ceta/ceta-explained/); Bundesministerium für Wirtschaft und Energie, EU-Japan Free Trade Agreement (https://www.bmwi.de/Redaktion/EN/Artikel/Foreign-Trade/free-trade-agreement-japan.html).

Balance of Payments

The Federal Republic typically achieves a surplus in the trading of goods. Traditionally, this surplus has been partially offset by deficits in other fields, such as services and secondary income. In 2020, the current account surplus totaled EUR 231.9 billion, compared to EUR 258.6 billion in 2019, a decrease of EUR 26.7 billion. Thus, the current account surplus declined to 7.0% of nominal GDP in 2020, down from 7.5% in 2019. The COVID-19 pandemic resulted in lower balances in the trade in goods and in primary incomes, while the traditionally negative service balance turned slightly positive.

Source: Deutsche Bundesbank, Monatsbericht März 2021, Table XII.2.

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).

Over the course of 2016, the euro remained relatively stable at an average level of USD 1.1 per euro. In 2017 and 2018 the euro appreciated slightly, before falling back in 2019 by 5.2% compared to the 2018 average. In 2020, the euro appreciated against the U.S. dollar by 2.0% due to a comparatively larger decline in U.S. interest rates.

Source: Deutsche Bundesbank, Monatsbericht März 2021, Tables XII.3, XII.10 and XII.12.

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

BALANCE OF PAYMENTS (BALANCES)

	2020	2019	2018	2017	2016
			(EUR in millions)		
Current account					
Trade in goods (1)	189,361	216,523	224,584	255,077	252,409
Services (2)	1,631	-20,653	-17,410	-23,994	-20,987
Primary income	92,497	111,191	105,694	74,629	76,199
Secondary income	-51,582	-48,434	-48,713	-50,776	-40,931
Total current account	**231,907**	**258,627**	**264,156**	**254,936**	**266,689**
Capital account (3)	-4,771	-526	676	-2,936	2,142
Financial account					
Net German investment abroad (increase: +)	703,655	247,406	398,714	397,050	407,469
Net foreign investment in Germany (increase: +)	476,016	43,607	152,171	120,341	146,346
Net financial account (net lending: + / net borrowing: -)	**227,639**	**203,799**	**246,544**	**276,709**	**261,123**
Net errors and omissions (4)	503	-54,302	-18,288	24,710	-7,708

(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.

Source: Deutsche Bundesbank, Zahlungsbilanzstatistik, März 2021, Table I. Wichtige Posten der Zahlungsbilanz and Table IV. Kapitalbilanz 1. Übersicht a) Insgesamt (https://www.bundesbank.de/action/de/732090/bbksearch?tf=815054%3A501158.815054%3A810762.815054%3A814192).

Balance of Trade

The following tables show information relating to foreign trade of the Federal Republic for each of the years indicated.

TRADE IN GOODS (1)

	2020	2019	2018	2017	2016
			(EUR in millions)		
Exports of goods	1,190,403	1,304,690	1,292,933	1,256,858	1,179,166
Imports of goods	1,001,043	1,088,167	1,068,349	1,001,782	926,757
Trade balance	**189,361**	**216,523**	**224,584**	**255,077**	**252,409**

(1) Including supplementary trade items.

Source: Deutsche Bundesbank, Zahlungsbilanzstatistik, März 2021, Table I. Wichtige Posten der Zahlungsbilanz (https://www.bundesbank.de/action/de/732090/bbksearch?tf=815054%3A501158.815054%3A810762.815054%3A814192).

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 virtually all of its oil and a significant portion of its natural gas requirements as well as all enriched uranium needed for nuclear energy.

Sources: Statistisches Bundesamt, Fachserie 7, Reihe 1, Außenhandel - Zusammenfassende Übersichten für den Außenhandel, Dezember 2020 (March 2021), Tables 5.1 and 5.2; Bundesanstalt für Geowissenschaften und Rohstoffe, Deutschland – Rohstoffsituation 2019 (https://www.bgr.bund.de/DE/Themen/Min_rohstoffe/Downloads/rohsit-2019.pdf?__blob=publicationFile&v=5).

Germany's Current Account Surplus and the Macroeconomic Imbalance Procedure

Within the framework of the Macroeconomic Imbalance Procedure (MIP) established in 2011, on November 18, 2020, the European Commission published the Alert Mechanism Report 2021, 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. As a result of the COVID-19 pandemic, the current account surplus has narrowed slightly and government investment has accelerated, while private investment declined. 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-2021, also taking into account the identification of imbalances within the in-depth review of February 2020. According to the results of the February 2020 review, Germany continues to experience macroeconomic imbalances, related in particular to excess savings and weak private and public investment. The current account surplus remains at levels still considerably above 6%, which is the threshold of the MIP scoreboard. The adjustment of the current account surplus has been limited so far, but a gradual decline is set to continue while the surplus level remains elevated. 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 the competitiveness and the exporting strength of German companies are an important pillar of the entire European economy. The Federal Government is taking a comprehensive approach to strengthening both public and private sector investments and has already taken numerous measures to further boost investment dynamics. Furthermore, it should be noted that Germany's current account surplus may to a large extent be explained by temporary factors, e.g., the development of exchange rates and fluctuations in the price of oil, as well as by fundamentals, e.g., demographic change. These factors usually remain unaffected by economic and financial policy measures.

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 2021, dated November 18, 2020 (https://ec.europa.eu/info/sites/info/files/economy-finance/alert_mechanism_report_2021.pdf); European Commission, Commission Staff Working Document, Country Report Germany 2020, Including an In-Depth Review on the prevention and correction of macroeconomic imbalances (https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-germany_en.pdf); European Commission, Economic and Financial Affairs, EU Economic governance: monitoring, prevention, correction, Macroeconomic imbalance procedure (http://ec.europa.eu/economy_finance/economic_governance/macroeconomic_imbalance_procedure/mip_reports/index_en.htm); Bundesministerium für Wirtschaft und Energie, Nationales Reformprogramm 2020 (https://www.bmwi.de/Redaktion/DE/Publikationen/Europa/nationales-reformprogramm-2020.pdf?__blob=publicationFile&v=12); Bundesministerium der Finanzen, Monatsbericht des BMF März 2017, Analysen und Berichte, Der deutsche Leistungsbilanzsaldo – Entwicklung und wirtschaftspolitische Implikationen (http://www.bundesfinanzministerium.de/Monatsberichte/2017/03/Inhalte/Kapitel-3-Analysen/3-2-Der-deutsche-Leistungsbilanzsaldo.html).

COMPOSITION OF EXPORTED AND IMPORTED GOODS

	2020 (1)	
	Imports	Exports
	(Percent of total)	
Products of agriculture and hunting	2.9	0.7
Products of forestry	0.0	0.1
Fish and products of fishing	0.1	0.0

	2020 (1)	
	Imports	Exports
	(Percent of total)	
Coal and lignite	0.2	0.0
Crude petroleum and natural gas	4.3	0.7
Metal ores	0.8	0.0
Other mining and quarrying products	0.1	0.1
Food products	4.8	4.7
Beverages	0.6	0.4
Tobacco products	0.3	0.2
Textiles	1.6	0.9
Wearing apparel	3.1	1.7
Leather and related products	1.3	0.8
Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	0.7	0.6
Paper and paper products	1.3	1.5
Coke and refined petroleum products	1.4	0.8
Chemicals and chemical products	7.7	9.2
Basic pharmaceutical products and pharmaceutical preparations	6.2	7.3
Rubber and plastic products	2.9	3.7
Other non-metallic mineral products	1.0	1.2
Basic metals	5.1	4.5
Fabricated metal products, except machinery and equipment	2.7	3.3
Computer, electronic and optical products	11.1	9.1
Electrical equipment	6.5	7.1
Machinery and equipment not elsewhere classified	7.6	14.4
Motor vehicles, trailers and semi-trailers	10.7	15.5
Other transport equipment	2.9	3.7
Furniture	1.2	0.8
Energy	0.2	0.2
Other goods	10.4	6.7
Total	**100.0**	**100.0**

(1) Preliminary data.

Source: Statistisches Bundesamt, Fachserie 7, Reihe 1, Außenhandel – Zusammenfassende Übersichten für den Außenhandel, Dezember 2020 (March 2021), Tables 5.1 and 5.2; 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.

FOREIGN TRADE (SPECIAL TRADE) BY GROUPS OF COUNTRIES AND COUNTRIES (1)

	2020	2019	2018
		(EUR in millions)	
Exports to:			
Total	**1,205,140**	**1,328,152**	**1,317,440**
of which:			
United States	103,822	118,680	113,341
China (2)	95,874	95,984	93,004
France	91,054	106,564	105,359
The Netherlands	84,368	91,528	91,061
United Kingdom	66,897	79,166	82,164
Italy	60,576	67,887	69,813
Austria	59,944	66,076	65,027
Switzerland	56,283	56,345	54,021
New industrial countries and emerging markets of Asia (3)	50,525	54,164	54,995
Belgium/Luxembourg	48,706	52,006	50,389
Spain	37,514	44,218	44,184
Japan	17,371	20,662	20,436

	2020	2019	2018
		(EUR in millions)	
Imports from:			
Total	**1,025,374**	**1,104,141**	**1,088,720**
of which:			
China (2)	116,254	110,054	106,065
The Netherlands	88,455	97,816	97,709
United States	67,760	71,334	64,493
France	56,629	66,199	65,024
Italy	53,860	57,100	60,223
New industrial countries and emerging markets of Asia (3)	48,018	51,748	52,945
Switzerland	45,391	44,824	45,913
Austria	40,344	44,059	42,994
Belgium/Luxembourg	39,854	46,322	49,315
United Kingdom	34,727	38,397	37,025
Spain	31,359	33,126	32,399
Japan	21,264	23,904	23,710

(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 2021, Table XII.3.

Foreign Direct Investment

The following table presents data with respect to foreign direct investment stocks at year-end 2018.

FOREIGN DIRECT INVESTMENT STOCKS AT YEAR-END 2018

	Outward (1)	Inward (2)
	(EUR in billions)	
Total (3)	**1,276.9**	**540.3**
Selected countries and regions		
European Union	546.1	377.6
of which: European Monetary Union	*282.4*	*327.2*
of which: United Kingdom (4)	*137.7*	*32.7*
Switzerland	40.7	41.1
Russia	20.3	2.4
United States	361.4	55.0
Canada	18.2	1.9
Central America	24.8	5.7
South America	29.1	0.3
Asia	176.5	41.1
of which: China	*86.1*	*3.2*
of which: India	*17.1*	*0.4*
of which: Japan	*13.9*	*22.7*
Australia	20.1	2.6
Africa	10.8	0.9
Selected economic sectors of investment object		
Manufacturing	417.1	141.7
of which: Chemicals and chemical products	*90.3*	*11.6*
of which: pharmaceutical products	*26.3*	*19.0*
of which: Machinery and equipment	*42.7*	*24.0*
of which: Motor vehicles, trailers and semi-trailers	*101.6*	*2.0*
Electricity, gas, steam and air conditioning supply	39.1	19.5
Wholesale and retail trade; repair of motor vehicles and motor cycles	186.2	61.5
Information and communication	74.2	38.7

	Outward (1)	Inward (2)
	(EUR in billions)	
Financial and insurance activities	367.6	176.1
Real estate activities	39.0	32.5
Professional, scientific and technical activities	63.9	36.4

(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/resource/blob/804098/3df58593faa3be6cd9d8e8e99e29a6e6/mL/ii-bestandsangaben-ueber-direktinvestitionen-data.pdf).

MONETARY AND FINANCIAL SYSTEM

The ESCB and the Eurosystem

The ESCB comprises the ECB and the national central banks of all EU Member States, while the Eurosystem consists only of the ECB and the national central banks of the Euro Area Member States.

The Eurosystem is responsible for the single monetary policy for the euro area. Its decision-making bodies are the Governing Council and the Executive Board of the ECB. The national central banks of the EU Member States that are not part of the Eurosystem are represented in the General Council of the ECB, but have no voting right in the decision-making process, particularly with respect to 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 (http://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

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. The ESCB has employed a variety of non-standard policy instruments in response to the global economic and financial crisis and the European sovereign debt crisis. 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's 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 less than 2%. However, the ECB has clarified that, within this definition, it aims at an inflation rate of "below, but close to, 2% over the medium term". This goal 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 pillars: (1) analysis and assessment of short- to medium-term risks to price stability (economic analysis); and (2) assessment of medium- to long-term monetary developments (monetary analysis).

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

The following table shows price trends in Germany for the periods indicated.

PRICE TRENDS

	2020	2019	2018	2017	2016
	(change from previous year in %)				
Harmonized index of consumer prices (HICP) (1)	0.4	1.4	1.9	1.7	0.4
Consumer price index (CPI) (1)	0.5	1.4	1.8	1.5	0.5
Index of producer prices of industrial products sold on the domestic market (2)	-1.0	1.1	2.6	2.7	-1.6

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

(2) Excluding value-added tax.

Source: 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, Verbraucherpreisindizes, Verbraucherpreise, Jahresdurchschnitte, Veränderung zum Vorjahr (https://www.destatis.de/DE/Themen/Wirtschaft/Preise/Verbraucherpreisindex/Tabellen/Verbraucherpreise-12Kategorien.html); Deutsche Bundesbank, Monatsbericht Dezember 2020, Table XI.7; Deutsche Bundesbank, Monatsbericht Februar 2021, 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. 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				
	2020	2019	2018	2017	2016
	(EUR in millions)				
Gold	166,904	146,562	121,445	117,347	119,253
Foreign currency balances	30,066	32,039	31,796	31,215	34,993
Special drawing rights	14,014	14,642	14,378	13,987	14,938
Reserve position in the IMF	8,143	6,051	5,518	4,294	6,581
Total	**219,127**	**199,295**	**173,138**	**166,842**	**175,765**

(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 2021, Table XII.8.

The Federal Republic's foreign reserve assets are managed by the Deutsche Bundesbank. The Euro Area Member States have transferred foreign reserve assets to the ECB in an aggregate amount equivalent to approximately EUR 40.3 billion, consisting of foreign currency reserves and gold. The ECB manages the foreign reserve assets transferred to it. The foreign reserve assets not transferred to the ECB continue to be held and managed by the national central banks of the Euro Area Member States. In order to ensure consistency within the single monetary and foreign exchange policies of the EMU, the ECB monitors and coordinates market transactions conducted with those assets.

Sources: European Central Bank, Annual Report 1998, page 74 (http://www.ecb.int/pub/pdf/annrep/ar1998en.pdf); European Central Bank, Annual Accounts 2020, 2.1 Balance Sheet as at 31 December 2020 (https://www.ecb.europa.eu/pub/annual/annual-accounts/html/ecb.annualaccounts2020~0508aea2f9.en.html#toc14).

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

	2020	2019	2018	2017	2016
			(EUR in billions)		
Deutsche Bundesbank					
Assets	1,429.2	1,161.0	1,210.0	1,142.8	990.5
of which: clearing accounts within ESCB (1)	*1,136.0*	*895.2*	*966.2*	*906.9*	*754.3*
Liabilities (2)	781.3	671.2	770.5	668.5	592.7
Net position	647.9	489.8	439.5	474.3	397.7
Banks					
Loans to foreign banks	1,024.3	1,064.2	1,014.1	963.8	1,055.9
Loans to foreign non-banks	822.8	795.3	762.0	723.9	756.2
Loans from foreign banks	761.2	680.6	643.1	659.0	696.1
Loans from foreign non-banks	258.5	229.8	231.5	241.2	206.2

(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 2021, Tables IV.4 and XII.8.

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, Thirty-Ninth Issue—Freely Usable Currencies, Prepared by the Legal Department of the IMF, As updated as of April 30, 2019 (https://www.imf.org/external/pubs/ft/sd/index.asp?decision=11857-(98/130)); 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).

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

ANNUAL AVERAGE EXCHANGE RATES OF THE EURO (1)

	2020	2019	2018	2017	2016
U.S. dollars per euro	1.1422	1.1195	1.1810	1.1297	1.1069
Pound sterling per euro	0.88970	0.87777	0.88471	0.87667	0.81948
Japanese yen per euro	121.85	122.01	130.40	126.71	120.20
Swiss franc per euro	1.0705	1.1124	1.1550	1.1117	1.0902
Chinese yuan per euro	7.8747	7.7355	7.8081	7.6290	7.3522

(1) Calculated from daily values.

Source: Deutsche Bundesbank, Monatsbericht Februar 2021, Table XII.10.

Financial System

German Financial System

Overview. As of January 31, 2021, 1,495 monetary financial institutions in Germany reported an aggregate balance sheet total of EUR 9,209.8 billion to the Deutsche Bundesbank. According to the Deutsche Bundesbank's classification, these institutions included:

- 255 commercial banks, with an aggregate balance sheet total of EUR 3,909.8 billion;
- 373 savings banks, with an aggregate balance sheet total of EUR 1,467.6 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 836.1 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 1,435.6 billion;
- 815 credit cooperatives, with an aggregate balance sheet total of EUR 1,074.2 billion;
- 10 mortgage banks, with an aggregate balance sheet total of EUR 242.2 billion;
- 18 building and loan associations, with an aggregate balance sheet total of EUR 244.3 billion; and
- 141 subsidiaries and branches of foreign banks located in the Federal Republic with an aggregate balance sheet total of EUR 1,543.9 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 2021, 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.

The Deutsche Bundesbank is closely involved in the ongoing supervision of credit institutions by the BaFin and has been assigned a substantial number of the ongoing operational tasks in banking supervision. Furthermore, the German Federal Agency for Financial Market Stabilization (*Bundesanstalt für Finanzmarktstabilisierung*, or "FMSA") supervises two wind-up institutions, Erste Abwicklungsanstalt and

FMS Wertmanagement, as well as Portigon AG (the legal successor of former Landesbank WestLB which is in the process of being wound-up), all of which were founded under its auspices in order to stabilize the financial market (see "—Wind-up Institutions").

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

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 (http://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); BaFin, 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 (http://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 Single Supervisory Mechanism ("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.

For more information on the SRM, see "—European Financial System—European System of Financial Supervision and European Banking Union."

Sources: Deutsche Bundesbank, Glossary: Restructuring Act (https://www.bundesbank.de/dynamic/action/en/homepage/glossary/729724/glossary?firstLetter=R&contentId=653352#anchor-653352); European Commission: Bank recovery and resolution (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-supervision-and-risk-management/managing-risks-banks-and-financial-institutions/bank-recovery-and-resolution_en); Bundesministerium der Finanzen, Verordnung über die Erhebung der Beiträge zum Restrukturierungsfonds für Kreditinstitute (Restrukturierungsfonds-Verordnung—RStruktFV) (http://www.bundesfinanzministerium.de/Content/DE/Gesetzestexte/Gesetze_Verordnungen/2015-07-22-RStruktFV.html); Gesetz zur Neuordnung der Aufgaben der Bundesanstalt für Finanzmarktstabilisierung (FMSA-Neuordnungsgesetz—FMSANeuOG) (http://www.bundesfinanzministerium.de/Content/DE/Gesetzestexte/Gesetze_Verordnungen/2016-12-28-FMSANeuOG.html); Federal Agency for Financial Market Stabilisation: History (https://www.fmsa.de/en/history/); Bundesrepublik Deutschland – Finanzagentur GmbH, Financial Market Stabilisation, Financial Market Stabilisation Fund (FMS) (https://www.deutsche-finanzagentur.de/en/financialmarketstabilisation/);Federal Financial Supervisory Authority (BaFin): Recovery and resolution (https://www.bafin.de/EN/Aufsicht/BankenFinanzdienstleister/Massnahmen/SanierungAbwicklung/sanierung_abwicklung_node_en.html).

Wind-up Institutions. In the wake of the global financial crisis, two wind-up institutions (*Abwicklungsanstalten*) for troubled German banks were established. The first wind-up institution, Erste Abwicklungsanstalt, was established in December 2009 to liquidate a portfolio of EUR 77.5 billion assumed from WestLB. It assumed a second portfolio consisting of an asset portfolio worth EUR 72.3 billion and a trading portfolio with a market value of approximately EUR 52.1 billion following the restructuring of WestLB. As of September 30, 2020, the combined asset portfolios had been reduced to approximately EUR 27.3 billion.

The second wind-up institution, FMS Wertmanagement, assumed a portfolio of EUR 175.7 billion from Hypo Real Estate Group in October 2010 to support restructuring efforts. In December 2014, FMS Wertmanagement acquired DEPFA Bank plc ("DEPFA"), which, as of December 31, 2013, had consolidated total assets amounting to EUR 49.1 billion from Hypo Real Estate Holding AG. On February 15, 2021, FMS Wertmanagement announced that it is selling wholly-owned DEPFA to BAWAG P.S.K. AG. The parties agreed not to disclose the purchase price of the transaction, which is still subject to approval by regulatory and antitrust authorities. As of December 31, 2020, FMS Wertmanagement's portfolio had a nominal value of EUR 61.6 billion.

Sources: Erste Abwicklungsanstalt, Interim Report 30 September2020 (https://stage.aa1.de/en/wp-content/uploads/sites/2/2020/12/EAA_Interim-Report_30.09.2020.pdf); Erste Abwicklungsanstalt, Annual Report 2019 (https://www.aa1.de/en/wp-content/uploads/sites/2/2020/04/GB-2019_en.pdf); Erste Abwicklungsanstalt, Attachment to Press Release of 27 April 2020 – Fiscal year 2019 (https://www.aa1.de/en/wp-content/uploads/sites/2/2020/04/Attachment_PR_FiscalYear_2019_e.pdf); FMS Wertmanagement AöR, Geschäftsbericht 2020 (https://www.fms-wm.de/de/downloadcenter-de/investoren/berichte/210-geschaeftsbericht-2020-1); 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); 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 (http://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 (http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1490275422217&uri=CELEX:32012D0118).

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

One of the key elements of Europe's banking union, which was established in the wake of the European sovereign debt crisis, is the SSM composed of the ECB and the national supervisory authorities of participating EU Member States. The SSM's main aims are to contribute to the safety and soundness of credit institutions and the stability of the European financial system and to ensure consistent supervision. 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 Europe's 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 Single Resolution Fund ("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 approximately EUR 55 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 2020, the SRF had grown to approximately EUR 42 billion and its target size for 2023 is expected to be in the range of EUR 70 billion to EUR 75 billion. In 2020, the aggregate contribution of German banks amounted to 27% 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 European banking union. Since then, work on a technical level has been ongoing. In December 2018, the Euro Summit, the meeting format of EMU heads of state or government, created a high-level working group to work on a roadmap for beginning political negotiations on EDIS. Negotiations on a political level will start as soon as sufficient further progress has been made on the measures on risk reduction, as mentioned in the Roadmap, adopted by the Council on June 17, 2016. To date, 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 reforms. It aims to reduce excessive variability in the calculation of risk-weighted assets. These new Basel regulations, typically referred to as Basel III final or Basel IV, will enter into force gradually from January 1, 2023 onwards until full implementation in January 2028, given that their implementation was postponed by one year by the Basel Committee on March 27, 2020 due to the COVID-19 pandemic.

In May 2019, the Council adopted a package of revised rules aimed at reducing risks in the EU banking sector. Most new rules will start applying in mid-2021. The package comprised two regulations and two directives, relating to bank capital requirements (amendments to CRR (CRR II) and CRD (CRD V)) and the recovery and resolution of banks in difficulty (amendments to BRRD and the Single Resolution Mechanism Regulation (SRMR)) and implemented reforms agreed at the international level following the 2007-2008 financial 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 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, amendments to improve cooperation between competent authorities on matters related to the supervision of anti-money laundering activities are introduced.

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 and are to benefit from this relief measure until June 27, 2021. This measure was extended to smaller German banks by BaFin as well.

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 (http://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 (http://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 (http://europa.eu/rapid/press-release_IP-15-6397_en.htm); Single Resolution Board, Single Resolution Fund: What is the Single Resolution Fund? (https://srb.europa.eu/en/content/single-resolution-fund); 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); European Banking Authority, Implementing Basel III in Europe: CRD IV Package (http://www.eba.europa.eu/regulation-and-policy/implementing-basel-iii-europe); Bank for International Settlements, Basel Committee on Banking Supervision, Basel II: Finalising Post-Crisis Reforms (https://www.bis.org/bcbs/publ/d424.htm); European Commission, Communication from the Commission: Completing the banking union, first published on October 11, 2017 (https://ec.europa.eu/info/publications/171011-communication-banking-union_en); Council of the European Union, Banking Union, Amendments to the banking union rules (http://www.consilium.europa.eu/en/policies/banking-union/2016-amendments); European Council, Banking Union: Council adopts measures to reduce risk in the banking system (https://www.consilium.europa.eu/en/press/press-releases/2019/05/14/banking-union-council-adopts-measures-to-reduce-risk-in-the-banking-system/); European Council, Euro Summit, 14/12/2018 (https://www.consilium.europa.eu/en/meetings/euro-summit/2018/12/14/); Single Resolution Board, Single Resolution Fund, SRF grows to EUR 33 billion after latest round of transfers, press release of July 17, 2019 (https://srb.europa.eu/en/node/804); Single Resolution Board, Single Resolution Fund: Statistical Overview of the funds collected by the SRB (https://srb.europa.eu/sites/srbsite/files/additional_statistics.pdf); European Central Bank – Banking Supervision, ECB Banking Supervision provides temporary relief for capital requirements for market risk, press release of April 16, 2020 (https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200416~ecf270bca8.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); Bundesanstalt für Finanzdienstleistungsaufsicht, General Administrative Act regarding a decrease in the domestic countercyclical capital buffer rate of March 31, 2020, updated on April 23, 2020 (https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Aufsichtsrecht/Verfuegung/vf_200331_allgvfg_antizykl_kapitalpuffer_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 will mature 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 will serve as liquidity backstop until at least the end of 2021.

In addition, over the past years the ECB has sought to provide monetary stimulus to the economy through its asset purchase program (“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 October 2014 and December 2018. When net purchases ended in December 2018, the ECB continued to reinvest principal payments from maturing securities purchased under the APP. In September 2019, the ECB announced that net purchases would be restarted under the Governing Council of the ECB’s APP at a monthly pace of EUR 20 billion as from November 1, 2019, and were expected to continue for as long as necessary to reinforce the accommodative impact of the ECB’s policy rates. In February 2021, the Eurosystem’s holdings under the APP stood at EUR 2.95 trillion. Moreover, starting in March 2020, the ECB introduced a pandemic emergency asset purchasing program (“PEPP”), which was extended several times and currently has a total program volume of EUR 1,850 billion. As of February 2021, the ECB had purchased assets in an amount of EUR 870 billion. All asset categories eligible under the existing APP are also eligible under the PEPP. Moreover, the ECB buys securities in a flexible manner over time, across asset classes and jurisdictions. Also 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. The interest rate on the ECB's deposit facility has been negative since June 2014. 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.

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: Non-standard measures (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 (http://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 (http://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 (http://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).

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 markets. Equity and debt issues are generally underwritten and distributed through banking syndicates, which typically include commercial banks as well as certain regional and specialized institutions. The regulated securities markets in Berlin, Dusseldorf, Frankfurt am Main, Hamburg, Hanover, Munich and Stuttgart and the European Energy Exchange are recognized as regulated markets of the EU according to Article 56 of Directive 2014/65/EU on Markets in Financial Instruments and comply with globally accepted regulatory standards.

Based on total turnover on German securities exchanges, the Frankfurt Stock Exchange, operated by Deutsche Börse AG, is by far the most important stock exchange in the Federal Republic.

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 ("FTT") through "enhanced cooperation." As of January 2019, these EU Member States support the introduction of an FTT based on the French model, which primarily taxes transactions involving domestically issued shares. Revenues could be used to finance EU spending. The proposal is still subject to discussion.

Sources: BaFin, Federal Financial Supervisory Authority, 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); BaFin, Federal Financial Supervisory Authority, 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); BaFin, Federal Financial Supervisory Authority, 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).

PUBLIC FINANCE

Receipts and Expenditures

The Federal Government, each of the Länder governments and each of the municipalities (*Gemeinden*) have separate budgets. The federal budget is the largest single public budget.

The fiscal year of the Federal Republic is the calendar year. The annual federal budget is passed by an act of Parliament. On the basis of a proposal prepared by the Ministry of Finance, the Federal Government introduces the federal budget bill to the Parliament, generally in the summer of each year. The proposal has to pass through three Bundestag sessions, the budget committee of the Bundestag, and the 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 2020, public finances were under significant pressure due to the COVID-19 pandemic. Total consolidated general government revenue, as presented in the national accounts, amounted to EUR 1,563.0 billion in 2020, with tax revenue of EUR 773.4 billion and net social contributions of EUR 607.9 billion.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 3.4.3.2.

In 2020, VAT and the taxes on income and wealth, as presented in the national accounts, amounted to EUR 223.7 billion and EUR 426.9 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 – 2020 (March 2021), Table 3.4.3.16.

Consolidated general government expenditure in 2020, as presented in the national accounts, amounted to a total of EUR 1,702.6 billion. The most significant consolidated general government expenditures were monetary social benefits (EUR 593.1 billion), social benefits in kind (EUR 311.8 billion) and employee compensation (EUR 283.4 billion). Other significant consolidated general government expenditures included intermediate consumption (EUR 202.6 billion), gross capital formation (EUR 92.5 billion), subsidies (EUR 69.8 billion) and interest on public debt (EUR 21.8 billion).

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 – 2020 (March 2021), Table 3.4.3.2.

GENERAL GOVERNMENT ACCOUNTS (1)

	2020	2019	2018	2017	2016
			(EUR in billions)		
Federal Government, *Länder* governments and municipalities					
Revenue	998.0	1,044.5	1,011.4	964.6	930.6
of which: Taxes (2)	*773.4*	*827.1*	*801.2*	*767.0*	*732.2*
Expenditure	1,103.8	1,000.7	965.8	931.4	903.0
Balance	**-105.9**	**43.8**	**45.6**	**33.2**	**27.6**
Social security funds					
Revenue	717.6	690.0	661.9	637.0	607.5
Expenditure	751.3	681.3	645.9	625.8	598.8
Balance	**-33.7**	**8.7**	**16.0**	**11.2**	**8.7**
General government					
Revenue	1,563.0	1,610.6	1,553.8	1,485.2	1,426.7
Expenditure	1,702.6	1,558.1	1,492.2	1,440.8	1,390.4
Balance	**-139.6**	**52.5**	**61.6**	**44.4**	**36.4**

(1) Definition according to the national accounts.

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

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2020 (March 2021), Tables 3.4.3.2, 3.4.3.3 and 3.4.3.7.

FEDERAL GOVERNMENT ACCOUNTS (1)

	2020	2019	2018	2017	2016
			(EUR in billions)		
Revenue	421.6	457.2	442.3	422.7	406.4
of which: Taxes (2)	*360.4*	*396.1*	*385.6*	*373.0*	*354.1*
Expenditure	508.2	434.5	421.5	414.9	392.7
Balance	**-86.6**	**22.7**	**20.8**	**7.8**	**13.7**

(1) Definition according to the national accounts.

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

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2020 (March 2021), Table 3.4.3.4.

GENERAL GOVERNMENT EXPENDITURE: BREAKDOWN BY FUNCTIONS (1)

	2020	2019	2018	2017	2016
			(EUR in billions)		
General public services	202.1	195.2	189.8	185.4	181.2
Defense	37.5	36.7	35.4	33.4	30.6
Public order and safety	59.3	55.3	52.4	51.0	48.6
Economic affairs	155.5	114.9	112.9	103.7	100.1
Environmental protection	25.1	20.8	19.3	17.7	17.4
Housing and community amenities	18.0	15.0	13.8	12.0	11.7
Health	271.1	254.0	242.2	233.1	225.8
Recreation, culture and religion	39.6	36.0	35.6	33.6	31.9
Education	157.9	149.2	141.8	137.0	131.6
Social protection	736.5	680.9	649.0	633.8	611.5
Total expenditure	**1,702.6**	**1,558.1**	**1,492.2**	**1,440.8**	**1,390.4**

(1) Definition according to the national accounts.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2020 (March 2021), 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. In 2019, Germany's general government surplus amounted to 1.5% of GDP, which constituted the eighth annual surplus in a row. In 2020, however, the German general government budget balance turned negative due to the impact of the COVID-19 pandemic. The general government deficit in 2020 amounted to EUR 139.6 billion, or 4.2% of nominal GDP, which is above the EU's 3% reference value. The German general government gross debt-to-GDP ratio increased from 59.7% in 2019 to 69.8% in 2020, 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 consequences of the COVID-19 pandemic. On March 3, 2021, the European Commission presented an updated approach to its fiscal policy response to the COVID-19 pandemic, recommending to assess the application of the general escape clause based on quantitative criteria such as the level of economic activity compared to the pre-crisis level at the end of 2019, in particular. According to the European Commission, current preliminary

indications suggest a continued application of the general escape clause in 2022, see also "General — The European Union and European Integration — EU Economic Governance — Stability and Growth Pact." At the national level, the German constitutional balanced budget rule known as the "debt brake" (*Schuldenbremse*), which provides for a structural budget deficit of no more than 0.35% of GDP at the federal level and structurally balanced Länder budgets, has been suspended for the years 2020 and 2021, in order to enable the financing of the governmental measures taken in connection with the COVID-19 pandemic without violating the constitutional budgetary requirements that normally apply. With respect to the fiscal year 2022, the suspension of the "debt brake" is expected to be renewed, according to the Federal Government's preliminary budget plan (*Eckwertebeschluss*).

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2020 (February 2021), 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, Funktionsweise der Schuldenregel des Bundes (Schuldenbremse), January 27, 2021 (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finanzen/Schuldenbremse/kurzinfo-zur-schuldenbremse.pdf?__blob=publicationFile&v=3); European Commission, Commission presents undated approach to fiscal policy response to coronavirus pandemic, press release of March 3, 2021 (https://ec.europa.eu/commission/presscorner/detail/en/ip_21_884); Bundesministerium der Finanzen, Scholz: Mit guter Finanzpolitik wirksam gegen die Krise—Eckwerte für 2022, Finanzplan bis 2025 und Nachtragshaushalt 2021 beschlossen, press release of March 24, 2021 (https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2021/03/2021-03-24-bundeshaushalt-2022.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

	2020	2019	2018	2017	2016
			(% of GDP)		
General government deficit (-) / surplus (+)	-4.2	1.5	1.8	1.4	1.2
General government gross debt	69.8	59.7	61.8	65.1	69.3

Sources: Statistisches Bundesamt, Fachserie 18, Reihe 1.2 – 4. Vierteljahr 2020 (February 2021), 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 21, 2021, the Federal Government published the German Stability Program 2021, in accordance with the rules of the Stability and Growth Pact. The German Stability Program 2021 contains budgetary projections for the years 2021 to 2025 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 27, 2021, (ii) the results of the Working Party on Tax Revenue Estimates of November 12, 2020, as subsequently updated to take account of the Federal Government's annual projection, (iii) the draft supplementary budget for 2021 and (iv) the Federal Government's benchmark figures decision of March 24, 2021 on the federal budget for 2022 and the fiscal plan until 2025, which was prepared on the basis of, among other things, the above-mentioned documents and results.

The following table presents the Federal Government's projection for key fiscal indicators in the years 2021 to 2025 compared to the results for these key fiscal indicators in 2020, as set out in the German Stability Program 2021, which takes into account the countermeasures adopted by the Federal Government in response to the COVID-19 pandemic.

GENERAL GOVERNMENT BUDGETARY PROSPECTS (1)

	2025	2024	2023	2022	2021	2020
Revenue	47 ¾	47 ½	47	46 ¼	45 ¾	46.9
Total taxes	24	24	23 ½	23 ¼	22 ¾	23.5
Social contributions	19	19	18 ½	18 ¼	18	18.2
Property income	½	½	½	½	½	0.6
Other	4 ¼	4 ¼	4 ¼	4 ¼	4 ½	4.6
Expenditure (2)	47 ¾	48 ¼	48 ½	49 ½	54 ¾	51.1
Compensation of employees and intermediate consumption	13 ¾	14	14 ¼	14 ½	15 ¼	14.6
Social payments	26 ½	26 ½	26 ½	26 ¼	27	27.2
Interest expenditure	½	½	½	½	½	0.7
Subsidies	¾	¾	¾	1 ¼	3 ¾	2.1
Gross fixed capital formation	2 ¾	2 ¾	2 ¾	2 ¾	2 ¾	2.7
Capital transfers	1 ½	1 ½	1 ¾	1 ¾	2	1.4
Other	2	2	2 ¼	2 ½	3 ¼	2.5
General government deficit (-) / surplus (+)	**0**	**-½**	**-1 ½**	**-3**	**-9**	**-4.2**
Federal Government	0	-½	-1	-2 ¼	-6 ¾	-2.6
Länder governments	0	0	-¼	-¼	-¾	-0.5
Municipalities	-¼	-¼	-½	-½	-½	0.0
Social security funds	¼	¼	0	-¼	-1	-1.0
General government gross debt	**69 ¼**	**72**	**73 ¼**	**74**	**74 ½**	**69.8**

(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 2021, Tables 15 and 18 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/stabilitaetsprogramm-2021.pdf?__blob=publicationFile&v=6).

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%.

Capital income received by domestic taxpayers (all types of income from capital as well as private shareholders' net gains from sales of shares in corporations) is subject to a final uniform tax rate of 25% (*Abgeltungsteuer*), taking into consideration an allowance (*Sparerpauschbetrag*) of EUR 801 (EUR 1,602 for married couples).

In addition to the various types of income tax, a solidarity surcharge of 5.5% is imposed on the applicable income tax liability. From January 1, 2021, onwards, the additional tax burden resulting from the solidarity surcharge has been abolished for approximately 90% and reduced for approximately 6.5% of income taxpayers for the benefit of low and middle incomes.

Sources: Bundesministerium der Justiz und für Verbraucherschutz, Einkommensteuergesetz (http://www.gesetze-im-internet.de/estg/index.html); Bundesministerium der Justiz und für Verbraucherschutz, Solidaritätszuschlaggesetz 1995, § 4 Zuschlagssatz (http://www.gesetze-im-internet.de/solzg_1995/__4.html); Bundesministerium der Justiz und für Verbraucherschutz, Körperschaftsteuergesetz (http://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 (http://www.gesetze-im-internet.de/ustg_1980/index.html); Bundesministerium der Justiz und für Verbraucherschutz, Umsatzsteuergesetz, § 12 Steuersätze (http://www.gesetze-im-internet.de/ustg_1980/__12.html); Bundesministerium der Justiz und für Verbraucherschutz, Energiesteuergesetz (http://www.gesetze-im-internet.de/energiestg/); Bundesministerium der Justiz und für Verbraucherschutz, Tabaksteuergesetz (http://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 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 (http://www.gesetze-im-internet.de/stromstg/index.html); Bundesministerium der Justiz und für Verbraucherschutz, Stromsteuergesetz, § 3 Steuertarif (http://www.gesetze-im-internet.de/stromstg/__3.html); Bundesministerium der Finanzen, Issues, Climate Action (https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Priority-Issues/Climate-Action/2020-06-22-climate-action-is-a-priority.html).

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 402.6% in 2018 the average trade tax rate in 2019 amounted to 14.07%.

Sources: Bundesministerium der Justiz und für Verbraucherschutz, Gewerbesteuergesetz (http://www.gesetze-im-internet.de/gewstg/index.html); Bundesministerium der Finanzen, Die wichtigsten Steuern im internationalen Vergleich 2019 (https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/2020-07-30-die-wichtigsten-steuern-im-internationalen-vergleich-2019-ausgabe-2020.html).

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 and self-employed persons that are directly affected by the COVID-19 pandemic benefit from temporary tax relief aimed at improving their liquidity, such as extensions of tax liabilities, modifications of tax prepayments, tax loss carrybacks and waivers of tax enforcement measures. These measures relate in particular to income tax, corporate income tax and VAT.

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, Steuerliche Hilfen für Unternehmen und Beschäftigte (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Schlaglichter/Corona-Schutzschild/2020-03-19-steuerliche-Massnahmen.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).

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

TAXES (1)

	2020	2019	2018	2017	2016
	(EUR in billions)				
Current taxes	773.4	827.1	801.2	767.0	732.2
Taxes on production and imports	346.5	369.7	356.5	345.9	335.1
of which: VAT	*223.7*	*244.1*	*235.1*	*226.7*	*218.8*
Current taxes on income and wealth	426.9	457.4	444.7	421.2	397.1
of which: Wage tax	*254.1*	*260.2*	*247.9*	*234.4*	*223.6*
Assessed income tax	*57.6*	*61.8*	*58.9*	*57.8*	*52.0*
Non-assessed taxes on earnings	*29.7*	*30.5*	*31.0*	*29.8*	*26.6*
Corporate tax	*26.0*	*34.1*	*36.0*	*31.6*	*29.2*
Capital taxes	8.7	7.0	6.8	6.1	7.0
Tax revenue of general government	**782.0**	**834.1**	**808.0**	**773.1**	**739.2**
Taxes of domestic sectors to EU	4.8	5.1	5.0	5.1	5.2
Taxes	**786.9**	**839.2**	**813.1**	**778.2**	**744.4**

(1) Definition according to the national accounts.

Source: Statistisches Bundesamt, Fachserie 18, Reihe 1.4 - 2020 (March 2021), Table 3.4.3.16.

Government Participations

The Federal Republic and its various special funds held direct participations in 106 public and private enterprises as of December 31, 2019.

The following table shows information on the Federal Republic's significant direct participations (including those held through special funds) as of December 31, 2019.

PARTICIPATIONS OF THE FEDERAL REPUBLIC

Enterprises	Total nominal capital of enterprise	Participation of the Federal Republic
	(EUR in millions)	(%)
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 2020 (https://www.bundesfinanzministerium.de/Web/DE/Themen/Bundesvermoegen/Privatisierungs_und_Beteiligungspolitik/Beteiligungspolitik/Beteiligungsberichte/beteiligungsberichte.htmlmn).

Direct Debt of the Federal Government

As of December 31, 2020, the Federal Government's direct debt totaled EUR 1,271.4 billion, compared to EUR 1,078.3 billion as of December 31, 2019. 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 546.2 billion as of December 31, 2019. Of this amount, EUR 125.2 billion were outstanding in the form of export credit insurance, which is handled by Euler 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 93.3 billion of the aggregate amount were outstanding in the form of a guarantee for the European Financial Stability Facility.

Source: Bundesministerium der Finanzen, Finanzbericht 2021, Overview 3, page 300 (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finanzen/Wirtschafts_und_Finanzdaten/Finanzberichte/Finanzbericht-2021.html).

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, 2020 for capital subscriptions to various international financial organizations, see the table entitled "Tables and Supplementary Information—III. Liabilities to International Financial Organizations."

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

	Principal amount outstanding as of December 31, 2020 (EUR in millions)
Federal Bonds (*Bundesanleihen*)	938,500
Federal Notes (*Bundesobligationen*)	210,500
Federal Treasury Notes (*Bundesschatzanweisungen*)	107,500
Treasury Discount Paper (*Unverzinsliche Schatzanweisungen*)	113,500
Inflation-linked Securities (*inflationsindexierte Bundeswertpapiere*)	62,200
Green Federal Bonds (*Grüne Bundesanleihen*)	6,500
Green Five-year Federal Notes (*Grüne Bundesobligationen*)	5,000
Borrowers' note loans (*Schuldscheindarlehen*)	6,202
Old debt (1)	4,474
Repurchased debt	182,982
Total (2)	**1,271,394**

(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 2021, 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 2021, Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2020", page 99, and table "Entwicklung von Umlaufvolumen und Eigenbestände an Bundeswertpapieren im Dezember 2020", page 102 (https://www.bundesfinanzministerium.de/Monatsberichte/2021/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen.html).

DEBT TABLES

1. FEDERAL BONDS (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (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	6.5	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	5.5	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	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

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (EUR in millions)
2.5% Bonds of the Federal Republic of 2010	2.5	2010	2021	19,000
3.25% Bonds of the Federal Republic of 2011	3.25	2011	2021	19,000
2.25% Bonds of the Federal Republic of 2011	2.25	2011	2021	16,000
2% Bonds of the Federal Republic of 2011	2	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	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
1.5% Bonds of the Federal Republic of 2014	1.50	2014	2024	22,500
1% Bonds of the Federal Republic of 2014	1	2014	2024	22,500
0.5% Bonds of the Federal Republic of 2015	0.5	2015	2025	27,500
1% Bonds of the Federal Republic of 2015	1	2015	2025	27,500
0.5% Bonds of the Federal Republic of 2016	0.5	2016	2026	30,500
0% Bonds of the Federal Republic of 2016	0	2016	2026	29,500
0.25% Bonds of the Federal Republic of 2017	0.25	2017	2027	30,500
0.5% Bonds of the Federal Republic of 2017	0.5	2017	2027	29,500
1.25% Bonds of the Federal Republic of 2017	1.25	2017	2048	25,500
0.5% Bonds of the Federal Republic of 2018	0.5	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	17,500
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

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (EUR in millions)
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
Total Federal Bonds				**938,500**

(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, 2020 (EUR in millions)
0.00% Green Bonds of the Federal Republic of 2020	0.00	2020	2030	6,500
Total Green Federal Bonds				**6,500**

(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.

3. Inflation-Linked Securities (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (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	19,100
0.10% Inflation-linked Bonds of the Federal Republic of 2015	0.10	2015	2026	16,800
0.10% Inflation-linked Bonds of the Federal Republic of 2015	0.10	2015	2046	9,800
Total Inflation-linked Securities				**62,200**

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

4. Federal Notes (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (EUR in millions)
0.00% Bonds of 2016-Series 173	0.00	2016	2021	21,000
0.00% Bonds of 2016-Series 174	0.00	2016	2021	21,500
0.00% Bonds of 2017-Series 175	0.00	2017	2022	20,500

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (EUR in millions)
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
Total Federal Notes				**210,500**

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

5. Green Federal Notes (1)

Title	Interest rate (% per annum)	Year of issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (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, 2020 (EUR in millions)
0.00% Notes of 2019	0.00	2019	2021	13,000
0.00% Notes of 2019 (II)	0.00	2019	2021	14,000
0.00% Notes of 2019 (III)	0.00	2019	2021	13,000
0.00% Notes of 2019 (IV)	0.00	2019	2021	15,500
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	8,000
Total Federal Treasury Notes				**107,000**

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

7. Treasury Discount Paper (1)

	Interest Rate(2) (% per annum)	Year of Issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (EUR in millions)
Treasury Discount Paper	-0.72 to -0.53	2020	2021	113,500

8. Borrowers' Note Loans (3)

	Interest Rate (% per annum)	Year of Issue	Maturity	Aggregate principal amount outstanding as of December 31, 2020 (EUR in millions)
Borrower's note loans *(Schuldscheindarlehen)*	2.91% to 5.05	2003 to 2011	2021 to 2037	6,202

(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, 2020 (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 for Debt Table 9: Monthly Report of the Federal Ministry of Finance, January 2021,Table "Entwicklung der Kreditaufnahme des Bundes im Dezember 2020", page 99 (https://www.bundesfinanzministerium.de/Monatsberichte/2021/01/Inhalte/Kapitel-4-Wirtschafts-und-Finanzlage/4-4-kreditaufnahme-des-bundes-und-seiner-sondervermoegen.html).

II. Guarantees by the Federal Government (1)

Purpose of Guarantees	Aggregate principal amount outstanding as of December 31, 2019	2018
	(EUR in millions)	
Export finance loans (including rescheduled loans)(2)	125,172	120,703
Untied loans; direct foreign investments by German companies; Loans of the European Investment Bank to non-EU borrowers	42,818	42,655
Loans in connection with EU agricultural policy measures	0	0
Loans to domestic corporations and for projects in areas of agriculture, fishing and housing construction	110,588	99,067
Contributions to international financing institutions	60,067	60,067
Co-financing of bilateral projects of German financial co-operation	25,555	22,780
Successor agencies to *Treuhandanstalt*	1,009	1,009
Interest compensation guarantees	15,000	15,000
Total guarantees pursuant to the 2019 German Budget Act	**380,210**	**361,282**
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	93,341	93,623
Total guarantees	**495,950**	**477,305**

(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 Euler Hermes Aktiengesellschaft ("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 2021, Overview 3, page 300 (https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finanzen/Wirtschafts_und_Finanzdaten/Finanzberichte/Finanzbericht-2021.html).

III. Liabilities to International Financial Organizations

The Federal Republic is obligated to contribute to the capital subscriptions and, in some cases, to additional financing, according to the requirements of each respective membership. Such contributions were in many cases stated initially in 1944 with one U.S. dollar being an equivalent to 0.888671 grams of gold, and later – with the creation of the Special Drawing Right ("SDR") – being an equivalent to the SDR at the same value. The value of the SDR, the possible inclusion of new currencies in the basket, the 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%).

Subscriptions or Commitments by the Federal Republic to International Organizations as of End of December 2020

Name of organization	Subscription or commitment by the Federal Republic (1)	Amount paid in
	(USD in millions)	
IMF (2)	37,930.8	37,930.8
International Bank for Reconstruction and Development (IBRD) (3)	12,711.9	848.1
International Development Association (IDA) (3)(4)	27,188.8	24,797.8
International Finance Corporation (IFC) (3)(4)	982.8	982.8
European Investment Bank (EIB) (5)	56,861.2	5,071.2
African Development Bank (AfDB) (3)	8,473.4	322.9
African Development Fund (AfDF) (3)	5,095.8	4,678.8
Asian Development Bank (AsDB) (3)	6,613.8	330.8
Asian Development Fund (AsDF) (3)	1,933.0	1,845.0
Inter-American Development Bank (IDB) (3)	3,368.7	242.3
Inter-American Investment Corporation (IIC) (3)	17,322.0	17,322.0
Fund for Special Operations (FSO) (3)	—	—
International Fund for Agricultural Development (IFAD) (3)	635.8	593.6
Caribbean Development Bank (CDB) (3)	106.6	23.6
Special Development Fund of the Caribbean Development Bank (SDF) (3)	109.9	106.7
European Bank for Reconstruction and Development (EBRD) (5)	3,111.3	648.9
Council of Europe Development Bank (CEB) (5)	1,114.5	123.7
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 1.4241

(2) Quota in SDR: 26,634.4 Mio SDR. 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 Fund'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 2021.

(5) Source: computation provided by the Ministry of Finance based on euro exchange rate of the European Central Bank at December 31, 2020 of EUR 1 per USD 1.2170.

Exhibit (e)

Group management report

Basic information on KfW Group

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, social and environmental 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 environment, globalisation, social change, digitalisation and innovation, and small and medium-sized enterprises (SMEs). The domestic promotional lending business with enterprises and private individuals is characterised by the on-lending strategy, in 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. In addition to KfW, 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)*	– 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 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. 2020 EUR in millions	31 Dec. 2019 EUR in millions
KfW, Frankfurt am Main, Germany	543,099	502,495
Subsidiaries		
KfW IPEX-Bank GmbH, Frankfurt am Main (KfW IPEX-Bank), Germany	29,617	27,029
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne (DEG), Germany	6,286	6,885
KfW Beteiligungsholding GmbH, Bonn, Germany	3,209	3,307
KfW Capital GmbH & Co. KG, Frankfurt am Main, Germany	413	254
Interkonnektor GmbH, Frankfurt am Main, Germany	376	376
Investments accounted for using the equity method		
Microfinance Enhancement Facility S.A., Luxembourg (20.3%), Luxembourg	575	614
DC Nordseekabel GmbH & Co. KG, Bayreuth (50.0%), Germany	996	888
Green for Growth Fund, Southeast Europe S.A., Luxembourg (10.0%), Luxembourg	639	525
AF Eigenkapitalfonds für deutschen Mittelstand GmbH & Co KG, Munich (47.5%), Germany[1)]	0	90
coparion GmbH & Co. KG, Cologne (16.4%), Germany	126	84

[1)] KfW's shares in AF Eigenkapitalfonds für deutschen Mittelstand GmbH & Co. KG were sold in financial year 2020.

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

Strategic objectives 2025

KfW Group has a set of strategic objectives in place that define KfW's targeted medium-term positioning. This framework encompasses top-level objectives at the overall bank level and serves as a central, binding reference for the strategic orientation of all business sectors, with a five-year horizon. The strategic objectives for 2025 were adopted in 2020.

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

Subsidiarity means that KfW focuses on eliminating market weaknesses. Putting this principle into practice, KfW strives to consistently maintain high-quality promotional activities. KfW also aims to increase in the volume of new commitments in line with the nominal growth of Germany's gross domestic product ("GDP"). However, this principle may be overridden in exceptional situations such as the current 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 (target environment quota > 38%), globalisation, social change, as well as 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, as well as 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.

The group-wide strategic objectives set by the Executive Board form the basis for the group's planning (defining objectives). 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 strategic 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. By involving these departments, their own strategies are aligned with the strategic objectives. The first regular capital budget in the base case is prepared on a multi-year horizon. This enables identification of any capital bottlenecks arising from strategic considerations or changed parameters, in response to which measures can be agreed on to mitigate such capital shortages. The Executive Board defines top-down objectives for all departments or subsidiaries (with regard to promotion, risk and finances) for the entire planning period based on the assessment and prioritisation of all strategic initiatives from a group perspective. Strategic group-level planning will be expanded to include business strategy scenario analysis. Scenario analysis is a "what if" analysis of a specific, plausible scenario, looking at the interaction of exogenous influencing factors and translating the results of the analysis into management-relevant parameters in new business, earnings and risk / capital. Such scenarios assist in the process of identifying potential risks and opportunities for promotional targets and KfW's profitability and risk-bearing capacity and enable these factors to be considered in the further planning process if necessary.

The business sectors plan their new business, risks and earnings, and each department its budgets and full time equivalents ("FTEs") as regards implementation and quality assurance 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 group's and business sectors' objectives. 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. The Executive Board approves the resulting budget or has plans fine-tuned in a revision round if necessary (finalisation). Any changes to the business strategy are subject to consultation with the Risk Controlling department in order to ensure consistency between the business and risk strategy. 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.

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. The Executive Board draws up the operating budget for the entire planning period, including any future capital requirement as well as the business and risk strategy. 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 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. Findings gained from this comparison are incorporated into the next planning process. 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 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. The results of the analysis are included in further strategy discussions and strategic planning processes. 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 has been implemented alongside strategic and operational controlling. Early warning systems have been established and mitigation measures defined for all material risk types in line with the risk management requirements set out in the risk strategy. All controlling and monitoring approaches are integrated into risk reporting. The Board of Supervisory Directors receives a risk report quarterly.

Alternative key financial figures used

The KfW Group Management Report contains key financial figures that are not defined in the IFRS. In its strategic objectives, KfW uses key indicators prescribed by accounting standards and supervisory regulations as well as key figures that are geared toward promotion as the core business activity. It also uses key figures in which the temporary effects on results determined and reported in the consolidated financial statements in accordance with IFRS and which KfW does not consider representative, are adjusted.

KfW has defined the following alternative key financial figures:

Promotional business volume

Promotional business volume refers to the commitments of each business sector during the reporting period. In addition to the lending commitments shown in the statement of financial position, promotional business volume comprises loans from Federal Government funds for promotion of developing countries and emerging economies – which are accounted for as trust activities – financial guarantees, equity financing and securities purchases in certain asset classes (green bonds until 2019, SME loan securitisation). 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 & Privatkunden (*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 in Net interest income through profit or loss (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, as of the beginning of 2020, promotional grants awarded as a supplement to the lending business (other operating expense).

Cost/income ratio (before promotional expense)

The cost/income ratio (before promotional expense) comprises administrative expense (excluding promotional expense) in relation to net interest income and net commission income before promotional expense.

The cost/income ratio ("CIR") shows costs in relation to income and is thus a measure of efficiency. To enable comparison of the CIR with other (non-promotional) institutions, an adjustment for promotional expense is made to the numerator (administrative expense) and denominator (net interest income and net commission income).

Consolidated profit before IFRS effects

Consolidated profit before IFRS effects from hedging is another key financial figure based on Consolidated profit in accordance with IFRS. Derivative financial instruments are entered into for hedging purposes. Under IFRS, the requirements for the recognition and valuation of derivatives and hedges 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.

Economic report

General economic environment

Due to the coronavirus pandemic, global real domestic product (“GDP”) declined by 3.5% year on year in 2020 according to estimates by the International Monetary Fund (“IMF”) (see table on gross domestic product at constant prices). According to the World Bank’s Global Economic Prospects of January 2021, this is the worst global recession since World War II, with more than 90% of developing countries and emerging economies expected to report a per capita decline in GDP. The lowest volume of the year for both global industrial production and global exports was recorded in Q2, followed by a recovery in Q3 (see table on industrial production). In contrast to past recessions, the service sectors reliant on personal contact have been harder hit than the manufacturing sector, based on an analysis in the IMF’s October 2020 World Economic Outlook.

Gross domestic product at constant prices (year-on-year change in %)

	2020 estimate	2019
	in %	in %
Global economy*	–3.5	2.8

* 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.

Industrial production and trade (Q4 2019 index = 100)

	Q1 2020	Q2 2020	Q3 2020	October/ November 2020
Volume of global industrial production*	96	89	98	101
Volume of global manufacturing*	99	86	98	100

* In constant USD (2020); seasonally adjusted

Economic development in the member states of the **European Economic and Monetary Union (“EMU”)** was also affected by the coronavirus pandemic and the steps taken to contain it. Economic output in the EMU countries measured by price-adjusted GDP fell by 6.8% year on year in 2020, following a 1.3% increase in price-adjusted GDP in 2019. This is the largest decline in price-adjusted GDP since the EMU was formed in 1999 (see table on gross domestic product at constant prices). However, the scale of the recession varied between the member states. For instance, price-adjusted GDP fell further in France, Italy and Spain than in Germany. The European Commission attributes these differences to the national containment measures, economic assistance and the significance of the sectors particularly affected, such as tourism.

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

	2020	2019	2011–2019 average	Minimum since 1999
	in %	in %	in %	
Euro area	–6.8	1.3	1.4	–4.5% (2009)
Germany	–5.0	0.6	1.9	–5.7% (2009)

Against the backdrop of the coronavirus pandemic, price-adjusted GDP **in Germany** fell by 5.0% in 2020 compared with the previous year, after growing by 0.6% in 2019 and by 1.9% per year on average for the previous ten years (2010 to 2019 inclusive) (see table on gross domestic product at constant prices). Positive impetus for the rates of change in price-adjusted GDP was only provided by price-adjusted government final consumption expenditure (+3.4%) and price-adjusted gross fixed capital formation in construction (+1.5%) in 2020. In contrast, price-adjusted final consumption expenditure declined (–6.0%), as the number of people in employment located in Germany also fell (–1.1%), along with price-adjusted gross fixed capital formation in machinery and equipment (–12.5%) and price-adjusted gross capital formation in other products (–1.1%). Price-adjusted domestic use declined overall by 4.1% in 2020. Net exports slowed the rate of change of price-adjusted GDP by 1.1 percentage points in 2020, with price-adjusted exports falling further (–9.9%) than price-adjusted imports (–8.6%). From a production perspective, the rate of change of price-adjusted GDP was curbed in particular in 2020 by the decline in price-adjusted gross value added in the manufacturing industry (excluding construction) (–9.7%), the retail, transport and hospitality sector (–6.3%), the business services sector (–7.9%) and other services (–11.3%).

Development in the **financial markets** was dominated by the coronavirus pandemic in 2020. In response to the emerging economic crisis, the US Federal Reserve lowered its key rate range from 1.50%–1.75% to just 0.00%–0.25% in March 2020. It also injected liquidity into the markets via repos (repurchase agreement operations) and greatly expanded its asset purchases. The European Central Bank ("ECB") introduced several targeted measures starting in March and gradually increased them over the course of the year, without lowering key interest rates any further (the deposit rate remained at –0.5% throughout 2020). The most important instruments include an expansion of asset purchases, primarily via the newly launched 'Pandemic Emergency Purchase Programme' (PEPP), which has provided funds of up to EUR 1.850 billion for asset purchases. The programme involves both government and corporate bonds, which can be purchased very flexibly in terms of maturity, asset class and country of origin. Banks were motivated to lend by improved terms for the ECB's targeted longer-term refinancing operations ("TLTRO III"). 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 lower than the average deposit facility rate over the same period and in no case above –1%.

In light of these monetary policy measures, the situation on the financial markets eased following its volatile development in the spring of 2020. Money-market interest rates, swap rates and government bond yields declined in the euro area and in the US compared to the previous year. For instance, the 3-month EURIBOR averaged –0.43% in 2020 (2019: –0.36%); the 5-year EUR swap rate averaged –0.35% (2019: –0.14%); and the yield of the 10-year German government bond was –0.47% (2019: –0.21%). In the US, the 3-month LIBOR in 2020 was 0.65% on average for the year, compared with 2.33% in the previous year. The 5-year USD swap rate averaged 0.59% in 2020 compared with 1.94% the previous year, and the yield on 10-year US Treasuries was 0.89% compared with 2.14% the previous year. The yield curves for the EUR and the USD moved in opposite directions as measured by the difference between the yields of 10 and 2-year government bonds. On average in 2020, the curve steepness for German government bonds was 22 bp (2019: 46 bp), whereas US government bonds climbed to 50 bp (2019: 17 bp).

The first quarter initially saw major price losses on the stock markets, but a recovery began after a trough in March. The US S&P 500 index actually reached new highs at the end of 2020, and recorded an annual average of 3,218 points, which was 10% above the prior-year average. At the end of 2020, the German DAX 30 was roughly at the year-end level of 2019. Its 2020 average of 12,339 points was around two points above the prior-year average. The trade-weighted euro gained on average around 2% (against the currencies of the 18 most important trading partners outside the euro area) in 2020, but appreciated somewhat less against the US dollar. The EUR/USD exchange rate (measured in USD per EUR) averaged 1.12 in 2019, but was 1.14 in 2020, representing an increase of 2.0%.

Development of KfW Group

KfW's business development in 2020 was characterised by the global coronavirus pandemic, which had a significant impact on the group's net assets, financial position and results of operations. At the same time, KfW recorded its historically strongest promotional year in terms of volume due to the coronavirus aid programmes, with a promotional business volume of EUR 135.3 billion (2019: EUR 77.3 billion).

As a result of pandemic-related effects in 2020, the **earnings position**, with a consolidated profit of EUR 0.5 billion, was down significantly on the previous year (EUR 1.4 billion), and therefore below expectations (EUR 0.8 billion). The operating result before valuation (before promotional expense) increased from EUR 1.7 billion to EUR 1.9 billion. This is also reflected in the cost-income ratio (before promotional expense), which declined to 41.8% (2019: 44.0%) as a result of increased income from interest and commissions and a slight increase in administrative expense. The valuation result, which was impacted by valuation effects from the coronavirus pandemic, lowered consolidated profit by EUR 1.2 billion (2019: EUR –0.2 billion).

Consolidated total assets rose by EUR 40.4 billion to EUR 546.4 billion in 2020.

The increase was largely attributable to the rise of EUR 33.9 billion in Net loans and advances to EUR 423.7 billion, which in turn was attributable in the amount of EUR 30 billion to disbursements under the KfW Special Programme 2020. The volume of own issues reported under Certificated liabilities amounted to EUR 425.3 billion (31 Dec. 2019: EUR 436.2 billion). The EUR 0.4 billion increase in equity to EUR 31.8 billion was due especially to consolidated comprehensive income.

Business performance in 2020 was largely characterised by the following developments:

A. High demand for the KfW coronavirus aid programmes

The group reached a historic high in 2020 with a promotional business volume of EUR 135.3 billion (+75%). The main drivers of the strong growth were the measures to absorb the economic consequences of the coronavirus pandemic in Germany and abroad, which accounted for a volume of EUR 50.9 billion.

A key component of the coronavirus assistance is the KfW Special Programme 2020 launched by KfW as part of the government stabilisation measures for the coronavirus pandemic. KfW has provided extensive liquidity support for businesses under this programme, and assumes up to 100% of the risk. The KfW Special Programme 2020 was launched in March 2020 based on existing promotional products such as the KfW corporate loan and the ERP Start-up Loan – Universal. A new product offering additional support to businesses was added in April 2020 on behalf of the Federal Government, the KfW Instant Loan with 100% of the risk assumed by KfW. The new 'Direct participation for syndicate financing' programme offers flexible financing to commercial companies for their operating equipment and investments. At the end of 2020, the Federal Government and KfW extended the KfW Special Programme 2020, including the KfW Instant Loan, until 30 June 2021.

KfW also set up funding opportunities to secure the liquidity of start-ups, in order to safeguard jobs and innovation in Germany. Students are receiving temporary support during the COVID-19 pandemic in the form of a reduced interest rate of 0% for their KfW Student Loan. KfW is being compensated by the Federal Government for the loss of interest. The KfW Student Loan has also been opened up to all foreign students. The support measures are mandated transactions in accordance with Article 2 (4) of the Law Concerning KfW (*KfW-Gesetz – "KfW Law"*) with a full federal guarantee, meaning that KfW is released from all risks and charges associated with granting the loan. Cost-based remuneration was agreed with the Federal Government for the KfW Special Programme 2020, including a processing margin for specific large-volume financings within the programme.

The commitment volume of the KfW Special Programme launched by KfW as part of the government stabilisation measures for the coronavirus pandemic amounted to EUR 44.5 billion by 31 December 2020. Of this, EUR 35.6 billion is attributable to the business sector Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*) with the KfW Entrepreneur Loan (EUR 28.3 billion), the KfW Instant Loan (EUR 5.8 billion) and the ERP Start-Up Loan (EUR 1.4 billion).

Commitments under the coronavirus special programme ‘Direct participation for syndicate financing’ reached a volume of EUR 8.4 billion, and commitments under the other coronavirus assistance for domestic business amounted to EUR 1.3 billion for measures for start-ups. A total of EUR 1.1 billion has been committed in student loans since the interest rate was cut. Including coronavirus aid, financing of EUR 106.4 billion (2019: EUR 43.4 billion) was committed in domestic promotional business. In addition to coronavirus aid, the promotional programmes in the area of Energy-efficient Construction and Refurbishment made a particular contribution to growth in promotional business volume in Germany, increasing their volume by 140% to EUR 26.8 billion. Commitments by the subsidiary KfW Capital reached EUR 0.9 billion in 2020, including coronavirus aid under the KfW Special Programme 2020.

International business decreased by 11% to a promotional business volume of EUR 29.0 billion (2019: EUR 32.7 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 was reflected in new business, as expected. As a result, commitments of EUR 16.6 billion were below the record amount of the previous year (EUR 22.1 billion), but were maintained at the same level as in the preceding years. At EUR 12.4 billion, the promotion of developing countries and emerging economies was higher than in the previous year (EUR 10.6 billion), with commitments under the Emergency COVID-19 Support Programme for the partner countries of German development cooperation of EUR 4 billion more than offsetting the negative impact of the coronavirus pandemic on new commitments by Financial Cooperation and DEG.

KfW raised EUR 66.4 billion in the capital markets to fund its business activities (2019: EUR 80.6 billion). As part of the KfW Special Programme 2020, KfW accessed new funding sources by participating in federal auctions via the government-owned Economic Stabilisation Fund (*Wirtschaftsstabilisierungsfonds – “WSF”*) and in the targeted longer-term funding of the Eurosystem via TLTRO III, thereby raising funds in the amount of EUR 39.0 billion (WSF) and EUR 13.4 billion (TLTRO III).

Promotional business volume of KfW Group

	2020 EUR in billions	2019 EUR in billions
Domestic business	**106.4**	**43.4**
Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*)	86.3	36.0
Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*)	19.2	7.2
KfW Capital	0.9	0.2
Financial markets	**0.4**	**1.4**
International business	**29.0**	**32.7**
Export and project finance	16.6	22.1
Promotion of developing countries and emerging economies	12.4	10.6
Volume of new commitments[1)]	**135.3**	**77.3**

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

B. Impact of the coronavirus pandemic on KfW’s earnings position

The COVID-19 crisis had a major tangible effect on KfW’s earnings position in financial year 2020. The operating result before valuation (before promotional expense) benefited slightly from additional income from the implementation of the KfW Special Programme, while the valuation adjustments resulting from the coronavirus pandemic had a significant adverse effect on the valuation result.

At EUR 1,855 million (2019: EUR 1,677 million), the Operating result before valuation (before promotional expense) was 11% above the prior-year level and exceeded the target by 19%. This was due to the increase by EUR 117 million to EUR 2,601 million in net interest income (before promotional expense) and by EUR 72 million to EUR 584 million in net commission income (before promotional expense). The increase in net commission income (before promotional expense) is primarily due to the cost-based remuneration for implementing the KfW Special Programme (EUR 79 million) and the processing margins collected for specific financings under the KfW Special Programme 2020 (EUR 20 million). Administrative expense (before promotion expense) rose by EUR 10 million to EUR 1,330 million and was lower than projected (EUR 1,409 million).

The coronavirus pandemic had a significant impact on earnings as regards risk provisions for lending business and the valuation of the equity investment portfolio. For instance, risk provisions for lending business resulted in a negative impact on earnings in 2020 of EUR 777 million, which was above the projected standard risk costs (EUR 466 million) and greater than the prior-year figure (2019: EUR –174 million). The provisions created were primarily general risk provisions in stages 1 and 2 with a net addition of EUR 412 million (2019: EUR 40 million) and the provision for imminent risks in stage 3 of EUR 403 million (2019: EUR 201 million). In order to appropriately reflect the effects of the coronavirus pandemic in the measurement of risk provisions, the risk parameters on which the calculation is based are adjusted by taking macroeconomic factors into account. The main reasons for the increased risk provisions are the sector expectations for aviation and shipping as well as for SMEs and start-ups, which are included in the adjustment of default probabilities. Given the current economic environment, this led to higher probabilities of default and therefore to increased stage transfers. Combined with the effects of rating downgrades and the first coronavirus-induced defaults, the total pandemic-related expenses resulting from risk provisions amounted to EUR 499 million in 2020. The COVID-19 effect was calculated as the deviation of risk provisions for 2020 from the average risk provisions of the last seven years adjusted for non-recurring effects.

In addition, markdowns in the equity investment portfolio fully measured at fair value led to adverse effects on the valuation result. As of 31 March 2020, when the global economic impact from the spread of the coronavirus was not yet appropriately reflected in the valuation techniques used as a standard, a markdown of EUR 645 million was determined based on historical market developments in crisis situations. The markdown was replaced by individual valuations during the second half of the year, as it was possible to reliably estimate the effects of the pandemic in full on the individual investments. As part of the transition to the standard valuation techniques and individual valuations of the investments by the end of the year, the coronavirus-related charges to earnings from the valuation of the entire equity investment portfolio were reduced to EUR 348 million. Taking into account the 2020 valuation effects unrelated to the coronavirus in the amount of EUR 67 million, the 2020 valuation result for the equity investment portfolio is EUR –281 million.

Overall, COVID-19 effects on KfW's consolidated profit in 2020 amounted to EUR 801 million.

C. Further decreased promotional expense in the low interest rate environment

KfW's domestic promotional expense, which has a negative impact on KfW Group's earnings position, was EUR 88 million in financial year 2020 (2019: EUR 159 million), and thus significantly lower than projected (EUR 341 million). This was primarily the result of a decline in interest rate reductions (EUR 54 million; 2019: EUR 137 million), due in particular to the limited need in the low-interest environment for interest rate reductions to achieve our promotional business volume target.

The following key figures provide an overview of key financial figure development in 2020:

Key financial figures of KfW Group

Key figures of the income statement	2020 EUR in millions	2019 EUR in millions
Operating result before valuation (before promotional expense)	1,855	1,677
Operating result after valuation (before promotional expense)	691	1,503
Promotional expense	88	159
Consolidated profit	525	1,367
Cost-income ratio (before promotional expense)[1]	41.8%	44.0%
Key economic figures	**2020 EUR in millions**	**2019 EUR in millions**
Consolidated profit before IFRS effects	633	1,447
Key figures of the statement of financial position	**31. Dec. 2020 EUR in billions**	**31. Dec. 2019 EUR in billions**
Total assets	546.4	506.0
Volume of lending	543.1	486.2
Volume of business	673.8	610.7
Equity	31.8	31.4
Equity ratio	5.8%	6.2%

[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).

Comparison with the previous year's forecast

	2019 Forecast for 2020	2020 Actual
New business		
Promotional business volume	EUR 77.0 billion	EUR 135.3 billion
Funding	approx. EUR 75 billion	EUR 118.8 billion
Result		
Consolidated profit before IFRS effects	EUR 0.8 billion	EUR 0.6 billion
Strategic target consolidated profit	EUR 1.0 billion	EUR 0.5 billion
Net interest income (before promotional expense)	at 2019 level	+5%
Low interest environment	detrimental	detrimental
Net commission income (before promotional expense)	at 2019 level	+14%
Administrative expense (before promotional expense)	approx. EUR 1.4 billion	EUR 1,330 million
CIR (before promotional expense)	48.0%	41.8%
Risk provisions for lending business	< standard risk costs higher than 2019	EUR – 777 million
Promotional expense	EUR 0.3 billion	EUR 0.1 billion

The main differences between the forecasts from the Financial Report 2019 and the actual business development in 2020 are presented in the Economic report.

Development of earnings position

The earnings position in 2020 was characterised by a year-on-year increase in the operating result combined with a decline in the valuation result due to the coronavirus pandemic. This resulted in a consolidated profit of EUR 0.5 billion, which is below both the prior-year figure (EUR 1.4 billion) and the target (EUR 0.8 billion).

Reconciliation of internal earnings position (before promotional expense) with external earnings position (after promotional expense) for financial year 2020

		Reconciliation		
	EUR in millions	EUR in millions	EUR in millions	
Net interest income (before promotional expense)	2,601	–54	2,547	Net interest income
Net commission income (before promotional expense)	584	–11	573	Net commission income
Administrative expense (before 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		16	Net gains/losses from hedge accounting
Other financial instruments at fair value through profit or loss	–428		–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		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 or loss (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		76	Taxes on income
Consolidated profit	**525**		**525**	**Consolidated profit**
Temporary net gains/losses from hedge accounting	–109		–109	Temporary net gains/losses from hedge accounting
Consolidated profit before IFRS effects	**633**		**633**	**Consolidated profit before IFRS effects**

Reconciliation of internal earnings position (before promotional expense) with external earnings position (after promotional expense) for financial year 2019

	EUR in millions	Reconciliation EUR in millions	EUR in millions	
Net interest income (before promotional expense)	2,484	–137	2,347	Net interest income
Net commission income (before promotional expense)	512	–13	499	Net commission income
Administrative expense (before promotional expense)	1,320	9	1,328	Administrative expense
Operating result before valuation (before promotional expense)	**1,677**	**–159**	**1,518**	**Operating result before valuation**
Risk provisions for lending business	–174	1	–173	Net gains/losses from risk provisions
Net gains/losses from hedge accounting	–1		–1	Net gains/losses from hedge accounting
Other financial instruments at fair value through profit or loss	–9		–9	Net gains/losses from other financial instruments at fair value through profit or loss
Securities and investments	–5	–1	–6	Net gains/losses from disposal of financial assets at amortised cost
Net gains/losses from investments accounted for using the equity method	15		15	Net gains/losses from investments accounted for using the equity method
Operating result after valuation (before promotional expense)	**1,503**	**–159**	**1,344**	**Operating result after valuation**
Net other operating income or loss	46		46	Net other operating income or loss
Profit/loss from operating activities (before promotional expense)	**1,549**	**–159**	**1,391**	**Profit/loss from operating activities**
Promotional expense	159	–159	0	–
Taxes on income	23		23	Taxes on income
Consolidated profit	**1,367**		**1,367**	**Consolidated profit**
Temporary net gains/losses from hedge accounting	–80		–80	Temporary net gains/losses from hedge accounting
Consolidated profit before IFRS effects	**1,447**		**1,447**	**Consolidated profit before IFRS effects**

At EUR 1,855 million (2019: EUR 1,677 million), the **Operating result before valuation (before promotional expense)** was above the prior-year level and the target (EUR 1,556 million).

At EUR 2,601 million, **Net interest income (before promotional expense)** increased compared to the 2019 figure (EUR 2,484 million). The increase was due to interest rate and spread management as well as interest margin income in the lending business. In contrast, return on equity declined.

Net commission income (before promotional expense) amounted to EUR 584 million, which is higher than the 2019 figure (EUR 512 million) and higher than expected (EUR 508 million). This was largely attributable to the cost-based remuneration for the implementation of the KfW Special Programme (EUR 79 million) and the processing margins collected for specific financings under this programme (EUR 20 million). The remuneration from the Federal Government was offset by related administrative expense.

Administrative expense (before promotional expense) increased slightly from EUR 1,320 million to EUR 1,330 million, but was lower than expected (EUR 1,409 million). Personnel expense amounted to EUR 770 million, which is above the previous year's figure of EUR 749 million. Non-personnel expense (before promotional expense) declined to EUR 560 million (2019: EUR 571 million). The savings of EUR 79 million in administrative expense against budget resulted from a lower-than-projected increase in FTEs and lower costs for external capacity support.

The cost-income ratio before promotional expense decreased to 41.8% (2019: 44.0%), mainly due to the overall increase in operating income and only slightly increased expenditure. Adjusted for income and expenses from products for which cost-based remuneration has been agreed with the Federal Government, the cost-income ratio for 2020 amounts to 30.0% (2019: 36.0%).

KfW Group's **risk provisions for lending business** resulted in a negative impact on earnings in 2020 of EUR 777 million, which was greater than in the previous year (2019: EUR 174 million), and above the projected standard risk costs (EUR 466 million) due to the economic effects of the coronavirus pandemic. Expenses resulting from risk provisions for lending business largely related to the subsidiary DEG in the business sector Promotion of developing countries and emerging economies, and to the business sector Export and project finance.

Net additions to the provision for imminent credit risks (stage 3) including direct write-offs increased by EUR 201 million year on year (2019: EUR 202 million) to EUR 403 million, and primarily related to the business sector Export and project finance with additions of EUR 212 million (2019: reversals of EUR 17 million) and to DEG with additions of EUR 95 million (2019: EUR 109 million). The business sector SME Bank & Private Clients required an addition of EUR 80 million (2019: EUR 114 million). Of this figure, EUR 67 million was attributable to education financing (2019: EUR 86 million).

Net additions to risk provisions of EUR 34 million (2019: EUR –32 million) in stage 1 and EUR 378 million (2019: EUR 72 million) in stage 2 in particular reflect the economic effects of the coronavirus pandemic. In the first quarter of 2020, these effects resulted from the inclusion of the changed macroeconomic environment due to the pandemic in the measurement of risk provisions. In the second quarter of 2020, these effects were due to rating downgrades.

At EUR 60 million, income from recoveries of loans previously written off was below that of the previous year (2019: EUR 77 million). Of this amount, EUR 41 million was attributable to the business sector SME Bank & Private Clients and EUR 16 million to the business sector Promotion of developing countries and emerging economies.

Risk provisions increased to EUR 2.3 billion in financial year 2020 (2019: EUR 1.7 billion), of which EUR 1.3 billion related to provisions for imminent risks in stage 3 (2019: EUR 1.2 billion). Provisions for individual risks in stage 2 that cannot be allocated increased from EUR 0.2 billion to EUR 0.5 billion, and in stage 1 from EUR 0.3 billion to EUR 0.4 billion.

The **net losses from hedge accounting and other financial instruments at fair value through profit or loss a**mounted to EUR 412 million (2019: EUR 10 million) and in financial year 2020 were primarily driven by negative coronavirus-related valuation effects from the equity investment portfolio and purely IFRS-related effects from the measurement of derivatives used for hedging purposes.

The equity investment portfolio measured at fair value through profit or loss was influenced by both the negative coronavirus-related performance of investments and exchange rate-induced reductions in value, particularly due to the depreciation of the US dollar. Overall, it generated expenditure of EUR 312 million (2019: income of EUR 79 million). This development is primarily due to the activities in the business sector Promotion of developing countries and emerging economies, with negative valuation effects of EUR 380 million (2019: EUR +44 million). Of DEG's negative contribution of EUR 334 million, EUR 150 million was attributable to exchange rate-induced reductions in value.

Net income offset net expenses in foreign currency translation (2019: net expenses of EUR 6 million).

Hedge accounting and borrowings recognised at fair value, including derivatives used for hedging purposes, resulted in net expenses of EUR 109 million (2019: EUR 80 million). The mark-to-market derivatives are part of economically hedged positions. However, if the other part of the hedging relationship cannot be carried at fair value or different valuation methods and parameters have to be applied, this inevitably results in temporary fluctuations in income that are fully offset over the term of the transactions.

The result from the valuation of securities at fair value declined to EUR –5 million (2019: EUR 0 million).

In the case of securities not carried at fair value, developments in the financial markets resulted in a net positive difference of EUR 48 million between the carrying amount and the fair value (2019: EUR 42 million). This development is partly attributable to increases in the value of covered bonds.

There were **net gains** of EUR 30 million (2019: EUR 10 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 31 million to the result. This was attributable in particular to the performance of the business sector Export and project finance and the business sector Promotion of developing countries and emerging economies, which was offset by the negative performance of the business sector Individualfinanzierung & Öffentliche Kunden (*Customised Finance & Public Clients*).

Net other operating income (before promotional expense) was EUR –2 million, which was down on the previous year's figure (2019: EUR 46 million).

At EUR 88 million in 2020, KfW's domestic **promotional expense**, which has a negative impact on KfW Group's earnings position, was below both the prior-year level (2019: EUR 159 million) and projections (EUR 341 million).

Interest rate reductions are the key component of KfW's promotional expense. KfW grants these for certain domestic promotional loans during the first fixed-interest-rate period, which has a negative effect on its earnings position, in addition to passing on its funding conditions which are influenced by its triple-A rating. The volume of interest rate reductions was EUR 54 million in 2020, which was below both the prior-year figure (2019: EUR 137 million) and the projected figure (EUR 311 million). This was partly due to the low demand for interest rate-reduced promotional loans. Also, due to the persistently low level of interest rates, no additional stimulus in the promotional business was necessary in order to achieve the promotional objectives.

In addition to its lending business, KfW provided promotional grants, in particular for the ERP Digitalisation and Innovation programme, totalling EUR 12 million in financial year 2020, which was recognised as promotional expense in Net other operating income.

Moreover, promotional expenses reported in net commission income and administrative expense were incurred in the amount of EUR 23 million (2019: EUR 22 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 –76 million (EUR 2019: EUR –23 million), which was largely attributable to impairment of deferred tax assets, the **consolidated profit** of EUR 525 million was lower than in the previous year (EUR 1,367 million) and below expectations of EUR 839 million.

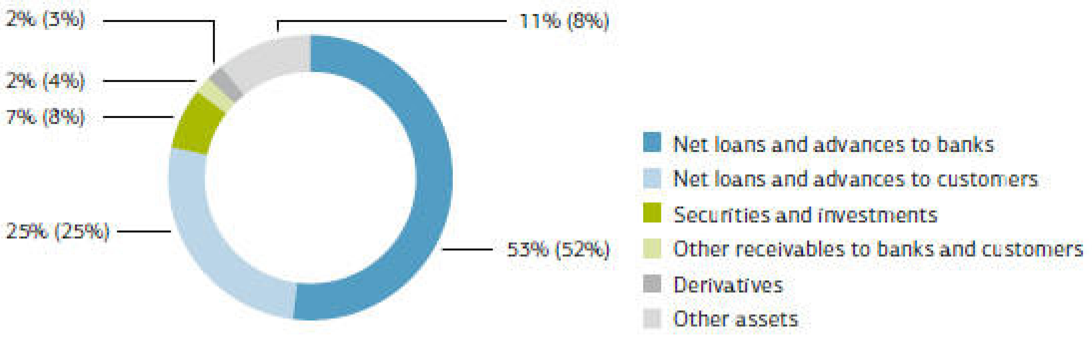
Consolidated profit before IFRS effects from hedging is another key financial figure based on Consolidated profit in accordance with IFRS to reflect the fact that KfW uses derivative financial instruments solely for hedging purposes. Under IFRS, the requirements for the recognition and valuation of derivatives and hedges give rise to temporary net gains or losses that are offset over the term as a whole. Against this backdrop, the IFRS effects from hedging relationships amounting to EUR –109 million (2019: EUR –80 million) are eliminated.

The reconciled earnings position amounted to a profit of EUR 633 million (2019: EUR 1,447 million). The marked decline in consolidated comprehensive income is primarily due to the effects of the coronavirus pandemic. The result is therefore below the sustainable earnings potential of EUR 1.0 billion.

Development of net assets

Lending to banks and customers accounted for 78% of the group's assets as of 31 December 2020 (2019: 77%).

Assets as of 31 December 2020 (31 Dec. 2019)



The **volume of lending** increased significantly compared to the previous year, amounting to EUR 543.1 billion.

Volume of lending

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Loans and advances	425,880	391,550
Risk provisions for lending business	–2,130	–1,670
Net loans and advances	**423,749**	**389,881**
Contingent liabilities from financial guarantees	2,808	2,636
Irrevocable loan commitments	105,282	82,052
Loans and advances held in trust	11,239	11,679
Total	**543,078**	**486,248**

Loans and advances increased by EUR 33.9 billion in 2020, of which around EUR 30 billion was attributable to the KfW Special Programme 2020, with the KfW Entrepreneur Loan and KfW Instant Loan programmes and the KfW Direct participation programme contributing a total of around EUR 29 billion. Overall, disbursements in new lending business more than compensated for unscheduled repayments (EUR 11.5 billion; 2019: EUR 11.6 billion) and scheduled repayments. At EUR 423.7 billion, Net loans and advances accounted for 78% of lending volume.

Contingent liabilities from financial guarantees were EUR 2.8 billion, up EUR 0.2 billion on the prior-year figure (2019: EUR 2.6 billion). Irrevocable loan commitments rose by EUR 23.2 billion to EUR 105.3 billion largely as a result of the KfW Special Programme 2020 with EUR 15.0 billion. The main drivers here too were the KfW Entrepreneur Loan, the Direct participation programme and the KfW Instant Loan, with a total of EUR 13.3 billion. Within assets held in trust, the volume of loans and advances held in trust, which primarily comprised loans to promote developing countries financed by budget funds provided by the Federal Republic of Germany, decreased by EUR 0.4 billion to EUR 11.2 billion.

At EUR 10.7 billion, other loans and advances to banks and customers were EUR 9.0 billion below the previous year's amount of EUR 19.8 billion. This includes, in particular, short-term secured and unsecured investments held for general liquidity management purposes and in connection with collateral management in the derivatives business. The decline mainly affected short-term, uncollateralised investments.

The total amount of **securities and investments**, at EUR 38.8 billion, was 3% above the previous year's level.

Securities and investments

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Bonds and other fixed-income securities	35,779	34,511
Shares and other non-fixed income securities	0	0
Equity investments	3,016	3,242
Shares in non-consolidated subsidiaries	48	43
Total	**38,844**	**37,795**

The securities portfolio, which increased by 4% in financial year 2020, accounted for a significant portion of securities and investments. Of the increase in the portfolio, EUR 0.9 billion was due to the increase in money-market securities to EUR 2.7 billion, and EUR 0.4 billion to the increase in bonds and other fixed-income securities to EUR 33.1 billion. Equity investments, in contrast, fell by EUR 0.2 billion to EUR 3.0 billion.

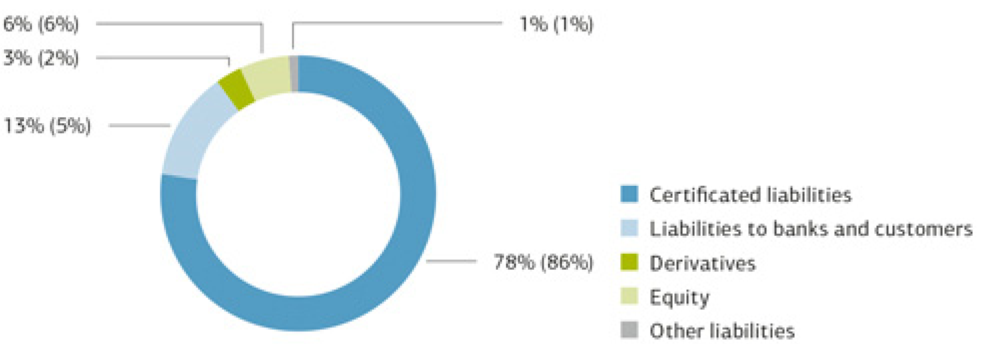
Derivatives with positive fair values, which are primarily used to hedge refinancing transactions, declined from EUR 16.2 billion in 2019 to EUR 13.3 billion. This was a result of value adjustments from micro hedging decreasing from EUR 10.9 billion to EUR 8.0 billion.

KfW increased its **balances with central banks** by EUR 16 billion to EUR 44.2 billion as a precautionary measure, to ensure the expected servicing of coronavirus aid measures and to be able to react on 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 three pillars: "benchmark bonds in euros and US dollars", "other public bonds" and "private placements". As part of the KfW Special Programme 2020, KfW accessed new funding sources in the reporting year by participating in federal auctions via the government-owned WSF and in the targeted longer-term funding of the Eurosystem via TLTRO III. The share of total assets accounted for by funding in the form of certificated liabilities therefore declined to 78% (previous year: 86%).

Financial position as of 31 December 2020 (31 Dec. 2019)



Borrowings increased by EUR 35.1 billion to EUR 496.4 billion.

Borrowings

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Short-term funds	43,988	44,000
Bonds and notes	383,975	395,557
Other funding	68,394	21,663
Total	**496,357**	**461,221**

Funds raised in the form of certificated liabilities declined by EUR 10.9 billion to EUR 425.3 billion. Of this decline, EUR 11.6 billion was a result of the low volume of medium and long-term bonds and notes issued, which nevertheless remain the group's principal source of funding. At year-end 2020, such funds amounted to EUR 384.0 billion (31 Dec. 2019: EUR 395.6 billion) and accounted for 77% of borrowings. Short-term issues of commercial paper increased by EUR 0.7 billion to EUR 41.3 billion. Total short-term funds, including demand deposits and term deposits, amounted to EUR 44.0 billion. The new funding sources tapped in connection with the KfW Special Programme 2020 were the main drivers of an increase of EUR 46.7 billion in Other funding to EUR 68.4 billion. In addition to promissory note loans (Schuldscheindarlehen) from banks and customers, which increased by EUR 38.9 billion to EUR 44.4 billion year on year (largely WSF funding), this consisted mainly of repurchase agreements of EUR 13.3 billion (largely TLTRO funding) (2019: EUR 0.2 billion) and cash collateral received of EUR 4.9 billion (31 Dec. 2019: EUR 9.9 billion), primarily to reduce counterparty risk from the derivatives business and liabilities to the Federal Republic of Germany.

The carrying amounts of **derivatives** with negative fair values, which were primarily used to hedge loans, increased by EUR 4.5 billion, from EUR 9.1 billion at year-end 2019, primarily due to changes in market parameters, and amounted to EUR 13.7 billion at year-end 2020.

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

At EUR 31.8 billion, **equity** was EUR 0.4 billion above the level of 31 December 2019 of EUR 31.4 billion. The increase resulted in particular from consolidated profit (EUR 0.5 billion). The equity ratio decreased year on year from 6.2% to 5.8% as of 31 December 2020.

Equity

	31 Dec. 2020 EUR in millions	31 Dec. 2019 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	19,411	18,742
Fund for general banking risks	600	600
Revaluation reserves	–1,151	–918
Total	**31,797**	**31,362**

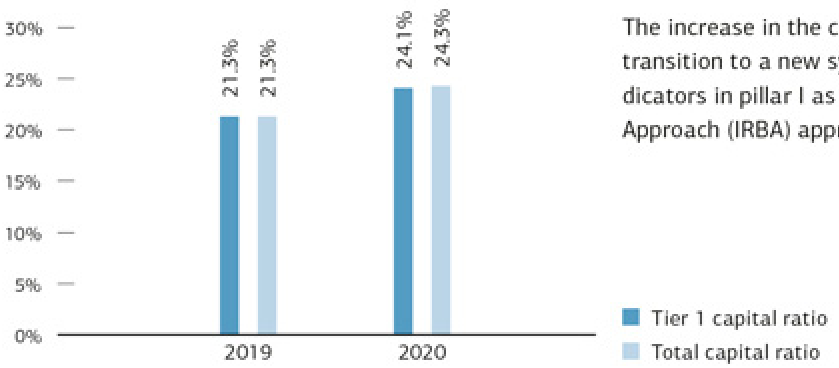
The consolidated profit was allocated to retained earnings.

Risk report

Overview of key indicators

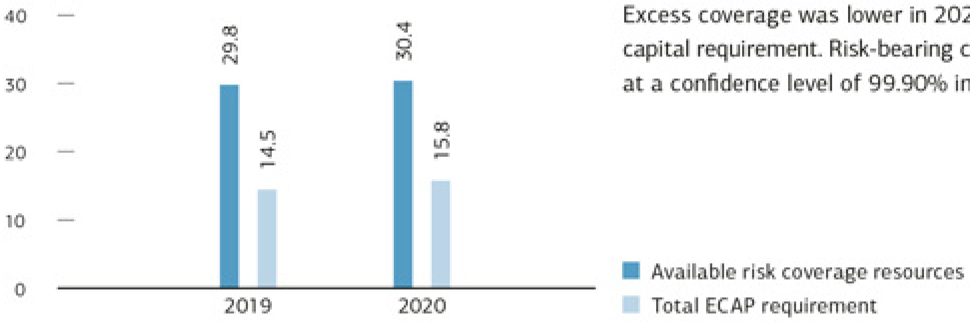
Risks are reported on a group level in accordance with KfW Group's internal risk management. The key risk indicators are presented below:

Regulatory capital ratios:



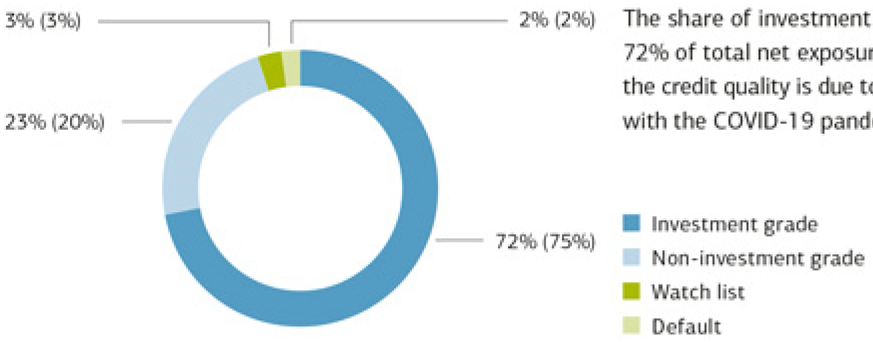
The increase in the capital ratios is primarily due to the transition to a new system for calculating credit risk indicators in pillar I as part of the Internal Ratings-Based Approach (IRBA) approval process.

Economic risk-bearing capacity:
(EUR in billions)



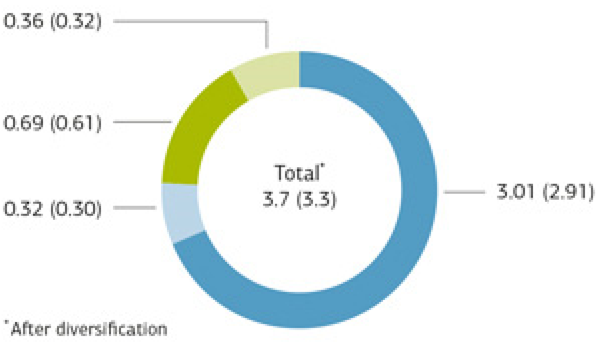
Excess coverage was lower in 2020 due to a higher total capital requirement. Risk-bearing capacity was maintained at a confidence level of 99.90% in 2020.

Credit risk:
2020 (2019), Net exposure breakdown



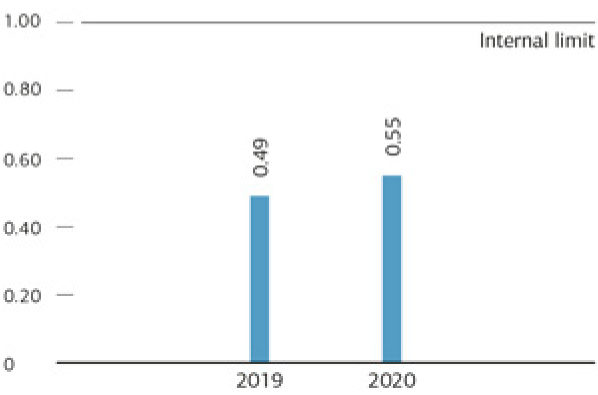
The share of investment grade net exposure declined to 72% of total net exposure. This change in the structure of the credit quality is due to rating downgrades in connection with the COVID-19 pandemic.

Market price risk:
2020 (2019), ECAP (EUR in billions)



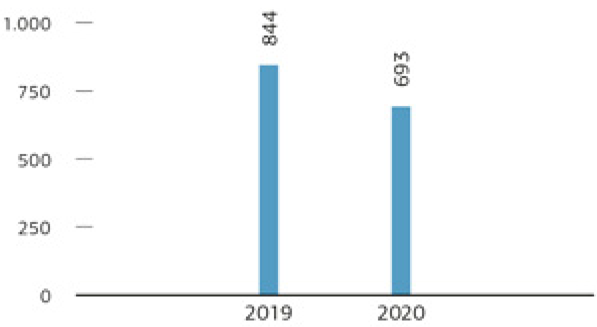
The capital requirement for market price risk increased in 2020 due to the volatile market environment.

Liquidity risk:



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

Operational risk:
ECAP (EUR in millions)



The updating of risk scenarios led to a reduction in economic capital requirements in 2020.

In financial year 2020, as in previous years, KfW Group refined the processes and instruments of its risk management and controlling, taking into account current banking supervisory requirements. This involved, in particular, further developing the credit risk methods for calculating the risk indicators for loss given default (LGD) and exposure at default (EAD) as part of a major project. Following approval by the relevant supervisory authority, these changes were implemented by means of a transition to a new system. The rating (PD – probability of default) procedures were also developed further in line with new supervisory requirements, including with regard to the assignment of default status and safety margins. As part of the enhancement of its credit risk measurement system, the bank also further developed its credit risk reporting systems in order to meet the requirements set out in the BCBS 239 standard on risk data aggregation and risk reporting using a future-viable architecture.

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 adherence to supervisory requirements constituting a fundamental prerequisite to 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 outbreak of the COVID-19 pandemic triggered a drastic and synchronous slump in economic output across the globe and significantly increased uncertainty regarding the future economic outlook. KfW considers the countries that are heavily reliant on tourism or exports of raw materials or that are especially vulnerable in terms of foreign trade to have been greatly affected, particularly if their credit rating was already weak before the crisis. 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 particularly hard-hit countries from March 2020 onwards. Rating committees met more frequently to ensure that the latest risk information was reflected in credit ratings as soon as possible. Rating changes were made primarily for countries in Sub-Saharan Africa, the Middle East and North Africa, and Latin America. These rating downgrades mean that the applicable country limits will potentially be reduced, and changes made to the parameters used to price loans extended to these borrowers. This deterioration in credit quality is also having an impact on the corporate and bank ratings of counterparties in the countries concerned. In addition, a stress test was performed for countries, banks and companies to simulate the effects of a prolonged pandemic.

The outbreak of the COVID-19 pandemic prompted risk management to step up its monitoring of banking markets and individual banks. These activities were based on a grid analysis of the individual banks and an analysis of the national banking markets to determine the expected impact on them, taking government aid measures into account ("heat map"). This analysis is updated on an ongoing basis. The analysis was taken as a basis for a risk-oriented approach to the regular ratings for the bank portfolio depending on the prevailing situation. Almost 30% of business partners/financial institutions had to be downgraded in the course of the year. These were mainly banks in the emerging markets of South Africa, India and Brazil, but also included institutions in the US and the United Kingdom. A large number of countries have granted their banks regulatory accounting relief (e.g. extended periods for overdue payments) or other forms of support. As a result, we expect the real impact of COVID-19 on bank balance sheets to be more noticeable from 2021 onwards. The rating migration has led to a reduction in individual bank limits, as well as to higher collateral requirements in some cases. This development has also affected German banks. In addition, in a number of countries, increased or very high collateral requirements were imposed for new business with financial institutions.

Serious negative effects on the corporate sector have emerged as a result of the COVID-19 pandemic. Many sectors have been hit by a dramatic decline in revenue while still having to meet their financial obligations to third parties. This means that, despite government support measures, companies in particularly exposed sectors are often facing acute liquidity bottlenecks, resulting in rating downgrades and, in isolated cases, loan defaults on the part of the affected companies. In the face of these challenges, KfW and its subsidiaries have taken extensive risk/portfolio and credit management measures. In addition to rating downgrades, these include provisions set up for critical sectors in the form of general and forward-looking valuation allowances, 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.

The sectors that are important from KfW's perspective and have been particularly hard hit by the COVID-19 pandemic include, in particular, cruise shipping and passenger air transport. The pandemic has forced the majority of cruise operators, which were operating in a fast-growing and lucrative market prior to the outbreak of the coronavirus, to suspend their operations entirely from the second quarter of 2020 onwards. Business started to ramp up again in small steps as of the end of July. Nevertheless, the setbacks that have emerged due to the pandemic mean that the extent and speed of any expected recovery in the sector remain uncertain. The crisis is reflected in the business figures reported by the shipping companies, with most of them implementing measures to safeguard their liquidity resources which, based on the bank's own assessment, will allow them to survive a shutdown until well into 2021. In this context, the Cruise Debt Initiative of the European ECAs (export credit agencies) launched by KfW's subsidiary KfW IPEX-Bank for cruise ship companies to take pressure off their liquidity resources is to be noted. Significant rating migrations have been witnessed in the cruise shipping including shipyards portfolio, which is largely secured by state credit insurance. In response to the risk situation, an internal management concept was developed with the aim of ensuring tight control and risk reduction until mid-2022 (selective new business characterised by low-risk structures – also via the introduction of risk guidelines; monitoring of target achievement and regular reporting to the responsible committees). Passenger air transport is experiencing a massive global slump (KfW's internal estimates suggest that passenger revenues will fall by around 65% on an annual basis, with a return to pre-crisis levels only in 2023–2024 at the earliest). Despite the government support measures taken by several governments to avert airline insolvencies, the first insolvencies have already occurred. The COVID-19 pandemic is associated with a marked increase in airline debt burdens, which will be a severe handicap for the sector once it is able to reboot its business when the coronavirus protective measures have come to an end. The increasingly difficult liquidity situation faced by individual counterparties means that, as a provider of aircraft financing, KfW is receiving more and more requests for payment deferrals. The quality of the aviation portfolio is clearly declining, with an increasing proportion of companies on the watch list, a number of non-performing loan exposures, declining collateral values and, ultimately, a need for more substantial risk provisions. One of the measures that the group has taken to counteract this development has been to tighten its risk guidelines for new business.

In order to cushion the impact of the effects referred to above, the German Federal Government has launched coronavirus aid measures for companies. Loans extended on behalf of the Federal Government in this context are secured in full by federal guarantees and do not put any pressure on the group's risk situation. Nevertheless, KfW has taken its new duties and the fundamental changes in the risk environment as an opportunity to adjust its risk strategy with regard to measures and decisions in the context of the COVID-19 pandemic.

Organisation of risk management and monitoring

Risk management bodies and responsibilities

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

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. 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 once a month 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. Also once a month, the Credit Risk Committee acknowledges the submissions addressed in the working groups on the basis of the minutes and discusses and makes decisions on general credit risk matters. These include in particular reports and draft resolutions on the risk situation and risk management as well as on credit risk methods and principles. Reports are also made on the development of regulatory requirements, their impact and the progress of implementation projects in KfW Group. To this end, membership of the Credit Risk Committee has been expanded to include the Director of Risk Controlling, the DEG CRO and the managing director of KfW Capital responsible for risk issues. Internal Auditing has guest status.

The Credit Risk Committee is supported by various working groups. The Country Rating Working Group serves as the central unit for assessing country risk. The Collateral Working Group supports the committee in connection with methodological and procedural issues and decisions relating to collateral acceptance and valuation, in particular the (further) development of methods used, approval of validation results and adjustments to the collateral management processes. The Rating Systems Working Group is responsible for credit risk measurement instruments and rating procedures. The Corporate Sector Risk Working Group is a group-wide expert panel which analyses sector and product-related credit risks in the corporate segment. The Credit Risk Committee acknowledges the decisions taken and reports submitted by the working groups and other important matters they have addressed, on the basis of the working groups' minutes.

Market Price Risk Committee

The Market Price Risk Committee meets monthly and 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 and Accounting, as well as 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, and on funding, transfer pricing and 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. Internal Auditing participates in the meetings but is not entitled to vote. 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.

Risk management approach of KfW Group

OVERVIEW

Governance

Strategy/objectives

Strategic objectives

Business strategy ‹‹‹ ››› Risk strategy (including risk appetite)

Securing KfW's promotional capacity by ensuring capital adequacy (ICAAP) and liquidity (ILAAP)

Processes and instruments

Risk committees & internal control procedures

Credit Risk Committee | Market Price Risk Committee | Operational Risk Committee

Direction front/back office

Direction Internal auditing

Process-integrated controls

Process-independent review

Corporate and risk culture

Internal control system (ICS)

Direction internal control mechanisms

Direction Risk Management/Controlling* | Direction Compliance

Risk inventory | Risk assessment | Stress tests | Risk reporting

Internal capital adequacy assessment process (ICAAP)
Ensuring economic and normative risk-bearing capacity, avoiding excessive indebtedness

Internal liquidity adequacy process (ILAAP)

Credit risk

- Portfolio guidelines
- Risk guidelines
- Second vote or central voting (programme business)
- Limit management system
- Proactive collateral management
- Internal rating models
- Loan portfolio model
- Early warning procedure
- Intensive monitoring

Market price risk

- Proprietary models for interest, interest rate volatility, foreign currency and credit spread risks
- Limiting and budgeting

Investment risk

- Risk management process for equity investments at operational level
- Management of strategic equity investments

Operational risk

- Models for determining capital requirements (pillar II)
- Risk assessments
- Risk indicators
- Loss event analyses
- Emergency concepts/crisis team

Project risk

- Central project portfolio management
- Management of individual projects

Reputational risk

- Sustainability management
- Exclusion list and countries blacklist

Liquidity risk

- Proprietary models for liquidity risks
- Liquidity transfer pricing
- Limiting
- Scenario analyses
- Early warning procedure
- Emergency planning

Concentration risk

Risk strategy addresses intra- and inter-risk concentrations as well as profit concentrations

Intra-group risk

Group risk management is monitoring the subsidiaries' business activities according to the "look through" principle

Regulatory risk

Impact and scenarios analyses, including in multi-year capital planning

Model development and validation processes

Model inventory ‹‹‹ ››› Modelling guideline ‹‹‹ ››› Methodology principles

New Products Process ("NPP")/changes in operational processes or structures / mergers and acquisitions

IT system landscape

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

To ensure capital and liquidity adequacy in line with the defined risk appetite, Risk Controlling supports the Executive Board in developing and implementing the group's **risk strategy** together with the relevant subsidiaries, KfW IPEX-Bank, DEG and KfW Capital.

The risk strategy translates the group's long-term and strategic risk objectives into operational risk management requirements. This involves defining risk management objectives for core business activities and measures for achieving targets, as well as determining KfW Group's appetite for material risks.

In order to determine its material risks, KfW Group conducts a **risk inventory** at least once a year. The risk inventory identifies and defines types of risks relevant to the group and then subjects them to a materiality evaluation. The materiality of a risk type depends on the potential danger for KfW Group's net assets, earnings and liquidity. The materiality evaluation looks at both the quantified net risk (taking existing risk 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 2020 inventory identified that KfW Group faces the following material risks: credit, market price, liquidity, operational, equity investment, regulatory, project, reputational and intra-group 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. As a result of the COVID-19 pandemic, ad hoc COVID-19 risk reporting on a weekly basis was introduced as of 9 April 2020 and changed to every two weeks from 30 June 2020 onwards. This reporting process involves reporting to the CRO on developments in normative risk-bearing capacity, credit risk, the yellow list and forbearance measures, rating downgrades, market price and liquidity risk, compliance risk indicators and country-specific topics. The overall risk report has also been expanded to include a section for special matters relating to COVID-19. Ad hoc COVID-19 risk reporting was suspended at the end of 2020 and will be resumed as and when 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, project and operational risks, as well as the models for financial reporting measurement.

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

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

The 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. Achievement of the strategic risk-bearing capacity objectives is also monitored in KfW's planning and management process. To avoid excessive debt, the leverage ratio is integrated into the normative perspective as a further control variable.

The economic perspective of the ICAAP serves to protect creditors from economic loss. 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.

The ICAAP is subject to an annual review of its adequacy. The results of this review are taken into account in the assessment of risk-bearing capacity.

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

Budgets based on total risk exposure in accordance with Art. 92 CRR at the level of each business sector/department are taken into account to ensure risk-bearing capacity. The allocated budgets are available to the business sectors/ departments for backing existing and new business for the various types of risk. Capital allocation is conducted as part of KfW Group's annual business sector planning process. In addition to the 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 (pursuant to advanced IRBA)

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Total risk exposure in accordance with Art. 92 CRR	124,237	138,750
– Credit risk	*116,690*	*131,477*
– Market price risk	*2,234*	*1,732*
– Operational risk	*5,313*	*5,541*
Regulatory capital (available risk coverage resources)	30,129	29,526
– Tier 1 capital	*29,896*	*29,526*
– Tier 2 capital	*233*	*0*
Tier 1 capital ratio	24.1%	21.3%
Total capital ratio	24.3%	21.3%

KfW calculates the overall risk requirement based on an IRBA (partial approval granted in 2017). The increase in the capital ratio is due primarily to the switch to a new system for calculating credit risk indicators in pillar I as part of the IRBA approval process. At 24.3%, the total capital ratio at year-end 2020 remained above the overall capital requirement.

Minimum requirements for total capital ratios

	31 Dec. 2020	31 Dec. 2019
Total SREP capital requirements (TSCR)	**13.0%**	**13.5%**
Capital conservation buffer	*2.5%*	*2.5%*
Countercyclical capital buffer	*0.03%*	*0.156%*
Other systemic buffer	*0.66%*	*0.33%*
Overall capital requirement (OCR)	**16.2%**	**16.5%**

Economic risk-bearing capacity

To assess its economic risk-bearing capacity, KfW Group compares its economic capital requirement for potential losses from material quantifiable risks to capital with its available financial resources. The basis for available financial resources is regulatory capital in accordance with Art. 25–91 (Part Two) CRR, which is adjusted for previously unrecognised accrued profits, hidden burdens on securities, some capital deduction items and any tier 2 capital that may be available.

KfW Group bases its calculation of the economic capital requirement on a time frame of one year. The economic capital requirement for various types of risks is aggregated by adding them up, with no allowance made for diversification effects.

Credit risk is the risk of losses if business partners fail to meet their payment obligations to KfW Group at all, in due time or in full (default) or if their credit ratings deteriorate (migration). Credit risk includes settlement risk in connection with derivative transactions, and 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.

The economic capital requirement for equity investments at operational level is measured in the same way as counterparty and migration risks.

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 types of market price risk in a cautious manner.

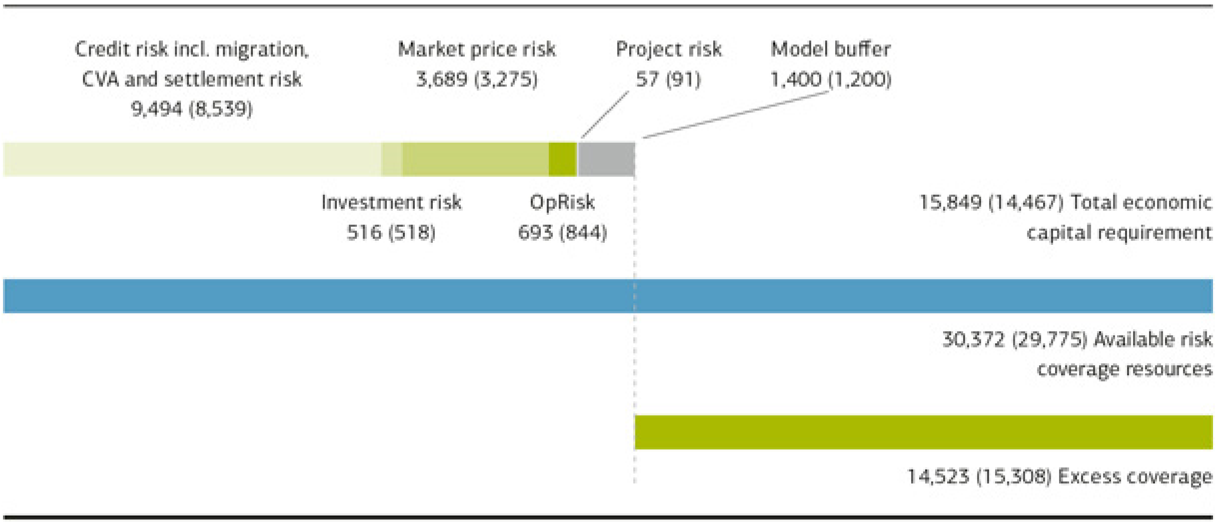
The economic capital requirement for **operational risk** is calculated using an internal statistical model, which was derived from regulatory requirements for advanced measurement approaches. It takes a risk-sensitive approach to internal and external event data and risk scenarios. The capital requirement 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 general assumptions about potential losses in the project portfolio are included in risk measurement.

In addition, as a 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 2020 satisfied a confidence level of 99.90%. The excess coverage of the available financial resources beyond the total capital requirement as of 31 December 2020 of EUR 14,523 million declined compared to 31 December 2019 (EUR 15,308 million). The decline is primarily due to increased capital requirements for credit risks as a result of rating downgrades in the portfolio. In addition, capital requirements for market price risks increased mainly because of higher interest rate and currency risks, as well as due to less relief from the diversification effect. In addition, the model buffer was increased as part of the regular adequacy review of the risk-bearing capacity concept. By contrast, capital requirements for operational and project risks fell. In particular, the accrued consolidated comprehensive income for 2020 strengthened the available financial resources, thus partially offsetting the risk-bearing capacity burden resulting from the higher capital requirement.

Economic risk-bearing capacity as of 31 December 2020
EUR in millions



In brackets: figures as of 31 December 2019

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 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.

The baseline scenario includes projected business performance, expected consolidated comprehensive income, and other effects influencing normative risk-bearing capacity, such as foreseeable changes in the capital structure and methodological developments. It also takes into account the negative effects on the earnings position and risk situation resulting from the COVID-19 pandemic.

The downturn and stress scenarios simulate adverse effects of varying severity on earnings and changes in capital requirements during the forecast period (in the economic perspective directly related to risk-bearing capacity as of the balance sheet date) extending beyond the negative effects expected in the baseline scenario. The stress scenario simulates severe effects from the COVID-19 pandemic leading to a prolonged and severe global recession. In both scenarios, the group assumes an extended increase in credit and equity investment risk. In these scenarios, the EUR and USD interest rates as well as the EUR-USD exchange rate are forecast to develop in line with the economic situation. At the same time, it is assumed that increasing market uncertainties will lead to increased volatility in interest rates, currencies and credit spreads, as a result of which the 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 expected capital requirements.

Stress testing activities in 2020 focused on simulating the potential impact of the COVID-19 pandemic. Brexit, which has now been completed, as well as the risk of excessive sovereign debt in a number of EU countries and in many developing countries and emerging markets were also taken into account. 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. In this context, the stress tests conducted in 2020 simulated how the Group's capital ratios could develop going forward if the COVID-19 scenarios were combined with the potential effects of the planned regulatory changes associated with the finalisation of Basel III ("Basel IV"). A stress test on transition climate risks was also developed in 2020. The scenario calculations and stress tests performed only point to a need for action with regard to KfW Group's risk-bearing capacity and liquidity resources in terms of the potential impact of the finalisation of Basel III. The group is keeping a close eye on developments relating to the finalisation of the supervisory 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.

Debtor level	Sovereigns	Banks	Enterprises	Other
Major rating procedures (Probability of default)	– Country rating	– Bank rating	– Corporate rating – SME rating	– Special financing – Structured products – Retail – Start-up rating – Investment fund rating
Business level	Exposure at default			
	Loss given default			
Portfolio level	Loan portfolio model			

Validation and further development processes

Counterparty default risk is measured by estimating the probability of default, the exposure at default and the loss given default. 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), start-ups and investment funds. 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. Several enhancements were made/initiated (including PD rating procedures for corporates, countries and banks) in 2020 and are scheduled for completion in 2021. Furthermore, a risk measurement procedure was developed 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 will also be implemented in 2021.

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 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.

Exposure at default ("EAD") and valuation of collateral influence the severity of loss. Collateral has a risk-mitigating effect in calculating loss given default ("LGD"). In valuing acceptable collateral, the expected net revenue from

[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.

collateral realisation in the case of loss, including haircuts, is determined. Haircuts to cover the credit risk of final borrowers are a major factor in the valuation of assignments made by financing partners in the on-lending business. For tangible collateral, further haircuts are applied for expected and unexpected changes in value, as well as devaluation resulting from depreciation. Depending on the availability of data, the various valuation procedures for individual types of collateral are based on internal and external historical data and on expert estimates. A risk principle for loan collateral regulates uniform management, valuation and recognition of collateral across KfW Group. In addition to net revenue from collateral realisation, the recovery rate for uncollateralised exposure amounts is also an important component in determining LGD. The collateral valuation procedure and the procedure for estimating the EAD and LGD are also subject to validation and further developed as needed, with new regulatory requirements also addressed.

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. 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.

Information on default risk and default risk concentrations (gross carrying amounts) as of 31 December 2020 – amortised cost

		Loans and advances to banks			Loans and advances to customers[1]		
		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	109,584	0	0	34,580	0	0
	Rating 5–8	135,190	53	0	24,060	40	0
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”.

Information on default risk and default risk concentrations (gross carrying amounts) as of 31 December 2019 – amortised cost

		Loans and advances to banks			Loans and advances to customers[1]		
		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	167,073	0	0	34,522	0	0
	Rating 5–8	84,117	0	0	28,774	60	0
Non-investment grade	Rating 9–15	29,785	6	0	30,913	1,348	0
Watch list	Rating 16–18	454	259	0	3,546	3,300	0
Default	Rating 19–20	0	0	209	0	0	17,335
Total		**281,429**	**265**	**209**	**97,755**	**4,708**	**17,335**

		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	24,103	0	0	31,909	0	0
	Rating 5–8	9,892	0	0	32,451	11	0
Non-investment grade	Rating 9–15	444	0	0	18,952	91	0
Watch list	Rating 16–18	0	0	0	839	564	0
Default	Rating 19–20	0	0	77	0	0	310
Total		**34,440**	**0**	**77**	**84,151**	**667**	**310**

[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”.

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

Credit risks and related credit protection of financial instruments measured at amortised cost as of 31 December 2019

	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	281,661	115	0	26
Loans and advances to customers	118,370	16,277	42	15,685
Securities and investments	34,511	77	0	77
Off-balance sheet transactions	85,055	301	0	230
Total	**519,597**	**16,770**	**42**	**16,018**

[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. These also include 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. Tangible collateral for financial instruments classified as stage 3 consists of aircraft and ship mortgages.

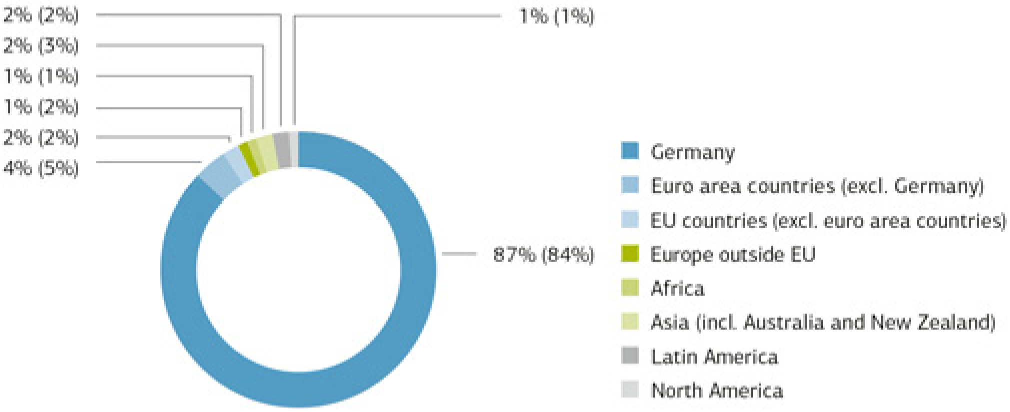
KfW Group did not take possession of any assets previously held as tangible collateral in 2020.

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.

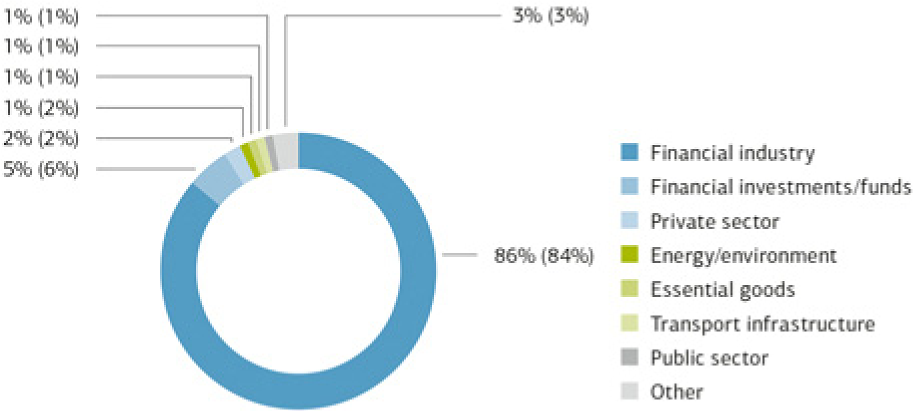
Economic capital requirement by region
31 December 2020 (31 Dec. 2019)



Regions

The increase over the previous year in the euro area's share of the total economic capital requirement to 91% (31 Dec. 2019: 89%) is largely due to an increase in on-lending business (mainly in energy transition and housing programmes), particularly in Germany. KfW's new business relating to the coronavirus aid measures for companies only has a minor impact on the economic capital requirement due to federal guarantees.

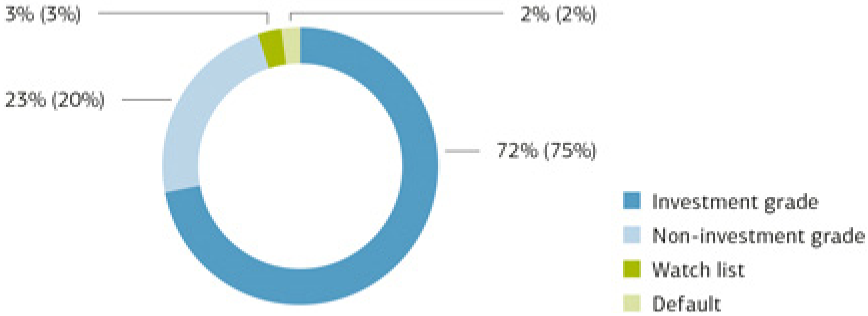
Economic capital requirement by sector
31 December 2020 (31 Dec. 2019)



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. The financial sector's share of the economic capital requirement increased overall, due primarily to an increase in on-lending business (mainly in energy transition and housing programmes).

Credit quality by net exposure
31 December 2020 (31 Dec. 2019)



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. Investment grade exposure decreased year on year, while non-investment grade exposure increased. The change in the structure of the credit quality is due to the rating downgrades in connection with the COVID-19 pandemic. The share of watch list positions of 2.9% (previous year: 2.7%) and the share of default positions of 2.2% (previous year: 1.9%) have increased slightly.

Securitisations in KfW Group's portfolio

Securitisations had a par value of around EUR 6.2 billion as of 31 December 2020. 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 6.3 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. 2020	31 Dec. 2019
	%	%
Europe	99.8	99.7
World	0	0
North America	0.2	0.3
Africa	0	0
Asia	0	0

Exposure based on par values

	CLO	RMBS	CMBS	ABCP	Other securiti-sations	Total as of 31 Dec. 2020	Total as of 31 Dec. 2019
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	0	1,088	2	2,687	2,349	6,125	5,856
Non-investment grade	0	0	0	0	98	98	67
Watch list	0	0	0	0	0	0	0
Default	7	0	0	0	0	7	7
	7	**1,088**	**2**	**2,687**	**2,447**	**6,229**	**5,930**

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

The portfolio volume increased compared to the volume of 31 December 2019 (nominal EUR +0.3 billion). The increase relates largely to the investment grade portfolio. In terms of the geographical breakdown of the underlying asset pool, the entire portfolio remains almost fully attributable to Europe, with Germany accounting for the lion's share.

MARKET PRICE RISK

KfW Group measures and manages market price risk on a present-value basis. The key drivers of market price risk in this context are:

– interest risk (consisting of the jointly analysed sub-risk types: interest risk, as well as tenor and cross-currency basis spread risks);
– interest rate volatility risk;
– foreign currency risk; and
– issuer-related spreads for securities (credit spread risk).

Market price risk within the group required a total of EUR 3.689 billion in economic capital as of 31 December 2020. This is EUR 0.414 billion more than the previous year. The changes are mainly due to the volatile market environment in 2020 and its reflection in the calculation of the economic capital. KfW Group market price risk breaks down as follows:

Economic capital requirement for market price risk

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	EUR in millions
Interest risk[1]	3,012	2,910
Interest risk	3,022	2,998
Tenor basis spread risk	158	209
Cross-currency basis spread risk	377	359
Interest rate volatility risk	319	304
Currency risk	693	611
Credit spread risk	358	318
Diversification	–693	–868
Market price risk	**3,689**	**3,275**

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

The additional loans relating to the special programmes for coronavirus aid were recognised temporarily in KfW's euro interest rate book until they were recognised in the form of a programme on behalf of the Federal Government. Additional limit leeway (an increase in the range for managing interest rate sensitivities, and in the ECAP limits) was created from June 2020 for this purpose. After the loans granted in connection with the special programmes for coronavirus aid had been recognised as a programme mandated by the Federal Government in August 2020, the limits were lowered to the initial May level again, meaning that there are no significant changes in the risk position as of 31 December 2020 compared with 31 December 2019.

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 types of 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 types. The total VaR, interest risk, interest rate volatility risk, credit spread risk and currency risk are limited.

Interest risk

Yield curves defined as risk factors serve as the basis for historical simulation to quantify interest risks. These implicitly include interest risk as well as tenor and cross-currency basis spread risks. In contrast, interest rate volatility and credit spread risks are explicitly not included in interest risk, but are modelled separately and reported using separate key VaR indicators. The capital requirement for interest risk increased by EUR 102 million to EUR 3,012 million as of 31 December 2020.

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 types of risk, using historical simulation (see Value at Risk section). Interest rate volatility risk arises as a side effect of the original business activity and is limited by means of an ECAP sub-limit. The capital requirement for interest rate volatility risk was EUR 319 million as of 31 December 2020.

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 increased by EUR 82 million to EUR 693 million as of 31 December 2020.

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 2020 was EUR 358 million. Credit spread risk increased by EUR 40 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 for present value stress testing (Interest 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 LIQUIDITY ADEQUACY ASSESSMENT PROCESS ("ILAAP")

The internal liquidity adequacy assessment process ("ILAAP") principle describes the management and monitoring of KfW Group's liquidity risk position. The procedure established by the institution serves to identify, measure, manage and monitor liquidity. The aim of the ILAAP is to ensure liquidity and avoid liquidity bottlenecks. It also assesses internal governance and institution-wide controls.

KfW Group prioritises management of insolvency risk. Market liquidity risk and funding risk are examined annually as part of the risk inventory; they were not classified as material as of 31 December 2020. The funding risk is limited indirectly by limiting the maturity gap. Insolvency risks are mainly limited through economic liquidity risk ratios and limits for liquidity potential and liquidity gaps. The aim of the liquidity risk strategy is to preserve the ability to meet payment obligations at all times and when due, even in stress scenarios.

Internal measurement of liquidity risk is based on scenario calculations. This approach first analyses the expected inflow and total outflow of payments for the next twelve months based on business already concluded. This baseline cash flow is then supplemented by planned and estimated payments (e.g. borrowings from the capital market, expected liquidity-related loan defaults or planned new business). The result provides an overview of the liquidity required by KfW Group over the next twelve months. The liquidity required is calculated for different scenarios. In this respect, market-wide and institution-specific risk factors are stressed and an evaluation is made of the impact on KfW Group's liquidity.

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 2020:

KfW liquidity risk indicators

	31 Dec. 2020	**31 Dec. 2019**
	Indicator	**Indicator**
Normal case	0.45	0.10
Stress case	0.49	0.24
Worst case (institution-specific)	0.33	0.31
Worst case	0.55	0.49

The internal liquidity risk indicators remained below the internal limit of 1 throughout 2020.

As a result of the COVID-19 pandemic, KfW had to make disbursements under special programmes for coronavirus aid on behalf of the Federal Government. The amounts disbursed extended considerably beyond the usual payout volume for new lending business. However, this additional funding requirement was addressed through a refinancing facility via the Economic Stabilisation Fund (*Wirtschaftsstabilisierungsfonds – "WSF"*), and a liquidity coverage potential provided by the German Finance Agency in the form of ECB-eligible German government securities. These aspects were adequately reflected in the liquidity risk indicators. Given that the additional fund outflows were covered by the additional coverage potential and the additional refinancing facility, the COVID-19 pandemic did not have any material impact on the group's liquidity situation.

Current funding environment

KfW Group raised a total volume of EUR 66.4 billion on the international capital markets in financial year 2020 (2019: EUR 80.6 billion). It issued a total of 172 individual transactions in 14 different currencies. Around 88% of its long-term funding was in the two main funding currencies: the euro and the US dollar. The share of bonds denominated in euros rose to 64% in 2020 (2019: 52%); while those denominated in US dollars amounted to 24% (2019: 26%). As of 31 December 2020, KfW had received a total of around EUR 39 billion from the WSF to refinance the special aid programmes allocated to it by the Federal Government in response to the COVID-19 crisis.

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. The volume issued under the ECP programme was higher in 2020 than in the previous year, with an outstanding volume of EUR 33.1 billion at the end of 2020. The programme volume of the U.S. Commercial Paper ("USCP") programme was increased from USD 10 billion to USD 20 billion as of 8 April 2020. 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 volume issued under the USCP programme was also significantly higher than in the previous year (USD 43 billion) at USD 59.9 billion. At the end of 2020, the outstanding volume was USD 10.1 billion. In addition, KfW participated in TLTRO III for the first time in 2020, raising EUR 13.36 billion on 18 June 2020 with a maximum maturity of three years.

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. The following types of risk/sub-types of operational risk are also defined and monitored as a rule by specialised second line of defence units: compliance risk, information security risk, payment transaction risk, legal risk, physical security risk, service provider risk (including outsourcing risk), personnel risk, model risk, operational risk from adjustment processes, conduct risk and information technology risk unrelated to information security.

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 of 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 Central Services (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.

Losses in KfW Group are recorded in an OpRisk events database and updated in the event of changes/developments. After each quarter, recorded loss events and any measures introduced as a result are reported to the relevant departments. The Executive Board, the Board of Supervisory Directors and the Operational Risk Committee are briefed monthly or quarterly as part of internal risk reporting. Ad hoc reports are also made if a loss exceeds a certain level.

In addition, potential operational risks are identified based on scenarios in risk assessments that are carried out group-wide. Within the risk assessments, operational risk is measured on the basis of expert estimates in combination with other information such as internal loss events, which are backed by a distribution assumption for loss frequency and amount. The results of the risk assessment are reported to the Operational Risk Committee and the Executive Board. As part of the risk assessment, the business areas check the implementation of additional risk-mitigating measures (e.g. checks as part of the internal control system, or “ICS”).

Where adequate monitoring of operational risks using metrics is possible, risk indicators are used. Compliance with centrally prescribed risk-mitigating requirements (e.g. training course participation, deadlines, escalation procedures) is monitored 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 and are included in the calculation of the economic capital requirement for OpRisk. Furthermore, the potential impact of COVID-19 was included in the risk assessment, meaning that it is also reflected in the economic capital requirement for OpRisk. The overall situation associated with the COVID-19 pandemic is fraught with uncertainty. It could escalate at any time and cannot be represented in full using the OpRisk methodology.

The risk assessments were completed as planned in 2020. In some cases, expert estimates used in the past were replaced by empirical data, thus improving the informational value of the scenarios (e.g. in compliance matters). Updating and recalculation of the scenarios led to a decrease in the ECAP for operational risks (approx. EUR –150 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 mobilised its crisis task force to coordinate measures addressing the coronavirus 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.

OTHER RISKS

Equity investment risks

In managing equity investment risks, KfW Group differentiates between risks from equity investments at operational level and strategic equity investments:

Equity investments (operational level)

Undertaking equity investments at operational level is part of the group's promotional mandate. Accordingly, there are equity investments in connection with domestic and European investment financing and in the Promotion of developing countries and emerging economies and Export and project finance business areas. KfW group-wide basic rules for equity investments at operational level are set out in guidelines. Specific rules tailored to certain segments of equity investments are also set out in portfolio guidelines, working instructions or risk guidelines. 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.

In the risk management process, reputational risk is primarily managed in a decentralised manner. The framework for this purpose includes sustainability management with group-wide sustainability mission statement, which uses a multidimensional approach to address central areas of action in the banking business and operations and as an employer. Furthermore, examinations of new activities in the NPP as well as of outsourced activities in outsourcing management are regularly conducted to detect potential reputational risks.

Moreover, as part of risk identification, the central reputational risk control function coordinates qualitative reputational risk assessment and creates a risk profile outlining the group's greatest reputational risks. In addition, reputational risk events that have occurred are reported on an ongoing basis.

In the context of reputational risks, no significant loss events relating to the COVID-19 pandemic have occurred to date. As a key service provider to the German Federal Government in the latter's endeavours to address the consequences of the pandemic, KfW's reputation experienced a positive development over the course of 2020.

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 objectives with regard to cost, time and achievement of objectives (e.g. new technical requirements, and time constraints arising from parallel projects). Managing project risk is part of project management and takes place in both the project planning and execution stages.

The Central Project Management Office ("CPMO") supports the projects in fulfilling their objectives and achieving their targets. The CPMO provides scaled specifications and support services according to project size. As the central authority for project portfolio management, the CPMO provides the methodological framework for implementation of projects within the group and is responsible for the evaluation and presentation of the risk situation of the project portfolio and the department portfolios for a specified number of projects. Compliance with this framework and these requirements by the aforementioned projects is also monitored and supported.

The impact of COVID-19 left its mark on the overall portfolio, including as a result of project postponements and additional requirements.

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 capitalisation 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.

Additional internal control procedures

Process-integrated internal control system (ICS)

The aim of KfW Group's ICS is to use suitable principles, measures and procedures to ensure the effectiveness and profitability of business activities, compliance with the legal requirements applicable to KfW Group, the accuracy and reliability of external and internal accounting, and the protection of assets.

There are group-wide ICS rules as well as binding group-wide minimum requirements of the ICS. KfW Group's ICS is based on the relevant legal (bank regulatory) requirements[6)], in particular those set forth in the KWG and MaRisk, and the market standard COSO model[7)].

The KfW Executive Board holds overall responsibility for the group's internal control system. At KfW IPEX-Bank, KfW Capital and DEG, the 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.

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

Compliance

The Executive Board bears the overall responsibility for compliance within the Group. The Executive Board delegates the associated tasks to the Compliance department. The officers appointed by the Executive Board for the relevant areas of responsibility are located in the Compliance department. They include, in particular, the (group) money laundering officer, the fraud officer (central unit in accordance with Section 25h KWG) and the company data protection officer.

The Compliance organisation is structured in accordance with the Three Lines of Defence model and as the second line of defence, it is aligned with the requirements for a MaRisk compliance function. In this context, group compliance has included measures to comply with data protection regulations and tax compliance, as well as measures for the prevention of insider trading, money laundering, terrorism financing and other criminal activities, and for monitoring legal requirements and the associated implementation measures. There are therefore binding rules and procedures that influence the day-to-day implementation of values and the corporate culture, which are updated regularly and on an ad hoc basis to reflect current law as well as market requirements. The aim is to manage and assess compliance risks as part of non-financial risks (“NFRs”) by means of key performance indicators (“KPIs”) to be developed (e.g. for money laundering, fraud, financial sanctions, securities compliance, data protection) and to establish a risk management cycle based on current management philosophy regarding financial risks (credit risk).

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.

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/terrorism financing, other criminal activities). This is due to the structural use of existing implementation channels (on-lending) and products (promotional loans). To date, KfW has not been commissioned with the direct disbursement of non-repayable grants to mitigate the economic implications of the COVID-19 pandemic.

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 2020 of the decentralised risk management processes and central aspects of risk management and risk control which were relevant group-wide. In order to take account of the significant changes in the risk situation as a result of the COVID-19 pandemic, Internal Auditing adjusted its auditing activities in a risk-oriented manner in 2020 and, among other things, focused on auditing support for key issues, such as the domestic promotional business, Financial Cooperation, ensuring IT operations, payment transactions and funding, as well as crisis management. Other focus areas of audit activity included risk management, especially with regard to models, as well as process audits and data protection implementation projects.

Moreover, Internal Auditing continued to monitor the ongoing development of risk measurement procedures in 2020 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.

Forecast and opportunity report

General economic environment and development trends

KfW expects global real gross domestic product ("GDP") to grow by 5.4% year on year in 2021, after the COVID-19 pandemic caused it to decline by 3.5% in 2020 according to IMF estimates. The higher growth of global real GDP in 2021, compared to global real GDP in 2020 and the average global real GDP for 2010 to 2019, is expected to result from the recovery following the 2020 recession. This pattern is forecast for both industrialised nations and developing countries/emerging economies as defined by the International Monetary Fund ("IMF"). However, in 2021, the real GDP of industrialised nations is not expected to reach the pre-crisis level of 2019, whereas that of developing countries/emerging economies is likely to exceed the 2019 level, which, however, is mainly due to China (see table on gross domestic product at constant prices). These aggregated figures mask regional differences, which, according to the IMF's World Economic Outlook of October 2020, see the developing countries and emerging economies of Latin America and the Caribbean coming in lowest in 2021 compared to the pre-crisis level of 2019, while Asia's developing countries and emerging economies will probably more than close the gap.

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

	2020 estimate	2021 forecast	2010–2019 average	2021 forecast
	in%	in%	in%	2019 index = 100
Global economy*	–3.5	5.4	3.7	102
Industrialised countries*	–4.9	4.1	2.0	99
Developing countries and emerging economies*	–2.4	6.4	5.1	104
Developing countries and emerging economies ex China*	–4.7	5.0	4.0	100

* 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 a numbers of risks associated with this baseline scenario, which could lead to lower global growth of real GDP in 2021 as a result of various possible situations: (a) if the pandemic cannot be contained; (b) if fiscal support is scaled back early; (c) if international financing terms are unexpectedly tightened or existing conflicts and uncertainties in international trade get worse or spread; (d) if corporate insolvencies increase; or (e) if geopolitical disputes, extreme weather conditions, natural disasters (climate change) or social unrest arise. A more favourable development in global real GDP than anticipated would be conceivable in particular if safe and effective vaccines against COVID-19 can be developed, produced and distributed quickly, but also if the economy returns to normal sooner than expected following the recession or fiscal aid packages are larger than assumed.

For the **euro area,** KfW expects price-adjusted GDP to grow by 5.1% in 2021, which is more than three times the average of 2010–2019. However, if this projection is accurate, the increase in total economic output would not be enough to return to 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). KfW agrees with the European Commission's assessment that containment measures to combat COVID-19 cannot be completely dispensed within 2021, and that the economic recoveries of the member states of the European monetary union are likely to progress at different speeds. All demand-side components of GDP are likely to make a positive contribution to price-adjusted GDP growth in 2021. As regards private consumption and investment, this forecast is based on the European Commission's assessment that businesses and households will adjust to the changed conditions resulting from the pandemic. This, together with government support measures, is likely to trigger postponed consumer spending and investment plans at some point during 2021. The European Commission only expects a limited contribution to growth from net exports (0.3 percentage points) due to ongoing trade policy tensions and restrictions on cross-border mobility.

KfW expects price-adjusted GDP in **Germany** to increase by 4,0% year on year in 2021. In light of the forecasts for the global economy described above and the assumptions on progress in containing the coronavirus pandemic in 2021, KfW expects that net exports will propel price-adjusted GDP growth in 2021. Among the domestic expenditure components of GDP, KfW expects gross fixed capital formation in machinery and equipment and private consumption expenditure to achieve the highest price-adjusted growth rates in 2021. The latter is based on the assumption that the proportion of the working population whose place of work is in Germany will rise in 2021. Even though the growth rate of price-adjusted GDP expected by KfW for 2021 is 2.1 percentage points above the average growth rate for the previous ten years, this growth in price-adjusted GDP expected for 2021 will not be enough to fully compensate for its decline of 5.0% in 2020. Price-adjusted GDP in 2021 is therefore expected to be lower 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).

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

	2020	2021 forecast	2010–2019 average	2021 forecast
	in %	in %	in %	2019 index = 100
Euro area	–6.8	5.1	1.4	98
Germany	–5.0	4.0	1.9	99
USA	–3.5	3.8	2.3	101

In KfW's view, setbacks in the containment of the coronavirus pandemic represent the greatest economic risk for Germany and the European Monetary Union, which could result in lower than expected growth in price-adjusted GDP in 2021. Additional risks include possible conflicts in the further development of long-term relations between the European Union ("EU") and the United Kingdom, geopolitical and trade policy tensions at a global level, and Italy's sovereign debt, which is a permanent source of uncertainty as regards confidence in the financial markets of the European Monetary Union and thus also Germany. Increasing shortages of skilled workers and insufficient further training also pose a risk for Germany in particular. Opportunities could be found primarily in unexpectedly fast progress in overcoming the coronavirus pandemic.

For the **euro area,** KfW expects the deposit rate of the European Central Bank ("ECB") to remain at –0.50% for the whole of 2021. The ECB has responded to the COVID-19 pandemic with several targeted measures, without lowering key interest rates any further. Its most important instruments include the pandemic emergency purchase Programme ("PEPP"), pursuant to which securities purchases in an amount of EUR 1,850 billion are planned. The programme involves both government and corporate bonds, which can be purchased very flexibly in terms of time, asset class and country of origin until at least the end of March 2022. The reinvestment of principal payments at maturity of securities purchased under this programme has been extended until at least the end of 2023. Banks are being provided with very cheap liquidity via targeted longer-term refinancing operations (TLTRO III) until at least June 2022. For banks that maintain at least their eligible net lending between October 2020 and December 2022, the interest rate applied to all TLTRO III transactions from 24 June 2021 to 23 June 2022 will be 50 basis points lower than the average deposit facility rate over the same period and in no case above –1%.

While these measures provide favourable financing conditions, economic output in the euro area will likely continue to recover in 2021 and approach pre-crisis levels. KfW therefore expects a gradual increase in EUR swap rates during 2021. The yield curve (the spread between ten and two-year swap rates) is expected to steepen on average in 2021.

KfW also expects a moderate rise in interest rates for the **USA** in 2021 based on the continued economic recovery. In KfW's view, the yield curve (the spread between ten and two-year USD swap rates) is expected to steepen sharply on average in 2021. As employment and inflation are expected to remain well below target over the course of the year, the Federal Reserve is expected to leave the Fed funds rate range between 0.00% and 0.25%.

New business projections

Overview

As the central control variable for its net assets, KfW Group projects new business volume of EUR 81.0 billion for 2021, which includes KfW Development Bank's coronavirus aid programme (approx. EUR 2 billion). Due to the extension of the special programmes for coronavirus until 30 June 2021, KfW expects a significant increase in the commitment volume in domestic promotion above the commitment trend shown here. Dynamic development means that we can only estimate this and any substitution effects on other funding programmes within a broad range. The further development of the pandemic, its economic consequences and any political measures will be decisive. KfW's internal forecast for all domestic coronavirus aid programmes in 2021 is currently in a range between EUR 6 and 23 billion. The estimate is subject to great uncertainty given the current situation. Implementation is based on established processes, full risk hedging by the Federal Government and the funding option via the Economic Stabilisation Fund (*Wirtschaftsstabilisierungsfonds – "WSF"*).

Domestic business

The business sector **Mittelstandsbank & Private Kunden (SME Bank & Private Clients)** is divided by client group into two segments: SME Bank and Private Clients.

In Private Clients, the business sector expects stable demand for housing-related and education financing comparable to that of previous years, despite the ongoing COVID-19 pandemic in 2021. Experience of the development of the COVID-19 pandemic in 2020 showed a high level of willingness to invest in projects planned for the longer term, partly due to the government aid programmes for the economy and private households. The main triggers for demand are structural developments in the market and society, which had already occurred before the coronavirus crisis and remain relevant: (1) low interest rates favour investment in residential property; (2) climate protection and energy transition are boosting demand in the housing-related programmes relating to energy effciency; (3) demographic trends require increasing investment in needs-based housing development; and (4) the affordable housing crisis entails further funding potential.

In view of the sustained high demand for the educational funding anchored in the segment, Private Clients expects the volume of such promotion to continue at the level of the past few years. Due to the extension of the coronavirus measure in the KfW Student Loan until the end of 2021 (temporary reduction of interest to 0%), we assume that demand will increase in some areas.

The SME Bank business segment expects mixed business growth in the commercial sector. In light of the ongoing COVID-19 pandemic, demand at the beginning of 2021 is expected to continue to focus on liquidity assistance under the federal coronavirus aid programmes, which will remain available to all business size classes until mid-2021. The vaccine rollout and the expected decline in the infection rate lead us to assume that small and medium-sized enterprises will increasingly replace the primary objective of securing liquidity with the (re)initiation of investment projects. We therefore expect a shift in focus to long-term financing that targets the megatrends climate protection and digitalisation and addresses the population’s growing environmental awareness and increased digital affinity. This business sector thus aims to continue to position itself as a catalyst for setting the economic course in the future.

In addition to the unpredictable development of the pandemic, the business sector is also addressing other major challenges, including implementing measures to pass on negative funding rates to financing partners to ensure the attractiveness of the promotional loan in the persistent low-interest environment. Moreover, digitalisation of promotional business increasingly requires a high level of standardisation and machine readability of promotional products and processes in order to enable the digital provision of promotional information/services on relevant platforms and portals, also in the interest of client focus.

All in all, the business sector expects a rapid economic recovery in 2021, with a healthy construction sector and a gradual increase in commercial investment. The projected figure for non-derivative new business is EUR 41.1 billion. Additional commitments of between around EUR 6 and around EUR 22 billion are expected for 2021 under the coronavirus aid measures.

The business sector **Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients)** plans promotion with a new business volume of EUR 8.8 billion in 2021 (actual figure for 2020: EUR 19.2 billion of which around EUR 9.5 billion for coronavirus-related commitments). This figure does not include the extension of the coronavirus aid programmes on behalf of the Federal Government. According to current estimates, the additional new commitment volume in this business sector could amount up to EUR 1 billion. The key factors here are the further course of the pandemic and its economic impact. In core business excluding special promotion related to COVID-19, more promotional impetus can be provided than in previous years.

In the Customised Finance segment, the impact of the coronavirus pandemic on corporate loan demand for new investments cannot be predicted yet. Excluding the special programmes, the segment plans a commitment value of around EUR 0.5 billion, as demand for traditional corporate financing is expected to be around 20% lower than the projected figure for 2020 following a high level of borrowing under the coronavirus aid programmes.

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. However, the strained budget and debt situation of some municipalities, combined with limited capacities in the construction industry and administration, continues to restrict their investment opportunities. 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. However, the segment expects to be able to meet substantial demand in this area too. Demand for global loans to support leasing investments will likely be higher in 2021 than in the previous year, as a stabilisation of business development is evident among leasing partners despite the ongoing pandemic. As regards funding for export loans, we assume that demand will remain stable, although it will be influenced by major projects in the German export industry and will depend on the development of the export economy during and after the COVID-19 pandemic.

The persistent low-interest environment represents a permanent challenge in 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 **KfW Capital** subsidiary expects a commitment volume of EUR 383 million in financial year 2021. The achievement of the projected volume could be hampered by the economic downturn and an accompanying decline in demand for venture capital.

The focus of promotion and financing remains on making equity investments in venture capital ("VC") and venture debt funds. The three existing products and programmes (High-Tech Start-Up Fund, coparion, ERP VC Fund Investments) form the core of the offering. KfW Capital has also been deploying the Corona Matching Facility and the Corona Liquidity Facility on a trust basis for KfW and indirectly for the Federal Government since 2020. The existing products are to be supplemented via the Future Fund, the specific details of which are still the subject of an ongoing project in close consultation with the Federal Ministry of Finance ("BMF") and the Federal Ministry for Economic Affairs and Energy ("BMWi").

Financial markets

The business sector **Financial markets** plans new investments in the amount of EUR 0.3 billion for financial year 2021 in order to achieve the target volume of the green bond portfolio of EUR 2 billion.

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 manifesting themselves primarily in lower country ratings. In the same way as protectionist efforts, these 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. All in all, developments in the post-COVID era will still be plagued with great uncertainty, which from today's perspective leaves 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. This business sector is pursuing its growth path by further developing its business model into a structuring and placement platform. The coronavirus pandemic is leading to changes as regards financing objects. Demand for financing cruise ships and aircraft has declined sharply, and financing for new commodity projects has been delayed. On the other hand, demand for financing for infrastructure investments, particularly in digital infrastructure, has increased. Overall, business potential is still there. Due to the current situation, Export and project finance plans a commitment volume of EUR 16.2 billion for 2021, which is around 15% less than the volume projected in 2020 (actual figure for 2020: EUR 16.6 billion).

The **Promotion of developing countries and emerging economies** business sector encompasses the business activities of KfW Development Bank and DEG.

The **KfW Development Bank** business area is expected to experience dynamic business growth also 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 2021. In view of the ongoing COVID-19 pandemic, support to partner countries through rapid and efficient implementation of the coronavirus immediate assistance programmes will play an important role in 2021. In addition to the implementation of the coronavirus special programmes, 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 the EU. The German Federal Government and the European Commission assume responsibility in the area of international environmental and climate protection and are involved in a large number of climate initiatives. The Federal Ministry for Economic Cooperation and Development (*Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung – "BMZ"*) also supports the G20 Compact with Africa initiative through reform partnerships with currently six selected countries. Official Development Assistance ("ODA") budget funds for development cooperation and international climate finance from both the Federal Government's budget and the European Commission continue to increase. In connection with the refugee and crisis context, the Sustainable Development Goals ("SDGs") and the Paris Agreement on climate change, the European Commission has developed an "EU External Investment Plan". At the same time, the European Commission and the member states are developing a range of promotional instruments for European development cooperation (the Neighbourhood, Development and International Cooperation Instrument of the Multiannual Financial Framework/MFF 2021–2027). This initiative focuses, among other things, on increased mobilisation of private capital, greater visibility for European development cooperation and closer cooperation between European promotional institutions. The quality requirements for development cooperation are also increasing, coupled with high demands for transparency and information from policymakers and the public regarding the results, effects and risks of development cooperation. Against the backdrop of planned projects of the German Federal Government and international institutions, KfW Development Bank expects a new business volume of EUR 12.6 billion for 2021.

Economic development in the 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 2021. In this challenging economic environment, an effective and profitable new business portfolio of around EUR 13.4 billion by 2024 is targeted, including by the following means:

a) priority portfolio management to provide support to existing customers as a reliable partner in times of crisis, to secure contributions to local development (labour force, local income, contributions to local communities) and at the same time to strengthen DEG’s risk position.

b) utilising opportunities for new business with business partners that have sustainable business models in sectors, among others, with relevance to COVID-19, such as healthcare, pharmaceuticals, communications, renewable energy, infrastructure and food, as well as supporting German companies entering the African market (AfricaConnect) and other developing countries and emerging economies.

DEG expects a new commitment volume of EUR 1.85 billion for financial year 2021.

Funding projections

KfW issues bonds in various currencies to fund its promotional activities worldwide and is assessed by rating agencies as having excellent credit quality (triple A rating) thanks to the explicit direct guarantee of the Federal Government. 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 account for the highest share of total volume. Further diversification takes place through various products depending on the market. As part of the KfW Special Programme, new funding sources were tapped in the form of access to federal auctions via the government-owned WSF and participation in the targeted longer-term refinancing operations of the Eurosystem via TLTRO III.

Long-term funding via the capital markets of EUR 70 to 80 billion is projected for 2021. This range is broader than in the past as KfW’s participation in TLTRO III is still open in 2021. Use of additional funds from the WSF depends on the development of the KfW Special Programme for coronavirus aid which is expected to run until the end of June 2021.

Earnings projections

In the group earnings projections for 2021, KfW expects Consolidated profit (before IFRS effects) of approximately EUR 0.8 billion based on anticipated macroeconomic conditions. The expected result remains below the strategic objective of EUR 1 billion.

Net interest income (before promotional expense) of EUR 2.5 to 2.6 billion is expected for 2021. Rising interest margins, primarily in the lending business, are likely to be offset by continuing burdens from the low interest rate environment in 2021. KfW therefore expects that the income generated by return on equity will continue to decline. Opportunities and risks for consolidated profit may arise primarily for the treasury result from market conditions deviating from projections in conjunction with KfW’s positioning.

KfW projects net commission income totalling EUR 0.6 billion, the same as was generated in 2020. This includes remuneration for the rollout of the coronavirus aid measures launched in 2020.

Administrative expense projections are based on the Delta cost-cutting project requirements, resulting in expected administrative expense of EUR 1.5 billion for the group in 2021. The reasons for the projected increase in costs are, in particular, the strategic plans for further development of the bank and spending in connection with the coronavirus aid measures. These are associated with either earnings increasing in the medium to long term, or expenses offset by remuneration from the Federal Government for services provided. Moreover, expenses for implementation of the Supervisory Requirements for IT in Financial Institutions (*Bankaufsichtliche Anforderungen an die IT – "BAIT"*) are included for 2021.

Overall, the operating result before valuation is expected to decline year-on-year. The cost-income ratio ("CIR") before promotional expense is budgeted at 48% for 2021.

At EUR 0.6 billion, expenses resulting from risk provisions for lending business forecast for 2021 are EUR 0.2 billion lower than the risk provisions needed for 2020, which were affected by the coronavirus pandemic. However, risk provisions for lending business for 2021 are heavily dependent on the further course of the pandemic. After the 2020 valuation result was heavily impacted by coronavirus-related negative fair value effects, mainly felt in the equity investment portfolio, planning for 2021 assumes a positive valuation result of around EUR 0.1 billion. A recovery to the pre-crisis level is not expected before 2022. 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 2021. Realisation of a year-on-year increase of EUR 0.3 billion compared to 2020 promotional expense will depend on market conditions in 2021.

Overall conclusion

In light of the COVID-related economic environment and expected demand, KfW projects new business volume of EUR 81 billion and consolidated profit of EUR 0.8 billion for 2021.

Consolidated financial statements

Consolidated statement of comprehensive income

Income statement

	Notes	2020 EUR in millions	2019 EUR in millions
Interest income from the effective interest method		1,876	2,767
Other interest income		609	1,151
Interest income, total	(20)	**2,485**	**3,918**
Interest expense	(20)	–62	1,571
Net interest income		**2,547**	**2,347**
Net gains/losses from risk provisions[1), 2), 3)]	(7), (21)	–781	–173
Net interest income after risk provisions		**1,766**	**2,174**
Commission income	(10), (22)	599	524
Commission expense	(22)	26	25
Net commission income		**573**	**499**
Net gains/losses from hedge accounting	(8), (23), (55), (56)	16	–1
Net gains/losses from other financial instruments at fair value through profit or loss	(24)	–428	–9
Net gains/losses from disposal of financial assets at amortised cost	(25)	–1	–6
Net gains/losses from investments accounted for using the equity method	(6), (26)	31	15
Administrative expense	(27)	1,342	1,328
Net other operating income or loss	(28)	–14	46
Profit/loss from operating activities		**600**	**1,391**
Taxes on income	(29)	76	23
Consolidated profit		**525**	**1,367**

1) Changed item name and structure (see Note 3)
2) Adjusted prior-year figure due to change in recognition (see Note 3)
3) Net gains/losses from non-substantial contractual modifications are reported under Net gains/losses from risk provisions.

Consolidated statement of comprehensive income

	2020 EUR in millions	2019 EUR in millions
Consolidated profit	**525**	**1,367**
Other comprehensive income	**–233**	**–320**
Change in own credit risk of liabilities designated at fair value through profit or loss	–114	–14
Defined benefit pension obligations (before taxes)	–126	–323
Deferred taxes on defined benefit pension obligations	6	17
Consolidated comprehensive income	**292**	**1,047**

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.

Consolidated statement of financial position

Assets

	Notes	31 Dec. 2020	31 Dec. 2019
		EUR in millions	EUR in millions
Cash reserves	(32)	44,178	28,195
Financial assets at amortised cost[1), 2)]	(7), (11), (33), (34), (35), (55), (56)	460,615	434,542
Financial assets at fair value[1), 2)]	(7), (36), (57)	18,077	18,295
Value adjustments from macro fair value hedge accounting	(8), (37), (56)	12,220	10,887
Derivatives designated for hedge accounting	(8), (38), (55), (56), (57)	7,958	10,859
Investments accounted for using the equity method	(6), (39)	613	609
Non-current assets held for sale	(12), (40)	81	0
Property, plant and equipment	(15), (41)	999	1,021
Intangible assets	(16), (42)	172	188
Income tax assets	(43)	714	703
Other assets	(10), (44)	758	723
Total		**546,384**	**506,022**

1) Changed item name and structure (see Note 3)
2) Adjusted prior-year figure due to change in recognition (see Note 3)

Liabilities and equity

	Notes	31 Dec. 2020	31 Dec. 2019
		EUR in millions	EUR in millions
Financial liabilities at amortised cost[1), 2)]	(7), (45), (55), (56)	483,867	448,208
Financial liabilities at fair value[1), 2)]	(7), (46), (57), (58)	16,231	15,466
Value adjustments from macro fair value hedge accounting	(8), (47), (56)	57	77
Derivatives designated for hedge accounting	(8), (48), (55), (56), (57)	9,910	6,674
Provisions	(7), (17), (49)	3,543	3,335
Income tax liabilities	(50)	450	358
Other liabilities	(10), (51)	529	542
Equity	(18), (52)	31,797	31,362
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		19,411	18,742
Fund for general banking risks		600	600
Revaluation reserves	(7), (18)	–1,151	–918
Total		**546,384**	**506,022**

1) Changed item name and structure (see Note 3)
2) Adjusted prior-year figure due to change in recognition (see Note 3)

Consolidated statement of changes in equity

Consolidated statement of changes in equity[1)]

	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. 2019	**3,300**	**8,447**	**1,191**	**17,371**	**600**	**–594**	**30,315**
Consolidated comprehensive income	0	0	0	1,367	0	–320	1,047
Consolidated profit	*0*	*0*	*0*	*1,367*	*0*	*0*	*1,367*
Other comprehensive income	*0*	*0*	*0*	*0*	*0*	*–320*	*–320*
Reclassifications within Equity	0	0	0	4	0	–4	0
Other changes in share capital	0	0	0	0	0	0	0
As of 31 Dec. 2019	**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
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**

1) Adjusted presentation (see Note 3)

Other changes in share capital of EUR 144 million within Retained earnings 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.

The line Reclassification of revaluation reserves to retained earnings from the previous year includes a reclassification in the amount of EUR 4 million from revaluation reserves to retained earnings recorded directly in equity due to a disposal within the liabilities measured at fair value.

The following tables as well as Note 52 provide details on the Consolidated statement of changes in equity.

Development of revaluation reserves[1)]

	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. 2019	**–21**	**–603**	**30**	**–594**
Consolidated comprehensive income	–14	–323	17	–320
Other comprehensive income	*–14*	*–323*	*17*	*–320*
Reclassifications within Equity	–4	0	0	–4
As of 31 Dec. 2019	**–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**

[1)] Adjusted presentation (see Note 3)

Consolidated statement of cash flows

	2020 EUR in millions	2019 EUR in millions
Consolidated profit	**525**	**1,367**
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	990	402
Changes in provisions for pensions and similar commitments and Other provisions[1]	143	119
Other non-cash expenses and income	59	–9
Profit/loss from the disposal of assets[1]	0	0
Other adjustments	–2,531	–2,314
Subtotal	**–814**	**–435**
Changes in assets and liabilities from operating activities after adjustment for non-cash items:		
Financial assets at amortised cost[1), 2)]	–26,879	–5,856
Financial assets at fair value[1), 2)]	201	–322
Other assets relating to operating activities	1,454	–3,378
Financial liabilities at amortised cost[1), 2)]	35,659	21,970
Financial liabilities at fair value[1), 2)]	–636	132
Other liabilities relating to operating activities	4,428	–3,371
Interest and dividends received	2,485	3,918
Interest paid	62	–1,571
Income tax paid	–16	–33
Cash flow from operating activities	**15,943**	**11,054**
Property, plant and equipment/Intangible assets:		
Cash proceeds from disposals	2	5
Cash payments for acquisitions	–95	–163
Securities and investments (equity investments):		
Cash proceeds from disposals/Cash payments for acquisitions	–12	–165
Cash flow from investing activities	**–105**	**–324**
Cash proceeds from/Cash payments for capital increases/decreases	0	0
Changes from other financing activities	144	0
Cash flow from financing activities	**144**	**0**
Cash and cash equivalents as of the end of the previous period	**28,195**	**17,465**
Cash flow from operating activities	15,943	11,054
Cash flow from investing activities	–105	–324
Cash flow from financing activities	144	0
Cash and cash equivalents as of the end of the period	**44,178**	**28,195**

[1)] Changed item name due to change in recognition (see Note 3)
[2)] Adjusted prior-year figure due to change in recognition (see Note 3)

The balance of Cash and cash equivalents reported in the statement of cash flows in accordance with IAS 7 is identical to the statement of financial position item Cash reserves and thus comprises cash on hand and balances with central banks.

The statement of cash flows shows the changes in Cash and cash equivalents in the financial year classified as the Cash flows from operating activities, investing activities and financing activities. The item Other adjustments largely comprises the adjustment for net interest income in the amount of EUR –2,547 million (2019: EUR –2,347 million). The cash payments for the repayment portion of lease liabilities included in Cash flow from operating activities amounted to EUR 11 million in financial year 2020 (2019: 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 "Risk report – Liquidity risk".

Notes

Accounting policies

(1) Basis of presentation

KfW is the promotional bank of the Federal Republic of Germany and was founded in 1948 as a public law institution based in Frankfurt am Main.

The Executive Board of KfW is responsible for the preparation of the consolidated financial statements and the group management report. After the recommendation of the Audit Committee, the consolidated financial statements and the group management report are submitted to KfW's Board of Supervisory Directors for approval. As of 2 March 20211), no significant events have occurred since the reporting date (31 December 2020).

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. KfW's stakes in the associated company "AF Eigenkapitalfonds für deutschen Mittelstand GmbH und Co. KG" were divested in financial year 2020.

Pursuant to Section 315e (1) of the German Commercial Code (*Handelsgesetzbuch – "HGB"*), the consolidated financial statements as of 31 December 2020 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 group 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 2020, except for some associated companies accounted for using the equity method, where financial statements as of 30 September 2020 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).

[1] Date of Executive Board approval of publication

(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 2020

The IASB issued “Definition of Material (Amendments to IAS 1 and IAS 8)” in October 2018. The amendments are aimed at standardising the definition of “material”. IAS 1 “Presentation of Financial Statements” now contains a standard definition of “material” as well as the corresponding text numbers; the definition in IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors” will be replaced by a reference to IAS 1 in future. The amendments are to be applied for financial years beginning on or after 1 January 2020. The amendments do not have any impact on KfW Group’s net assets, financial position and results of operations.

The IASB also issued “Amendments to References to the Conceptual Framework in IFRS Standards” in March 2018, along with the revised framework. These amendments are to be applied for financial years beginning on or after 1 January 2020. The amendments do not, however, have any impact on KfW Group’s net assets, financial position and results of operations.

The IASB published “Definition of a Business (Amendments to IFRS 3)” in October 2018. The amendments are aimed at resolving the difficulties for an entity in determining whether it has acquired a business or a group of assets. The amendments are relevant for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2020. The amendments do not have any impact on KfW Group’s net assets, financial position and results of operations.

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 Benchmark Reform involves fundamentally changing market practices, which affect all market participants to the same extent. Therefore, it may be assumed that the transition to the new reference rates will occur in such a manner that it creates neither advantages nor disadvantages for any counterparty, in other words, it will result in a level playing field. Based on the anticipation of a rate transition that will be largely present value neutral, the impact of the reliefs is not expected to be very significant.

The reference rate transition as part of the Benchmark Reform entails changes to all the bank’s core processes. The impact on accounting will be particularly noticeable in derivative portfolios measurement and other measurements.

KfW has created a cross-functional project structure to accommodate the complex multi-faceted implications on methods, processes and IT and to be well-prepared in advance for the rate transition.

The IASB’s standard-setting programme is split into two phases. Phase 1 deals with issues affecting financial reporting in the period before the replacement of an existing interest rate benchmark with an alternative rate. Phase 2, on the other hand, deals with issues affecting financial reporting once an existing interest rate benchmark is replaced by an alternative rate.

Phase 1 is applicable to the current reporting period. It includes reliefs relating to the formation of expectations in cash flow hedge accounting as well as to the proof of effectiveness in fair value hedge accounting. As KfW does not use cash flow hedge accounting, these aspects have no impact. With regard to the proof of effectiveness in fair value hedge accounting, KfW applies the reliefs relating to the formation of expectations on the future transition to the new reference rates. This has had no significant impact on key earnings figures.

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 rent concessions granted as a result of the coronavirus pandemic constitute a lease modification. The amendments apply to rent concessions that reduce 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. These amendments do not have any impact on KfW Group’s net assets, financial position and results of operations.

B. Impact of new or amended IFRS/IFRIC interpretations to be adopted in the future that were endorsed by the EU into European law before the reporting date

At the end of 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 position and results of operations.

C. New or amended IFRS/IFRIC interpretations to be applied in the future that were published by the EU before the reporting date but have not yet been endorsed into European law

The phase 2 amendments with regard to the benchmark reform include amendments to certain standards, including IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16. They are to be applied, at the latest, from the 2021 reporting period. Early application is permitted, but KfW will not be utilising this option. There was no significant rate transition in 2020.

In May 2020, the IASB published amendments to IFRS 3, IAS 37 and IAS 16 with first-time application from 1 January 2022:

– The update to IFRS 3 mainly relates to the reference to the revised conceptual framework. In addition, IFRS 3 was amended to require an acquirer to apply IAS 37 or IFRIC 21 instead of the conceptual framework to identify the obligations it has assumed that are within the scope of IAS 37 or IFRIC 21. Furthermore, an addition was made to IFRS 3 explicitly prohibiting recognition of acquired contingent assets.
– The amendment to IAS 37 clarified that in determining an onerous contract, in addition to incremental costs directly related costs are to be taken into account.
– 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.

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. Amendments from the 2018–2020 Cycle are to be applied for financial years beginning on or after 1 January 2022.

IFRS 17 “Insurance Contracts” was issued in May 2017. This standard is intended to replace IFRS 4 “Insurance Contracts” in the future. IFRS 17 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.

In January 2020, the IASB published amendments to IAS 1 to clarify the criteria for classifying liabilities as current or non-current. In the future, the classification of liabilities as current or non-current will be based on the rights held by the entity on the reporting date. A liability is classified as non-current if, at the end of the reporting period, the entity has a substantial right to defer settlement of the liability for at least 12 months after the reporting date. Further guidance on the interpretation of specific criteria and explanatory notes have also been included. In mid-July 2020, the IASB published amendments to IAS 1 that delayed the mandatory application date of the amendments to IAS 1 published in January 2020 on the classification of liabilities as current or non-current by one year to 1 January 2023.

(3) Changes to significant accounting policies and estimates

The measurement of over-the-counter (“OTC”) derivative financial instruments includes greater consideration of standard market valuation adjustments for counterparty risks as well as collateral and funding costs (see Section 7.D. Fair value). The calculation of the valuation adjustments is based on a Monte Carlo simulation and totals EUR 7 million as of 31 December 2020. The allocation to individual transactions is based on the relative credit adjustment approach.

Reporting of the effects from the reversal of provisions is not explicitly addressed by IFRS. Treatment as an expense reduction of the income statement item under which the additions were also posted, as well as recognition of income under Other operating income is possible. From financial year 2020, pending reversals of Other provisions in accordance with IFRS are recognised in profit or loss in favour of the item from which they were originally added.

A fluctuation rate of 2.0% (previously: 1.5%) was applied to the measurement of pension provisions at KfW and its two subsidiaries DEG and KfW Capital as of 31 December 2020. This led to a valuation effect for the total obligation of EUR –1 million. Moreover, an improved valuation method, primarily with regard to the attribution components, resulted in a valuation effect of EUR –20 million for Pension provisions for KfW Group.

KfW Group changed the structure of its statement of financial position in financial year 2020. The previous presentation was based in particular on the national requirements for balance sheet classification at banks and financial services institutions. From financial year 2020 onwards, KfW’s statement of financial position classification scheme will be based on the measurement categories in accordance with IFRS 9. The new scheme was introduced in order to achieve harmonisation and comparability with other bank financial statements, as a classification scheme based on the IFRS 9 measurement categories has now become established on the market. Another aim is it to generate synergies with regard to the IFRS-based regulatory requirements on financial reporting (“FINREP”).

The following tables show the relationships between the old and new items on the statement of financial position as of 31 December 2019.

Transition to the new statement of financial position structure: Assets by measurement category

Previous statement of financial position structure	31 Dec. 2019	Financial assets at amortised cost		
		Loans and advances to banks	Loans and advances to customers	Securities and investments
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Cash reserves	28,195	0	0	0
Loans and advances to banks	281,912	–281,902	0	0
Loans and advances to customers	129,416	0	–119,798	0
Risk provisions for lending business	–1,670	242	1,428	0
–	–	281,660	118,370	34,511
–	–	0	0	0
Value adjustments from macro fair value hedge accounting	10,887	0	0	0
Derivatives designated for hedge accounting	10,859	0	0	0
Other derivatives	5,383	0	0	0
Securities and investments	37,795	0	0	–34,511
Investments accounted for using the equity method	609	0	0	0
Property, plant and equipment	1,021	0	0	0
Intangible assets	188	0	0	0
Income tax assets	703	0	0	0
Other assets	723	0	0	0
Total	**506,022**	**0**	**0**	**0**

Transition to the new statement of financial position structure: Liabilities by measurement category

Previous statement of financial position structure	31 Dec. 2019	Financial liabilities at amortised cost		
		Liabilities to banks	Liabilities to customers	Certificated liabilities
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Liabilities to banks	14,899	–14,644	0	0
Liabilities to customers	10,131	0	–8,667	0
Certificated liabilities	436,191	0	0	–424,897
–	–	14,644	8,667	424,897
–	–	0	0	0
Value adjustments from macro fair value hedge accounting	77	0	0	0
Derivatives designated for hedge accounting	6,674	0	0	0
Other derivatives	2,453	0	0	0
Provisions	3,335	0	0	0
Income tax liabilities	358	0	0	0
Other liabilities	542	0	0	0
Equity	31,362	0	0	0
Total	**506,022**	**0**	**0**	**0**

Financial assets at fair value					
Loans and advances to banks	Loans and advances to customers	Securities and investments	Other derivatives	31 Dec. 2019 adjusted	
EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	New statement of financial position structure
0	0	0	0	28,195	Cash reserves
–9	0	0	0	–	–
0	–9,618	0	0	–	–
0	0	0	0	–	–
0	0	0	0	434,542	Financial assets at amortised cost
9	9,618	3,285	5,383	18,295	Financial assets at fair value
0	0	0	0	10,887	Value adjustments from macro fair value hedge accounting
0	0	0	0	10,859	Derivatives designated for hedge accounting
0	0	0	–5,383	–	–
0	0	–3,285	0	–	–
0	0	0	0	609	Investments accounted for using the equity method
0	0	0	0	1,021	Property, plant and equipment
0	0	0	0	188	Intangible assets
0	0	0	0	703	Income tax assets
0	0	0	0	723	Other assets
0	**0**	**0**	**0**	**506,022**	**Total**

Financial liabilities at fair value					
Liabilities to banks	Liabilities to customers	Certificated liabilities	Other derivatives	31 Dec. 2019 adjusted	
EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	New statement of financial position structure
–255	0	0	0	–	–
0	–1,464	0	0	–	–
0	0	–11,294	0	–	–
0	0	0	0	448,208	Financial liabilities at amortised cost
255	1,464	11,294	2,453	15,466	Financial liabilities at fair value
0	0	0	0	77	Value adjustments from macro fair value hedge accounting
0	0	0	0	6,674	Derivatives designated for hedge accounting
0	0	0	–2,453	–	–
0	0	0	0	3,335	Provisions
0	0	0	0	358	Income tax liabilities
0	0	0	0	542	Other liabilities
0	0	0	0	31,362	Equity
0	**0**	**0**	**0**	**506,022**	**Total**

No material adjustments were made to the statement of comprehensive income, as this is already largely based on the IFRS 9 measurement categories. Only the presentation of Risk provisions for lending business was changed. The previous items “Risk provisions for lending business” and “Net gains/losses from risk provisions in the securities business” have been combined in a new item “Net gains/losses from risk provisions” in order to present the items relating to risk provisions together and thereby increase transparency. The comparative information in the income statement and the related notes were changed for 2019. This adjustment did not have any impact on consolidated profit and consolidated comprehensive income.

The structure of the consolidated statement of changes in equity was also changed in financial year 2020 compared to 2019 with the aim of improving transparency and comparability. Equity items are now presented as columns, in line with standard accounting practice. The transaction types, such as Consolidated profit and Other comprehensive income, are displayed in the rows. The comparative figures for 2019 have been adjusted accordingly. These adjustments had no impact on the amount of equity.

The changed classification scheme in the statement of financial position also required adjustments to “Changes in assets and liabilities from operating activities after adjustment for non-cash items” within the statement of cash flows. The following table presents the changes made:

Transition of the consolidated statement of cash flows to the new format

	31 Dec. 2019	Adjustment	31 Dec. 2019 adjusted	
Previous items	**EUR in millions**	**EUR in millions**	**EUR in millions**	**New items**
Loans and advances to banks	–1,506	1,506	–	–
Loans and advances to customers	–2,677	2,677	–	–
Securities	–1,996	1,996	–	–
–	–	–5,856	–5,856	Financial assets at amortised cost
–	–	–322	–322	Financial assets at fair value
Total assets	**–6,179**	**0**	**–6,179**	
Liabilities to banks	6,682	–6,682	–	–
Liabilities to customers	–2,160	2,160	–	–
Certificated liabilities	17,580	–17,580	–	–
–	–	21,970	21,970	Financial liabilities at amortised cost
–	–	132	132	Financial liabilities at fair value
Total liabilities and equity	**22,102**	**0**	**22,102**	

Due to the aforementioned changes, further adjustments to various Notes were necessary. The structure of the Notes is now also based on the IFRS 9 measurement categories. However, none of the changes have any effect on consolidated profit, consolidated comprehensive income or equity.

The comparative disclosures for 2019 in the statement of financial position, statement of comprehensive income, consolidated statement of changes in equity, consolidated statement of cash flows and in the related Notes have been adjusted accordingly, as needed.

(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 inputs not based on observable market data – are employed to measure only small parts of receivables, securities, investments and borrowings measured at fair value, on the one hand, and only a small portion of financial derivatives used to economically hedge risk, on the other hand.

The anticipated impact of the 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"). The coronavirus pandemic was taken into account, firstly, within the framework of the macroeconomic factors by means of the established process of point-in-time adjustment of the PD. Downturn components have also been included in LGDs since the 31 March 2020 reporting date in order to take adequate account of the current macroeconomic environment. Prior to the downturn induced by the COVID-19 pandemic, downturn components were not included in LGD calculation due to the previous economic environment.

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 is taken into account is such assessment.

(5) Group of consolidated companies

All significant subsidiaries, joint ventures and associated companies are included in the consolidated financial statements.

Subsidiaries are all business units (including structured entities) over which the group exercises control. Control exists when a group is exposed or entitled to variable cash flows through its relationship and has the opportunity to use its power of disposal to influence the amount of such cash flows. Subsidiaries are included in the consolidated financial statements (full consolidation) from the point at which control is transferred to the group. They are deconsolidated when control is lost.

Joint ventures and associated companies are included in the consolidated financial statements in accordance with IFRS 11/IAS 28 if a joint agreement is in place or the group has significant influence. Significant influence exists when KfW can participate in financial and business policy decisions regarding the associated company even if it does not have sole or joint control.

The composition of the consolidated group is presented in the Notes under “List of KfW Group shareholdings”.

(6) Basis of consolidation

Consolidation involves revaluing the total assets and liabilities of the subsidiaries at the acquisition date, irrespective of the equity interest held, and incorporating them into the consolidated statement of financial position. 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 thus 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)

Instruments are assigned to business models on a portfolio basis. IFRS 9 provides for three business models to manage financial assets:
1. Hold to collect – financial assets are held with the objective of collecting contractual cash flows.
2. Hold to collect and sell – financial assets are held with the objective of both collecting the contractual cash flows and selling the financial assets (not used at KfW).
3. Hold to sell – financial assets held with the objective of selling, or which do not fulfil the “hold to collect” or “hold to collect and sell” criteria.

The cash flow criterion is assessed for each individual financial asset as the second step. The cash flows of financial instruments are then to be assessed as to whether they are consistent with a basic lending arrangement and thus constitute SPPIs on the outstanding loan balance. If payments contain payments beyond SPPIs, they must be measured at fair value. IFRS 9 defines interest as compensation for the time value of money and credit risk assumed, although it can also include a premium for liquidity risk. As is customary for the sector, compensation (e.g. for equity or administrative costs), and a profit margin may also be included. 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 standardised 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 sale 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.

IFRS 9 only provides for two categories for financial liabilities: amortised cost and FVTPL. Financial liabilities are accounted for at FVTPL if they are classified as held for trading (mandatory fair value) or assigned to this measurement category at initial recognition through application of the fair value option (designated fair value); otherwise they are accounted for at amortised cost. The classification must be irrevocably determined at initial recognition. Reclassification is not permitted.

All non-derivative financial liabilities are held for non-trading purposes at KfW. All non-derivative financial liabilities for which the fair value option has not been exercised are classified as liabilities at amortised cost. These are thus measured at amortised cost using the effective interest method. For the group, this category covers funding reported in Liabilities to banks, Liabilities to customers and Certificated liabilities. The fair value option is exercised for some structured liabilities such as promissory note loans (*Schuldscheindarlehen*) and certificated liabilities. This concerns liabilities with bifurcated structures as well as liabilities with non-bifurcated structures for which there is an accounting mismatch unless they meet the requirements for application of hedge accounting. In exercising the fair value option, valuation effects resulting from changes in own credit risk are recognised directly in equity in the revaluation reserve.

Derivatives are concluded 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").

Subsequently, expected credit losses are calculated based on changes in a financial instrument's credit risk since initial recognition. If there has been a significant deterioration of the credit risk (stage 2) or objective evidence of impairment is identified (stage 3), expected credit losses are to be calculated over the remaining lifetime (lifetime ECLs). If, in contrast, there has been no significant increase in credit risk, the financial instrument is still assigned to stage 1 and only the ECLs for the term of the instrument resulting within the next 12 months from potential loss events are taken into account.

A lifetime ECL is recognised for financial instruments in stage 2 as risk provisioning. This is based on risk parameters oriented to regulatory and internal credit risk models for parameterisation of probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD"). Interest income for financial instruments in stage 2 continues to be recorded using the effective interest method based on the gross carrying amount.

A lifetime ECL is also recognised for financial instruments in stage 3 as risk provisioning. Assignment to stage 3 and thus classification as impaired is undertaken in line with the group-wide default definition, which reflects the definition of "default of an obligor" in accordance with Article 178 of the Capital Requirements Regulation ("CRR"). The definition distinguishes between the 90 days past due and unlikely to pay criteria. A distinction is made in calculating impairment in stage 3 between significant (non-retail) and non-significant (retail) financial instruments. Impairment for retail business in stage 3 is calculated based on risk parameters and applying a PD of 1. Individual impairment is recognised for incurred losses and is computed on the basis of individual loans for significant portfolios in the lending business. The amount of the impairment loss equals the difference between the carrying amount of the loan and the present value of discounted expected future cash flows from interest, redemption payments and collateral cash flows. Any reversals of individual impairment losses are accounted for through profit or loss. Interest income for these financial instruments is recognised based on the net carrying amount.

In contrast to the lending business, expected losses for defaulted securities are not calculated based on cash flow but instead on market values in stage 3. This is due to the assumption that the market value in the case of impairment is primarily influenced by credit rating factors.

Purchased or originated credit-impaired financial assets ("POCI") are not significant due to 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 default). Additional periods of good conduct were also defined for the retail business, based on previous past-due status (> 30 days) or default. These range from 90 days to two years, depending on the specifics of the case.

Expected credit losses for stage 1 and stage 2 and the retail business in stage 3 are calculated based on individual transactions using statistical risk parameters. The regulatory and internal credit risk models for parametrisation of PD, EAD and LGD that KfW uses in risk management serve as the basis for this calculation. These parameters are adequately adjusted to determine expected credit losses in accordance with IFRS 9. This enables largely uniform credit risk modelling in line with supervisory law, risk management and IFRS requirements even though they may individually differ somewhat in scope.

Calculation of one-year PD is based on the internal rating system, in which every exposure is assigned a PD score that corresponds to a rating scale of 18 levels for non-defaulted transactions ("PL") and two levels for defaulted transactions ("NPL"). The lifetime PDs are derived from the one-year PD via migration matrices. For IFRS-9-compliant PD modelling, the internal credit risk parameters are adjusted by placing a greater weight on macroeconomic factors from a point-in-time ("PIT") perspective. The adjustment is made through segment and rating-specific modelling of PD premiums and discounts on regulatory PD (through-the-cycle PD). This is based on expert estimates of the economic situation of sectors and countries, with assessment of expected effects, taking into account forward-looking information. This approach differs for the retail business, for which premiums and discounts are calculated applying an expert model based on econometric factors.

LGD is the loss ratio that results in the event of default after taking collateral into account. In accordance with IFRS 9 impairment requirements, a multi-year view without taking internal costs into account is generally required. The regulatory LGD parameters are adjusted accordingly in order that internal costs for IFRS 9 are not included in the calculation of expected credit losses.

The EAD per time bucket corresponds to the loan drawdown expected at the time of default, taking into account additional drawings on open lines of credit. For the off-balance sheet portion, the expected drawdown is calculated based on credit conversion factors (“CCFs”).

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.

C. Contractual modifications

IFRS 9 defines contractual modifications as modifications of contractual cash flows. These can be indexed to the market rate or credit rating. In contrast, an adjustment of contractual payments agreed at the time the contract was concluded and thus intrinsic to the contract is not deemed a contractual modification.

In the case of a modification of contractual payments of a financial asset measured at amortised cost, an assessment is first made as to whether the asset is subject to partial or full derecognition. Partial derecognition is defined as owing to an event that affects the nominal value of the financial asset, such as (partial) waivers and unscheduled (partial) principal repayments, in particular. The following rules are applied to all other contractual modifications.

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 Net gains/losses from risk provisions.

D. Fair value

Subsequent measurement at fair value, which, depending on the measurement category, is regularly determined either for recognition in the statement of financial position or for the disclosure of financial instruments in the Notes, is based on the following hierarchy at KfW Group:

Active market – allocation to level 1 (Quoted market price)

The best objective evidence of fair value is provided by published price quotations in an active market. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available and those prices represent current – i.e. traded on the reporting date or shortly before – and regularly occurring market transactions on an arm’s length basis. Together with the traded nominal volumes, the contract sizes and the number of contracts, this assessment takes into account in particular the bid-ask spreads observed which in the event of a significant increase indicate the absence of an active market.

No active market – allocation to level 2 (Valuation methods based on observable market data [model]) or level 3 (Valuation methods based in part on data not observable in a market).

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.

The steps detailed below are taken for certain product groups:

For securities in the Securities and investments line item, the group examines whether a financial instrument is quoted on an active market on the basis of homogeneous portfolios. Market activity is assessed based on the following criteria:

– There is more than one market maker.
– Prices are set on a regular basis.
– Prices deviate only slightly between market makers.
– The bid-ask spread is narrow.

Prices on active markets are used to determine the fair value of the group’s asset securities as of the reporting date. In addition, for parts of the portfolio, prices from price service agencies are used that do not qualify as prices quoted on active markets. Should these not be available in individual cases, valuation techniques are used to determine 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.

When no prices from liquid markets are available and prices on inactive markets cannot be provided by price service agencies, recognised valuation models and methods are used. The DCF method is used for securities, swaps, and currency and money market transactions with no embedded options and no complex coupons. Stand-alone options, as well as derivatives with embedded options, triggers, guaranteed interest rates and/or complex coupon agreements, are measured using recognised models (e.g. Hull & White) unless they are listed on a stock exchange.

The aforementioned models are calibrated, if possible, on the basis of observable market data for instruments that are similar in terms of the type of transaction, maturity, and credit quality.

E. Financial guarantee contracts

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:

Transition of the statement of financial position items for financial instruments to classes in accordance with IFRS 7.6

Statement of financial position item	Class	Sub-class
Financial assets at amortised cost	*Loans and advances to banks*	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Loans and advances to customers	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Securities and investments	Bonds and other fixed-income securities
Financial assets at fair value	*Loans and advances to banks*	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Loans and advances to customers	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	Securities and investments	Bonds and other fixed-income securities
		Shares and other non-fixed income securities
		Equity investments
		Shares in non-consolidated subsidiaries
	Other derivatives	Interest-related derivatives
		Currency-related 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
		Currency-related 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 class Loans and advances to banks primarily consists of the promotional lending business, in which loans are typically granted to the final borrowers through accredited commercial banks. These assets are presented in this class when commercial banks underwrite part of the liability. Promotional loans that commercial banks on-lend without underwriting of liability are recognised in the class Loans and advances to customers.

The classes Loans and advances to banks and Loans and advances to customers also include loans that benefit from a subsidy (interest rate reductions) granted by KfW under the ERP economic promotion programme. The promotional grants awarded annually to KfW through the ERP Special Fund based on the ERP Economic Planning Act (*ERP-Wirtschaftsplangesetz*) for the purpose of executing the ERP economic promotion programme are recognised as deferred income in Other liabilities and are amortised in profit or loss under Interest income as the underlying funding expenses occur.

The class Securities and investments 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 classes Liabilities to banks and Liabilities to customers 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 group 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.

However, not all economic hedging relationships qualify for hedge accounting or the fair value option. In these cases, the risk-mitigating impact of the derivatives used for hedging purposes is not reflected in the accounts because the hedged risk associated with the underlying transactions is not recognised in profit or loss under IFRS. The applicable recognition requirements may therefore lead to one-sided valuation results from the derivatives used for hedging purposes in the group's income statement – as well as volatility in profit or loss – despite an economically effective hedging relationship.

Hedge accounting in the group is used solely in the form of fair value hedges to recognise economic hedging relationships. The hedging relationship is designated, firstly, at individual transaction and group level in the form of micro fair value hedge accounting, and, secondly, at portfolio level in the form of macro fair value hedge accounting. KfW has exercised the option of applying IAS 39 rules for hedge accounting. If risk-free overnight interest rates are used in the valuation of the derivatives, this market practice is also subject to micro fair value hedge accounting for the measurement of the hedged risk related to the hedged item. The hedged risk in macro fair value hedge accounting 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.

In macro fair value hedge accounting, interest risks primarily from loan receivables (in the Financial assets at amortised cost item) that are hedged against interest risks as part of dynamic asset liability management in the group, are hedged. 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 – 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.

Further derivative financial instruments are used to hedge risks, but their economic hedging relationships are not reflected in the accounts. The fair values of these hedging instruments are also presented in Financial assets at fair value or Financial liabilities at fair value, and the changes in Net gains/losses from other financial instruments at fair value through profit or loss.

KfW Group neither uses derivatives for trading purposes nor does it enter into derivatives acting as a broker or intermediary on behalf of third parties.

B. Embedded derivatives

Derivative financial instruments can be part of a hybrid (combined) financial liability as embedded derivatives. Under certain conditions, they are accounted for separately from the host contract, similar to stand-alone derivatives. They must be bifurcated if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract. The host contract is accounted for according to its classification at inception.

KfW Group enters into contracts with separable embedded derivatives particularly with respect to its own funding. In the case of these products, the embedded derivatives must be bifurcated. 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.

As performance obligations are mostly satisfied over time, revenue from customer contracts is recognised according to the measure of progress and is thus normally recognised over time.

KfW Group has no items that require recognising customer acquisition or contract fulfilment costs as assets. One-time advance payments to be allocated are deferred and recognised as contract liabilities in the statement of financial position under Other liabilities.

If the service has already been performed but fees have not yet been paid or if there is not yet any claim to payment, a contract asset is to be recognised in the statement of financial position under Other assets. If the claim becomes unconditional, the contract asset is to be reclassified as a Trade receivable adjusting the carrying amount where applicable. This rule is applied to fees for administration of certain programmes subsidised by the Federal Government.

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

(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, it 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.

(13) Repurchase agreements and securities lending

KfW Group enters into repurchase agreements as standardised repos or reverse repos. These are combinations of simultaneous spot and forward transactions on interest-bearing securities with the same counterparty. The terms and modalities of collateral and its use follow common market practice. Credit claims are also an eligible type of collateral for open-market transactions.

The interest-bearing securities sold under repo transactions (spot sales) continue to be recognised and measured under Financial assets at amortised cost. The repayment obligation towards the counterparty is carried under Financial liabilities at amortised cost for the amount of cash consideration received. Interest is recorded in Interest expense in accordance with the respective term of the repurchase agreements.

A repayment claim is recognised and measured under Financial assets at amortised cost for the amount of cash outflow generated by reverse repos. The securities received (spot purchases) are not recognised or measured. Interest is recorded in Interest income in accordance with the respective conditions of the reverse repurchase agreements.

The term 'securities lending' refers to transactions in which securities are transferred from the lender to the borrower with the obligation that the borrower transfer back securities of the same type, quality and quantity at the end of the agreed term and pay a usage fee for the duration of the loan. IFRS 9 does not distinguish between collateralised and uncollateralised securities lending. The cash collateral generally to be pledged to the lender is to be capitalised as a receivable by the borrower. The securities are accounted for by the lender, which bears the credit and market risk.

KfW has been acting as a borrower of essentially uncollateralised securities lending transactions since 2020. The fee paid is recognised in Net interest income. As of 31 December 2020, there were no securities loans in the portfolio.

(14) Government grants

With regards to the pandemic-induced special programmes KfW funds its activities, among other sources, via the ECB's TLTRO III, by means of which it has raised around EUR 13 billion. The term of TLTRO III transactions is normally three years. Participants whose eligible net lending in the special reporting period (March 2020 to March 2021) is equal to or higher than their individual benchmark will receive an interest rate reduced by 50 bp for the period from June 2020 to June 2021.

This government grant in the form of a reduced interest rate is to 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 made possible by the grant is not to be recognised until there is reasonable assurance that KfW will meet the attached conditions and that the grants will be issued. Taking into account disbursement and repayment schedules stored in the system and the estimated new business up to 31 March 2021, KfW Group assumes that achievement of the net lending target is highly likely. The interest grant is 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 are reported. KfW Group uses the gross method for this purpose. KfW Group received a total of EUR 35 million in reduced interest grants in accordance with IAS 20 in 2020.

(15) Property, plant and equipment

The land and buildings and the plant and equipment reported by KfW Group are carried at cost less depreciation on a straight-line basis and any impairment, both recognised in Administrative expense. In accordance with the requirements in IAS 36, an impairment is recognised if there are indications of impairment and the carrying amount of the asset exceeds the recoverable amount, i.e. the lower of fair value less costs of disposal and value in use. The useful life is determined based on expected wear and tear. KfW Group assumes an estimated useful life of 40 to 50 years for buildings, four years for workstation computer equipment and five to 15 years for other property, plant and equipment. Gains and losses from the sale of property, plant and equipment are recognised in Net other operating income.

Payments in advance and assets under construction are recognised in Other property, plant and equipment and are not subject to depreciation.

(16) 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.

(17) 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.

Longevity risk is the risk that higher expenses will be incurred for the company pension plan if the pensioners live longer than projected. In general, this risk is balanced out across all pensioners and would only have an impact if life expectancy were to rise faster in the future than anticipated.

Due to the long term of the company pension plan, provisions for pension obligations are subject to general interest rate fluctuation risks.

Pension adjustment risk largely relates to the pension plan offering a full pension (*Gesamtversorgung*). In this scheme, benefits are recalculated as soon as there is a change in the base income eligible for pension or the state pension to be offset. Another pension plan must be examined regularly in terms of forecast and actual pension adjustments, undertaking such adjustments if necessary.

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 (*Beitragsbemessungs-grenze)*. 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.

(18) Equity

The equity structure is determined, in particular, by the KfW Law and the requirements of IFRS.

Pursuant to Article 10 (2) and (3) of the KfW Law, KfW's net income for the period determined in accordance with the German Commercial Code is transferred to reserves and is included in equity under IFRS.

KfW Group has created a fund for general banking risks. Additions to or reductions of the fund are shown under IFRS as appropriation of consolidated profit/loss.

Under IFRS, any remaining consolidated net income is allocated to Other retained earnings in the same period.

Revaluation reserves comprise transactions to be recognised directly in equity in accordance with IFRS. These include valuation results from the change in own credit risk of liabilities measured at fair value through profit or loss and from defined benefit pension obligations. They also may include deferred taxes, depending on the underlying transaction.

(19) Trust activities

Assets and liabilities held by KfW Group in its own name but for the account of third parties are not recognised. This applies in particular to loans granted under German Financial Cooperation to support developing countries. The related funds are granted and underwritten by the German federal budget. The fees earned associated with these transactions are recognised under Commission income.

Cash reserves also include cash proceeds from assets held in trust. The resulting payment obligations are reported as Financial liabilities at amortised cost.

Notes to the statement of comprehensive income

(20) Net interest income

Analysis of Net interest income

	2020 EUR in millions	2019 EUR in millions
Interest and similar income from loans and advances to banks and customers	5,186	6,355
Similar income from off-balance sheet transactions[1]	28	22
Interest income from securities and investments	110	154
Interest income from hedges recognised in the statement of financial position	–3,304	–3,650
Other interest income	–143	–114
Interest income from the effective interest method	**1,876**	**2,767**
Interest and similar income from loans and advances to banks and customers	–25	–23
Interest income from securities and investments	58	66
Interest income from Other derivatives	576	1,108
Other interest income	**609**	**1,151**
Interest income, total	**2,485**	**3,918**
Interest and similar expense for liabilities to banks and customers	15	217
Interest expense for certificated liabilities	5,228	6,947
Interest expense from hedges recognised in the statement of financial position[2]	–5,171	–5,814[2]
Interest expense from Other derivatives[2]	–229	35[2]
Other interest expense	95	188
Interest expense, total	**–62**	**1,571**
Net interest income	**2,547**	**2,347**

[1] Item name changed from previous year without change in content
[2] Interest expense from hedges recognised in the statement of financial position and Interest expense from Other derivatives was recognised under Interest Expense for derivatives in the previous year.

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 54 million (2019: EUR 137 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 243 million (2019: EUR 279 million).

Interest income from stage 3 loans in the amount of EUR 37 million (2019: EUR 33 million) is reported under Interest and similar income from loans and advances to banks and customers.

Interest income from hedges recognised in the statement of financial position comprises interest income from derivatives subject to hedge accounting as well as interest income from amortisation of value adjustments from hedge accounting. Interest income from derivatives in hedge accounting is recognised depending on the related hedged item in the interest income from hedges recognised in the statement of financial position for related financial assets.

Interest expense from derivatives in hedge accounting is recognised depending on the related hedged item in the interest expense from hedges recognised in the statement of financial position for related financial liabilities.

By including the interest income or expense from the hedged items and derivatives in hedge accounting, presentation is thus 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

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	EUR in millions
Interest income (gross)	2,758	4,156
Negative interest from financial assets	–273	–237
Interest expense (gross)	326	1,713
Negative interest from financial liabilities	–389	–141
Net interest income	**2,547**	**2,347**

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.

(21) Net gains/losses from risk provisions

Analysis of Risk provisions by transaction[1)]

	2020 EUR in millions	2019 EUR in millions
Expenses for risk provisions for lending business (Loans and advances to banks/customers and off-balance sheet lending transactions)	1,610	755
Expenses for additions to risk provisions	1,581	718
Direct write-offs	29	36
Expenses for risk provisions for securities and investments	12	4
Expenses for additions to risk provisions	12	4
Direct write-offs	0	0
Expenses for risk provisions	**1,622**	**758**
Income from risk provisions for lending business (Loans and advances to banks/customers and off-balance sheet lending transactions)	811	597
Income from the reversal of risk provisions	751	520
Income from recoveries of amounts previously written off	60	77
Income from risk provisions for securities and investments	7	4
Income from the reversal of risk provisions	7	4
Income from recoveries of securities and investments previously written off	0	0
Income from risk provisions	**819**	**601**
Net gains/losses from non-substantial contractual modifications	**–22**	**–10**
Other risk provisions for lending business	**44**	**–6**
Total	**–781**	**–173**

[1)] Item name changed from previous year without change in content (see Note 3)

(22) Net commission income

Analysis of Commission income

	2020 EUR in millions	2019 EUR in millions
Revenue from contracts with customers	**589**	**518**
From mandate contractual arrangements with the Federal Government[1)]	540	463[2)]
Fee income from mandate agreements, processing activities and services	14	16
Fee income from the lending business	36	39
Other commission income	**10**	**6**
Financial guarantee contracts	0	1
Other	9	5
Commission income, total	**599**	**524**

[1)] Includes commission income in the amount of EUR 68 million (2019: EUR 65 million) from mandate contractual arrangements with the Federal Government in trust activities.
[2)] Commission income from "trust activities" reported as a separate line item of EUR 2 million in the previous year is also included in this amount.

Commission income by segment in financial year 2020

2020	Mittel-standsbank & Private Kunden *(SME Bank & Private Clients)*	Individual-finanzierung & Öffent-liche 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%

Commission income by segment in financial year 2019

2019	Mittel-standsbank & Private Kunden *(SME Bank & Private Clients)*	Individual-finanzierung & Öffent-liche 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	**210**	**14**	**0**	**33**	**266**	**0**	**1**	**524**
of which Federal Government	205	11	0	0	247[1)]	0	0	463
%	98%	77%	0%	0%	92%	0%	0%	88%

[1)] Commission income of the Federal Government also includes commissions of EUR 2 million from “trust activities”

Out-of-period income

	2020	2019
	EUR in millions	EUR in millions
Revenue in current period resulting from services performed in the previous period(s)	17	42

Analysis of Commission expense

	2020 EUR in millions	2019 EUR in millions
Commission expense for lending business	10	13
Commission expense for credit derivatives	0	0
Other commission expense	16	12
Commission expense	**26**	**25**

(23) 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
	2020 EUR in millions	2019 EUR in millions	
Micro fair value hedges	**–25**	**17**	Net gains/losses from hedge accounting
Interest risk	–27	0	–
Interest-currency risk	2	18	–
Macro fair value hedges	**41**	**–18**	Net gains/losses from hedge accounting
Interest risk	41	–18	–
Total	**16**	**–1**	Net gains/losses from hedge accounting

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

	2020 EUR in millions	2019 EUR in millions
Hedging of securities and investments	5	5
Hedging of liabilities to banks and customers	–29	–1
Hedging of certificated liabilities	–1	12
Subtotal: Effectiveness of hedges	**–25**	**16**
Amortisation of value adjustments	0	1
Total	**–25**	**17**

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 valuation gains/losses from micro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2019

	Hedged items	Hedging instruments	Effectiveness of hedges
	EUR in millions	EUR in millions	EUR in millions
Hedging of securities and investments	204	–199	5
Hedging of liabilities to banks and customers	–44	44	–1
Hedging of certificated liabilities	–5,156	5,168	12
Total	**–4,996**	**5,013**	**16**

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**

Gross analysis of net gains/losses from macro fair value hedge accounting: Comparison of hedged items and hedging instruments in financial year 2019

	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	**2,428**	**–2,446**	**–18**

Net gains/losses from macro fair value hedge accounting comprise the valuation of hedging instruments and the valuation of hedged risks from the hedged portfolios. It also includes the amortisation of the value adjustments from the dynamic hedge designation and de-designation and the pro rata reversal of value adjustments in the event of derecognition of financial instruments from the underlying portfolios as well as the pull-to-par effect of the hedging derivatives.

(24) 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

	2020 EUR in millions	2019 EUR in millions
Loans and advances to banks/customers[1)]	2	–14
Loans and advances	2	–14
Miscellaneous receivables (money-market transactions, promissory note loans and Other receivables)	0	0
Securities and investments[1)]	–312	79
Bonds and other fixed-income securities	0	0
Shares and other non-fixed income securities	0	0
Equity investments	–312	79
Liabilities to banks and customers	8	–33
Certificated liabilities	–238	–373
Other derivatives[2)]	112	338
Financial derivatives not qualifying for hedge accounting	112	338
Credit derivatives	0	0
Foreign currency translation	0	–6
Total	**–428**	**–9**

[1)] Expanded presentation with sub-classes compared with previous year
[2)] Item name changed from previous year without change in content

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 18 million in financial year 2020 (2019: EUR 0 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.

**Gross analysis of results from economically hedged borrowings:
Comparison of hedged items and hedging instruments**

	2020 EUR in millions	2019 EUR in millions
Borrowings	–230	–406
Hedging instruments	294	387
Total (effectiveness of economic hedges)	**63**	**–19**

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

	2020 EUR in millions	2019 EUR in millions
Income from the disposal of financial assets at amortised cost	0	1
Expense from the disposal of financial assets at amortised cost	1	6
Total	**–1**	**–6**

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

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

	2020 EUR in millions	2019 EUR in millions
Net gains/losses from investments accounted for using the equity method	31	15

(27) Administrative expense

Analysis of Administrative expense

	2020 EUR in millions	2019 EUR in millions
Wages and salaries	591	594
Social security contributions	94	81
Expenses for pension provision and other employee benefits	85	73
Personnel expense	**770**	**749**
Other administrative expenses	440	447
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	131	133
of which impairments of rights of use arising from leases	22	13
Non-personnel expense	**572**	**580**
Total	**1,342**	**1,328**

Current impairments of rights of use arising from leases includes an impairment of rights of use in the amount of EUR 10 million (2019: EUR 0 million).

(28) Net other operating income or loss

Analysis of Net other operating income or loss

	2020 EUR in millions	2019 EUR in millions
Other operating income	26	71
Other operating expense	41	25
Total	**–14**	**46**

Other operating income primarily includes income from the reversal of other provisions in the amount of EUR 10 million (2019: EUR 46 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 (2019: EUR 11 million). KfW is not obligated to contribute to the fund in accordance with Section 2 of the Restructuring Fund Act (*Restrukturierungsfondsgesetz – "RStrukFG"*).

(29) Taxes on income

Analysis of Taxes on income by component

	2020 EUR in millions	2019 EUR in millions
Current taxes on income	16	33
Deferred taxes	59	–9
Total	**76**	**23**

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

	2020 EUR in millions	2019 EUR in millions
Profit/loss from operating activities (before taxes)	600	1,391
Group income tax rate	0%	0%
Calculated income tax expense in the financial year	**0**	**0**
Effects of tax rate differentials within the group	–131	406
Effect of tax rate changes	0	0
Effects of previous year taxes recorded in the reporting year	–9	39
Effects of non-deductible taxes on income	3	5
Effects of non-deductible business expenses	3	4
Effects of tax-free income	1	0
Trade tax add-ons/reductions	1	1
Permanent accounting differences	30	–378
Effects of changes in recognised deferred tax assets	178	–54
Reported taxes on income	**76**	**23**

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%.

Segment reporting

(30) 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 through 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

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 interest margins 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 economic capital usage. 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 interest margins in this method.
[2] The difference between the realised refinancing rates and the maturity-matched refinancing rates calculated in-house.

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*) 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 as of the beginning of 2020, 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, the net gains/losses from securities and investments, the 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.

– The reported economic capital requirement covers all types of risk according to the definition of economic capital requirement in the risk report section of the group management report.

– 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 regarding "KfW's promotional lending business" for details of KfW's interest rate reductions in the promotional lending business. The present value of the nominal scheduled interest rate reductions, which is recognised as interest expense in profit or loss, is allocated to the Mittelstandsbank & Private Kunden (*SME Bank* & *Private Clients*) and Individualfinanzierung & Öffentliche Kunden (*Customised Finance* & *Public Clients*) business sectors. The compounding effect on the present values included in interest expense is allocated to the Head office for simplicity's sake.
[4)] The costs incurred in the organisational units are largely allocated to the products by means of core services.

Segment reporting by business sector for financial year 2020

	Mittelstandsbank & Private Kunden *(SME Bank & Private Clients)*	Individualfinanzierung & Öffentliche Kunden[1] *(Customised Finance & Public Clients)*	KfW Capital[1]	Export and project finance[1]	Promotion of developing countries and emerging economies[1]	Financial markets	Head office	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)	372	94	–1	767	402	356	610	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)	**232**	**50**	**–9**	**540**	**194**	**261**	**586**	**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)	**123**	**55**	**40**	**107**	**–423**	**270**	**516**	**–1**	**688**
Promotional expense	78	4	0	0	0	0	6	0	88
Taxes on income	0	0	0	8	2	0	65	0	76
Consolidated profit	**45**	**52**	**40**	**99**	**–425**	**270**	**444**	**–1**	**525**
Economic capital requirement	**6,752**	**546**	**220**	**712**	**977**	**443**	**6,200**	**0**	**15,849**

[1] 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.

Segment reporting by business sector for financial year 2019

	Mittel-stands-bank & Private Kunden *(SME Bank & Private Clients)*	Individual-finanzie-rung & Öffentliche Kunden[1)] *(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	**35,979**	**7,217**	**156**	**22,080**	**10,648**	**1,402**	**0**	**–175**	**77,307**
Net interest income (before promotional expense)	383	91	–1	744	389	359	521	–2	2,484
Net commission income (before promotional expense)	210	13	0	33	260	–3	0	0	512
Administrative expense (before promotional expense)	416	75	6	248	443	82	51	0	1,320
Operating result before valuation (before promotional expense)	**177**	**29**	**–7**	**529**	**207**	**274**	**470**	**–2**	**1,677**
Risk provisions for lending business	–57	6	0	–10	–120	1	6	0	–174
Valuation result (before promotional expense)	4	32	13	6	10	5	–23	0	47
Profit/loss from operating activities (before promotional expense)	**125**	**67**	**6**	**525**	**96**	**279**	**453**	**–1**	**1,549**
Promotional expense	142	7	0	0	0	0	10	0	159
Taxes on income	0	0	0	25	3	0	–5	0	23
Consolidated profit	**–17**	**60**	**6**	**499**	**94**	**279**	**448**	**–1**	**1,367**
Economic capital requirement	**5,818**	**594**	**158**	**720**	**1,048**	**618**	**5,511**	**0**	**14,467**

[1)] 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 1.6 million, KfW Capital EUR 0.8 million, Export and project finance EUR 6.0 million and Promotion of developing countries and emerging economies EUR 7.0 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.

(31) Segment reporting by region

Net interest and commission income are allocated on the basis of the customers' geographical location. The imputed return on equity included in net interest income, the profit contribution from KfW funding and the treasury result are allocated to Germany. KfW receives commission income from the Federal Government for supporting developing countries and emerging economies using budget funds of the Federal Government. These funds are allocated according to the region of the country receiving the investment.

Property, plant and equipment and intangible assets are not reported according to region because, apart from immaterial amounts, these assets relate to Germany.

Segment reporting by region for financial year 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**

Segment reporting by region for financial year 2019

	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	1,269	440	640	–2	2,347
Net commission income	211	40	248	0	499
Segment income	**1,480**	**480**	**888**	**–2**	**2,846**

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.

Notes to the statement of financial position

(32) Cash reserves

Analysis of Cash reserves

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Cash	0	0
Balances with central banks	44,178	28,195
Total	**44,178**	**28,195**

(33) Financial assets at amortised cost

Analysis of Financial assets at amortised cost by class[1), 2)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Loans and advances to banks		
Money-market transactions	2,782	13,029
Loans and advances	287,687	264,974
Promissory note loans	21	23
Other receivables	5,277	3,876
Loans and advances to customers		
Money-market transactions	680	870
Loans and advances	128,539	116,949
Promissory note loans	1,616	1,540
Other receivables	364	439
Securities and investments		
Bonds and other fixed-income securities	35,790	34,517
Total gross	**462,756**	**436,218**
Less risk provisions for		
Loans and advances to banks	–306	–242
Loans and advances to customers	–1,824	–1,428
Securities and investments	–11	–6
Total net	**460,615**	**434,542**

1) Adjusted presentation due to change in recognition (see Note 3)
2) Adjusted prior-year figures due to change in recognition (see Note 3)

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

Analysis of Loans and advances by underwriting liability type[1)]

	Loans and advances to banks		Loans and advances to customers	
	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Direct loans	72,833	72,817	120,533	114,428
On-lent customer loans with full underwriting borne by the on-lending commercial bank	193,036	190,910	0	0
On-lent customer loans with partial underwriting borne by the on-lending commercial bank	22,289	1,827	0	0
On-lent customer loans without underwriting borne by the on-lending commercial bank	0	0	5,736	242
Customer loans on-lent through insurance companies with full underwriting borne by the on-lending insurance company	0	0	888	710
Direct and on-lent subordinated loans	266	334	1,428	1,633
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	–737	–914	–46	–64
Total	**287,687**	**264,974**	**128,539**	**116,949**

[1)] Adjusted presentation

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.

(34) Gross carrying amounts

Development of gross carrying amounts of financial assets at amortised cost – Loans and advances to banks[1)]

	Financial year 2020				Financial year 2019			
	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.	**281,429**	**265**	**209**	**281,902**	**279,816**	**453**	**127**	**280,396**
Transfer from stage 2 and stage 3 to stage 1	–2	2	0	0	140	–141	1	0
Transfer from stage 1 and stage 3 to stage 2	–1,153	1,168	–15	0	–100	101	–1	0
Transfer from stage 1 and stage 2 to stage 3	–165	–18	183	0	–77	–68	145	0
Additions	320,273	284	33	320,590	218,472	39	3	218,514
of which recently purchased or issued financial assets	*294,777*	*276*	*23*	*295,076*	*195,517*	*27*	*0*	*195,545*
of which current business	*25,496*	*7*	*11*	*25,514*	*22,955*	*12*	*3*	*22,969*
Disposals	–305,292	–160	–170	–305,623	–216,909	–126	–64	–217,099
of which financial assets written off	*–305,292*	*–160*	*–160*	*–305,613*	*–216,909*	*–126*	*–51*	*–217,086*
of which default on receivables	*0*	*0*	*–10*	*–10*	*0*	*0*	*–13*	*–13*
Changes from non-substantial contractual modification	–8	0	–1	–10	0	0	0	0
Exchange rate and other changes	–1,073	–17	–4	–1,094	88	5	–2	91
As of 31 Dec.	**294,009**	**1,522**	**235**	**295,766**	**281,429**	**265**	**209**	**281,902**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Development of gross carrying amounts of financial assets at amortised cost – Loans and advances to customers[1)]

	Financial year 2020				Financial year 2019			
	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.	**97,755**	**4,708**	**17,335**	**119,798**	**95,650**	**4,445**	**17,159**	**117,254**
Transfer from stage 2 and stage 3 to stage 1	679	–678	–1	0	354	–354	0	0
Transfer from stage 1 and stage 3 to stage 2	–10,845	10,878	–33	0	–1,656	1,885	–230	0
Transfer from stage 1 and stage 2 to stage 3	–1,742	–651	2,393	0	–279	–357	637	0
Additions	32,149	1,103	269	33,522	17,379	134	280	17,793
of which recently purchased or issued financial assets	*24,572*	*421*	*214*	*25,207*	*10,673*	*5*	*104*	*10,782*
of which current business	*7,577*	*683*	*55*	*8,315*	*6,706*	*129*	*176*	*7,011*
Disposals	–16,236	–2,155	–1,149	–19,541	–14,682	–1,090	–607	–16,380
of which financial assets written off	*–16,234*	*–2,153*	*–955*	*–19,342*	*–14,672*	*–1,090*	*–493*	*–16,256*
of which default on receivables	*–2*	*–2*	*–194*	*–198*	*–10*	*0*	*–114*	*–124*
Changes from non-substantial contractual modification	–10	–3	1	–12	–7	–1	–1	–10
Exchange rate and other changes	–1,681	–729	–158	–2,567	997	47	97	1,140
As of 31 Dec.	**100,069**	**12,474**	**18,656**	**131,199**	**97,755**	**4,708**	**17,335**	**119,798**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Development of gross carrying amounts of financial assets at amortised cost – securities and investments[1)]

	Financial year 2020				Financial year 2019			
	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.	**34,440**	**0**	**77**	**34,517**	**32,732**	**35**	**91**	**32,858**
Transfer from stage 2 and stage 3 to stage 1	0	0	0	0	4	–4	0	0
Additions	19,874	0	0	19,874	15,380	0	0	15,380
of which recently purchased or issued financial assets	*19,842*	*0*	*0*	*19,842*	*15,364*	*0*	*0*	*15,364*
of which current business	*32*	*0*	*0*	*32*	*17*	*0*	*0*	*17*
Disposals	–18,617	0	–12	–18,629	–13,957	–30	–13	–14,001
of which financial assets written off	*–18,617*	*0*	*–12*	*–18,629*	*–13,957*	*–30*	*–13*	*–14,001*
Exchange rate and other changes	28	0	0	28	281	–1	0	279
As of 31 Dec.	**35,725**	**0**	**65**	**35,790**	**34,440**	**0**	**77**	**34,517**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Development of gross carrying amounts of off-balance sheet lending transactions[1)]

	Financial year 2020				Financial year 2019			
	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.	**84,151**	**667**	**310**	**85,128**	**85,421**	**370**	**211**	**86,003**
Transfer from stage 2 and stage 3 to stage 1	71	–71	0	0	3	–3	0	0
Transfer from stage 1 and stage 3 to stage 2	–448	448	0	0	–56	56	0	0
Transfer from stage 1 and stage 2 to stage 3	–58	–9	68	0	–3	–11	13	0
Additions	1,180	54	5	1,239	2,274	5	0	2,280
of which recently purchased or issued financial assets	*775*	*4*	*0*	*779*	*1,685*	*0*	*0*	*1,685*
of which current business	*405*	*50*	*5*	*460*	*589*	*5*	*0*	*595*
Disposals	–826	–77	–36	–940	–2,156	–36	–10	–2,201
of which financial assets written off	*–826*	*–77*	*–36*	*–940*	*–2,156*	*–36*	*–10*	*–2,201*
Exchange rate and other changes	18,721	4,092	–89	22,723	–1,333	285	95	–954
As of 31 Dec.	**102,790**	**5,103**	**257**	**108,151**	**84,151**	**667**	**310**	**85,128**

[1)] Adjusted presentation due to change in recognition (see Note 3)

The gross carrying amount of financial assets whose risk provisioning at the time of modification was assigned to stages 2 or 3 and which were transferred back to stage 1 during the reporting period amounted to EUR 14 million as of the reporting date (31 Dec. 2019: EUR 2 million).

(35) Risk provisions

Development of risk provisions for financial assets at amortised cost – Loans and advances to banks[1)]

	Financial year 2020				Financial year 2019			
	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.	**124**	**24**	**93**	**242**	**122**	**33**	**39**	**195**
Transfer from stage 2 and stage 3 to stage 1	7	–7	0	0	10	–10	0	0
Transfer from stage 1 and stage 3 to stage 2	–24	24	0	0	–2	2	0	0
Transfer from stage 1 and stage 2 to stage 3	–3	–3	6	0	–1	–10	11	0
Additions	99	71	39	208	58	18	55	130
Utilisation	0	0	–48	–48	0	0	–7	–7
Reversals	–56	–10	–23	–89	–65	–9	–5	–80
Net present value effect	0	0	2	2	0	0	2	2
Exchange rate and other changes	–4	–5	1	–8	2	1	–1	2
As of 31 Dec.	**143**	**95**	**68**	**306**	**124**	**24**	**93**	**242**

1) Adjusted presentation due to change in recognition (see Note 3)

Development of risk provisions for financial assets at amortised cost – Loans and advances to customers[1)]

	Financial year 2020				Financial year 2019			
	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.	**184**	**186**	**1,058**	**1,428**	**199**	**176**	**975**	**1,350**
Transfer from stage 2 and stage 3 to stage 1	96	–96	0	0	30	–30	0	0
Transfer from stage 1 and stage 3 to stage 2	–45	60	–15	0	–10	20	–11	0
Transfer from stage 1 and stage 2 to stage 3	–20	–67	87	0	–7	–46	53	0
Additions	257	406	521	1,184	110	141	237	488
Utilisation	0	0	–238	–239	0	0	–147	–147
Reversals	–220	–141	–169	–530	–138	–78	–123	–339
Net present value effect	0	0	67	67	0	0	63	63
Exchange rate and other changes	–9	–23	–54	–86	0	2	10	12
As of 31 Dec.	**243**	**326**	**1,255**	**1,824**	**184**	**186**	**1,058**	**1,428**

1) Adjusted presentation due to change in recognition (see Note 3)

Development of risk provisions for financial assets at amortised cost – securities and investments[1)]

	Financial year 2020				Financial year 2019			
	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.	**6**	**0**	**0**	**6**	**6**	**1**	**0**	**7**
Additions	12	0	0	12	4	0	0	4
Reversals	–8	0	0	–8	–4	0	0	–4
As of 31 Dec.	**11**	**0**	**0**	**11**	**6**	**0**	**0**	**6**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Development of Risk provisions for lending business (off-balance sheet lending transactions)[1)]

	Financial year 2020				Financial year 2019			
	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.	**36**	**28**	**10**	**73**	**40**	**28**	**6**	**73**
Transfer from stage 2 and stage 3 to stage 1	22	–22	0	0	1	–1	0	0
Transfer from stage 1 and stage 3 to stage 2	–3	3	0	0	–2	2	0	0
Transfer from stage 1 and stage 2 to stage 3	–1	–2	3	0	0	–2	2	0
Additions	87	83	18	188	84	10	6	100
Reversals	–90	–31	–12	–132	–87	–10	–4	–101
Exchange rate and other changes	–1	–2	0	–3	1	0	0	1
As of 31 Dec.	**49**	**58**	**19**	**126**	**36**	**28**	**10**	**73**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Provisions for losses on loans and advances also include money market investments and reverse repos.

In the reporting year, EUR 69 million (31 Dec. 2019: EUR 65 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 61 million as of the reporting date (31 Dec. 2019: EUR 71 million).

(36) Financial assets at fair value

Analysis of Financial assets at fair value by class[1), 2)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Loans and advances to banks – FVM		
Loans and advances	38	9
Loans and advances to customers – FVM		
Loans and advances	9,616	9,617
Securities and investments – FVM		
Equity investments	3,016	3,242
Shares in non-consolidated subsidiaries	48	43
Other derivatives – FVM		
Interest-related derivatives	4,751	4,314
Currency-related derivatives	607	1,069
Total	**18,077**	**18,295**

1) Adjusted presentation due to change in recognition (see Note 3)
2) Adjusted prior-year figures due to change in recognition (see Note 3)

Cross-currency swaps are presented under Currency-related derivatives.

Other derivatives includes derivatives with positive fair values of EUR 11 million (31 Dec. 2019: EUR 37 million) attributable to embedded derivatives that are bifurcated.

(37) Value adjustments from macro fair value hedge accounting

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Value adjustments to assets under macro fair value hedge accounting	12,220	10,887

The fair values attributable to hedged risks in the hedged portfolios in the at amortised cost measurement category are included in this item.

(38) Derivatives designated for hedge accounting

Analysis of derivatives with positive fair values designated for hedge accounting by type of hedging relationship

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Micro fair value hedge accounting	7,934	10,840
Macro fair value hedge accounting	24	19
Total	**7,958**	**10,859**

Analysis of derivatives with positive fair values designated for hedge accounting by type of hedging instrument[1)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Interest-related derivatives	5,374	3,822
Currency-related derivatives	2,584	7,038
Total	**7,958**	**10,859**

[1)] Item name changed from previous year without change in content

Only Interest-related derivatives are designated for macro fair value hedge accounting. Cross-currency swaps are presented under Currency-related derivatives.

(39) Investments accounted for using the equity method

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Investments accounted for using the equity method	613	609
Total	**613**	**609**

The note regarding “Disclosures on shareholdings” contains a list of Investments accounted for using the equity method.

(40) 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 81 million (31 Dec. 2019: EUR 0 million) in the areas of banks and companies and the regions of Asia and Latin America, which meet the criteria under IFRS 5 as “non-current assets held for sale”, and are therefore to be reported separately. These equity investments are recognised in the business sector “Promotion of developing countries and emerging economies” and are intended to be sold within the next twelve months.

(41) Property, plant and equipment

Analysis of Property, plant and equipment by class

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Land and buildings	857	872
Plant and equipment	81	80
Rights of use arising from leases	60	68
Other property, plant and equipment	1	1
Total	**999**	**1,021**

Additions to rights of use arising from leases amounted to EUR 15 million (2019: EUR 0 million). Payments in advance and assets under construction are presented in Other property, plant and equipment.

Development of Property, plant and equipment in financial year 2020

	Acquisition/ production cost EUR in millions	Accumulated depreciation, impairment and reversal of impairment losses EUR in millions	Net carrying amount 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**

Development of Property, plant and equipment in financial year 2019

	Acquisition/ production cost EUR in millions	Accumulated depreciation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 2019	**1,379**	**–421**	**958**
Additions/reversals of impairment losses	130	0	130
Disposals	–22	18	–4
Depreciation	0	–63	–63
Impairment losses	0	0	0
Carrying amount as of 31 Dec. 2019	**1,487**	**–466**	**1,021**

(42) Intangible assets

Analysis of Intangible assets by class

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Software	122	131
Purchased software	*72*	*90*
Internally generated software	*50*	*41*
Other intangible assets	50	58
Total	**172**	**188**

Other intangible assets include, in particular, software under development.

Development of Intangible assets in financial year 2020

	Acquisition/ production cost EUR in millions	Accumulated amortisation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 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**

Development of Intangible assets in financial year 2019

	Acquisition/ production cost EUR in millions	Accumulated amortisation, impairment and reversal of impairment losses EUR in millions	Net carrying amount EUR in millions
Carrying amount as of 1 Jan. 2019	**439**	**–214**	**225**
Additions/reversals of impairment losses	33	0	33
Disposals	–6	6	0
Amortisation	0	–59	–59
Impairment losses	0	–11	–11
Carrying amount as of 31 Dec. 2019	**466**	**–277**	**188**

(43) Income tax assets

Analysis of Income tax assets

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Current income tax assets	15	45
Deferred income tax assets	698	658
Total	**714**	**703**

Current income tax assets result from creditable taxes (investment income tax/solidarity surcharge) and tax receivables from advance tax payments during financial year 2020.

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 carry-forwards are based on the business plan for 2021–2024. The volume of deferred tax assets not included amounts to EUR 178 million, of which EUR 45 million relates to loss carry-forwards.

Composition of deferred tax assets by statement of financial position item[1), 2)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Financial assets (at amortised cost and at fair value)[1), 2)]	91	93
Intangible assets	10	15
Financial liabilities at fair value – Other derivatives[1), 2)]	425	329
Provisions	75	79
Other statement of financial position items	9	0
Tax loss carry-forwards	88	142
Subtotal	**698**	**658**
Offset against deferred tax liabilities	0	0
Total	**698**	**658**

[1)] Adjusted presentation due to change in recognition (see Note 3)
[2)] Adjusted prior-year figures due to change in recognition (see Note 3)

(44) Other assets

Analysis of Other assets

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Other assets and receivables	720	696
Prepaid expenses and deferred charges	38	27
Total	**758**	**723**

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

	2020 EUR in millions	2019 EUR in millions
As of 1 Jan.	**7**	**19**
Additions	1	7
Disposals	–7	–19
As of 31 Dec.	**1**	**7**

(45) Financial liabilities at amortised cost

Analysis of Financial liabilities at amortised cost by class[1), 2)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Liabilities to banks		
Money-market transactions	2,477	3,165
Promissory note loans	1,682	1,424
Other financial liabilities	18,145	10,055
Liabilities to customers		
Money-market transactions	218	202
Promissory note loans	41,129	2,332
Other financial liabilities	5,872	6,133
Certificated liabilities		
Money-market issues	41,293	40,633
Bonds and notes	373,051	384,264
Total	**483,867**	**448,208**

1) Adjusted presentation due to change in recognition (see Note 3)
2) Adjusted prior-year figures due to change in recognition (see Note 3)

Liabilities from cash collateral received are included in Other financial liabilities.

New securities including money market papers with a nominal volume of EUR 215.0 billion (2019: EUR 206.3 billion) were issued during the reporting period. The volume of repayments due to maturity during the same period amounted to EUR 215.4 billion (nominal) (2019: EUR 198.4 billion) and the volume of early repurchases to EUR 0.1 billion (nominal) (2019: EUR 1.0 billion).

(46) Financial liabilities at fair value

Analysis of Financial liabilities at fair value by class[1), 2)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Liabilities to banks – FVD		
Promissory note loans	266	255
Liabilities to customers – FVD		
Promissory note loans	1,300	1,464
Certificated liabilities – FVD		
Bonds and notes	10,924	11,294
Other derivatives – FVM		
Interest-related derivatives	1,271	984
Currency-related derivatives	2,470	1,470
Total	**16,231**	**15,466**

1) Adjusted presentation due to change in recognition (see Note 3)
2) Adjusted prior-year figures due to change in recognition (see Note 3)

There were no new issues in the reporting period – as in the previous year. The volume of repayments due to maturity during the same period amounted to EUR 0.2 billion (nominal) (2019: EUR 0.7 billion) and the volume of early repurchases to EUR 0 billion (nominal) (2019: EUR 0.2 billion).

Cross-currency swaps are presented under Currency-related derivatives.

Other derivatives include derivatives with negative fair values of EUR 20 million as of 31 December 2020 (31 Dec. 2019: EUR 23 million) attributable to embedded derivatives that are bifurcated.

(47) Value adjustments from macro fair value hedge accounting

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Value adjustments to liabilities under macro fair value hedge accounting	57	77

The fair values attributable to formerly hedged risks in the hedged portfolios in the liabilities at amortised cost measurement category are included in this item.

(48) Derivatives designated for hedge accounting

Analysis of derivatives with negative fair values designated for hedge accounting by type of hedging relationship

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Micro fair value hedge accounting	5,750	2,727
Macro fair value hedge accounting	4,160	3,947
Total	**9,910**	**6,674**

Analysis of derivatives with negative fair values designated for hedge accounting by type of hedging instrument[1)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Interest-related derivatives	4,317	4,206
Currency-related derivatives	5,594	2,468
Total	**9,910**	**6,674**

[1)] Item name changed from previous year without change in content

(49) Risk provisions

Analysis of Provisions by class

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Provisions for pensions and similar commitments	2,687	2,523
Provisions for credit risks	126	73
Other provisions	731	739
Total	**3,543**	**3,335**

Development of Provisions for pensions and similar commitments in financial year 2020

	Defined benefit obligations EUR in millions	Early retirement EUR in millions	Partial retirement EUR in millions	Total 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*
Interest cost	*33*	*0*	*0*	*33*
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
Contributions by members (recognised in equity)	6	0	0	6
As of 31 Dec. 2020	**2,616**	**60**	**11**	**2,687**

The average expected residual term of the defined benefit pension obligations is 21.1 years as of 31 December 2020 (31 Dec. 2019: 20.7 years).

Development of Provisions for pensions and similar commitments in financial year 2019

	Defined benefit obligations	Early retirement	Partial retirement	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2019	**2,041**	**93**	**14**	**2,148**
Additions	107	1	5	113
Current service cost	*64*	*1*	*5*	*70*
Past service cost	*0*	*0*	*0*	*0*
Interest cost	*43*	*0*	*0*	*43*
Other additions	*0*	*0*	*0*	*0*
Actuarial gains and losses	323	0	0	323
Changes in demographic assumptions	*0*	*0*	*0*	*0*
Changes in financial assumptions	*325*	*0*	*0*	*325*
Changes in experience adjustments	*–2*	*0*	*0*	*–2*
Utilisation	–47	–10	–4	–62
Reversals	0	0	0	0
Transfers	0	0	0	0
Contributions by members (recognised in equity)	1	0	0	1
Changes in consolidated group	0	0	0	0
As of 31 Dec. 2019	**2,424**	**84**	**14**	**2,523**

Provisions for pensions and similar commitments are calculated on the basis of the new RT 2018 G Heubeck actuarial tables and the following other actuarial assumptions:

Actuarial assumptions in % p.a.

	31 Dec. 2020	31 Dec. 2019
Technical discount rate	1.02	1.34
Rate of salary increases	2.20	2.20
Rate of pension increases	2.50	2.50
Rate of staff turnover	2.30	1.84

The technical discount rate as of 31 December 2020 reflects an adjustment to the average residual term of the defined benefit pension obligations translating into an adjustment to the average capital commitment period used.

Sensitivity of defined benefit pension obligations as of 31 December 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

Sensitivity of defined benefit pension obligations as of 31 December 2019

	Difference	Change in defined benefit obligations	Difference	Change in defined benefit obligations
		EUR in millions		EUR in millions
Life expectancy	+1 year	107	–1 year	–106
Technical discount rate	+0.25%	–119	–0.25%	129
Rate of salary increases	+0.50%	19	–0.50%	–18
Rate of pension increases	+0.50%	166	–0.50%	–95
Rate of staff turnover	+1.00%	–4	–1.00%	4

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 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
Other additions	*3*	*53*	*56*
Utilisation	–3	–48	–52
Reversals	0	–13	–13
As of 31 Dec. 2020	**37**	**694**	**731**

The Obligations to employees column presents other long-term employee benefits including provisions for service anniversaries. Corresponding actuarial reports have been prepared for these obligations.

An Other provision item in the amount of EUR 10 million (31 Dec. 2019: EUR 24 million) is reported due to the interest rate being below the market rate for irrevocable promotional loan commitments with additional promotional funds in the form of interest rate reductions impacting KfW's earnings position. Changes to existing provisions are presented as net additions or, in the case of a decline, as a transfer via the adjustments to the carrying amounts of already disbursed promotional loans recognised on the assets side under Financial assets at amortised cost – Loans and advances to banks or customers.

Other provisions also comprise obligations arising from the assumption of the operations of the State Insurance Company of the GDR 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 Sonderaufgaben – "BvS"*) recognised in Other assets.

Development of Other provisions in financial year 2019

	Obligations to employees	Other provisions	Total
	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2019	**33**	**774**	**807**
Additions	7	50	57
Interest cost	*0*	*1*	*1*
Other additions	*7*	*49*	*57*
Utilisation	–3	–72	–75
Reversals	0	–51	–51
As of 31 Dec. 2019	**37**	**702**	**739**

(50) Income tax liabilities
Analysis of Income tax liabilities

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Current income tax liabilities	31	33
Deferred income tax liabilities	418	325
Total	**450**	**358**

Current income tax liabilities as of 31 December 2020 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[1)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Financial assets at fair value – Other derivatives[1)]	404	308
Other statement of financial position items	14	17
Total	**418**	**325**

[1)] Adjusted presentation due to change in recognition (see Note 3)

(51) Other liabilities
Analysis of Other liabilities

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Other financial liabilities	401	399
Deferred income	57	74
Lease liabilities	72	69
Total	**529**	**542**

Deferred income includes liabilities resulting from contractual obligations (“contract liabilities” in accordance with IFRS 15). These developed as follows:

Development of liabilities from contractual obligations

	2020 EUR in millions	2019 EUR in millions
As of 1 Jan.	**37**	**35**
Additions	8	16
Disposals	–11	–14
As of 31 Dec.	**34**	**37**

(52) Equity

Analysis of Equity

	31 Dec. 2020 EUR in millions	31 Dec. 2019 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	19,411	18,742
Statutory reserve under Article 10 (2) KfW Law	*1,875*	*1,875*
Special reserve under Article 10 (3) KfW Law	*12,971*	*11,372*
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	*4,544*	*5,474*
Fund for general banking risks	600	600
Revaluation reserves	–1,151	–918
Valuation result from the change in own credit risk of liabilities designated at fair value through profit or loss	*–153*	*–40*
Actuarial gains and losses from defined-benefit pension obligations (after tax)	*–998*	*–879*
Total	**31,797**	**31,362**

Equity forms the basis for the capital available to cover 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 group management report.

KfW's net income amounting to EUR 1,599 million was used to increase the special reserve under Article 10 (3) of the KfW Law.

Notes to financial instruments

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

(53) Gains and losses from financial instruments by measurement category

The following tables present 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 2020

	Financial assets at amortised cost[1)]	Financial liabilities at amortised cost[1)]	Financial assets at fair value – FVM[1)]	Financial liabilities at fair value[1)] 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[3)]	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[2)]	–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)]	–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) Item name changed without change in content (see Note 3)
2) Changed item name and structure (see Note 3)
3) Includes interest income from financial guarantees of EUR 28 million

Gains and losses from financial instruments by measurement category in financial year 2019

	Financial assets at amortised cost[1]	Financial liabilities at amortised cost[1]	Financial assets at fair value – FVM[1]	Financial liabilities at fair value[1]		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	5,829[3]	0	594	557	0	–3,062	3,918
Interest expense	–137	–6,150	241	–276	–478	5,273	–1,528
Net gains/losses from risk provisions[2]	–173	0	0	0	0	0	–173
Commission income	6	0	0	0	0	0	6
Commission expense	–11	–5	–1	0	0	0	–18
Net gains/losses from hedge accounting	2,609	–5,177	0	0	0	2,567	–1
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	787	–384	–406	0	–3
Net gains/losses from disposal of financial assets at amortised cost[1]	–6	0	0	0	0	0	–6
Net other operating income	0	0	0	0	0	0	0
Change in revaluation reserves	0	0	0	0	–18	0	–18
Total	**8,116**	**–11,332**	**1,621**	**–103**	**–902**	**4,778**	**2,177**

[1] Adjusted presentation due to change in recognition (see Note 3)
[2] Adjusted prior-year figures due to change in recognition (see Note 3)
[3] Includes interest income from financial guarantees of EUR 22 million

(54) Disclosures on fair value

The following tables present 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.

Fair value of financial instruments by valuation method as of 31 December 2020[1)]

	Carrying amount (statement of financial position)	Fair value Level 1	Level 2	Level 3	Total	Difference from carrying amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets						
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	38	0	0	38	38	0
Loans and advances to customers	9,616	0	9,425	191	9,616	0
Securities and investments	3,064	39	2,315	710	3,064	0
Other derivatives	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	266	0	266	0	266	0
Liabilities to customers	1,300	0	1,300	0	1,300	0
Certificated liabilities	10,924	7,690	3,231	3	10,924	0
Other derivatives	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**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Fair value of financial instruments by valuation method as of 31 December 2019[1)]

	Carrying amount (statement of financial position)	Fair value Level 1	Level 2	Level 3	Total	Difference from carrying amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Assets						
Financial assets at amortised cost[2)]						
Loans and advances to banks	281,661	1	16,475	273,830	290,305	8,645
Loans and advances to customers	118,370	0	906	121,860	122,765	4,395
Securities and investments	34,511	27,410	3,917	3,226	34,553	42
Financial assets at fair value[2)]						
Loans and advances to banks	9	0	0	9	9	0
Loans and advances to customers	9,618	0	9,432	185	9,618	0
Securities and investments	3,285	251	2,192	842	3,285	0
Other derivatives	5,383	0	4,546	837	5,383	0
Value adjustments from macro fair value hedge accounting	10,887	n.a.	n.a.	n.a.	n.a.	–10,887
Derivatives designated for hedge accounting	10,859	0	10,859	0	10,859	0
Non-current assets held for sale	0	0	0	0	0	0
Total	**474,583**	**27,661**	**48,327**	**400,789**	**476,778**	**2,195**
Liabilities and equity						
Financial liabilities at amortised cost[2)]						
Liabilities to banks	14,644	0	14,703	1	14,704	60
Liabilities to customers	8,667	0	8,870	26	8,896	229
Certificated liabilities	424,897	376,435	49,900	2	426,336	1,439
Financial liabilities at fair value[2)]						
Liabilities to banks	255	0	255	0	255	0
Liabilities to customers	1,464	0	1,464	0	1,464	0
Certificated liabilities	11,294	8,138	3,139	16	11,294	0
Other derivatives	2,453	0	2,404	49	2,453	0
Value adjustments from macro fair value hedge accounting	77	n.a.	n.a.	n.a.	n.a.	–77
Derivatives designated for hedge accounting	6,674	0	6,674	0	6,674	0
Total	**470,425**	**384,573**	**87,408**	**95**	**472,076**	**1,652**

1) Adjusted presentation due to change in recognition (see Note 3)
2) Adjusted prior-year figures due to change in recognition (see Note 3)

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.

Change of valuation method used for financial instruments measured at fair value with a transfer between levels 1 and 2 in financial year 2020[1)]

	Transfer from level 1 to level 2	Transfer from level 2 to level 1
	EUR in millions	EUR in millions
Assets		
Financial assets at fair value		
Loans and advances to banks	0	0
Loans and advances to customers	0	0
Securities and investments	352	0
Other derivatives	0	0
Derivatives designated for hedge accounting	0	0
Non-current assets held for sale	0	0
Total	**352**	**0**
Liabilities and equity		
Financial liabilities at fair value		
Liabilities to banks	0	0
Liabilities to customers	0	0
Certificated liabilities	229	9
Other derivatives	0	0
Derivatives designated for hedge accounting	0	0
Total	**229**	**9**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Certificated liabilities in the amount of EUR 229 million were transferred to level 2 in the reporting period due to declining market liquidity.

Change of valuation method used for financial instruments measured at fair value with a transfer between levels 1 and 2 in financial year 2019[1)]

	Transfer from level 1 to level 2	Transfer from level 2 to level 1
	EUR in millions	EUR in millions
Assets		
Financial assets at fair value		
Loans and advances to banks	0	0
Loans and advances to customers	0	0
Securities and investments	16	0
Other derivatives	0	0
Derivatives designated for hedge accounting	0	0
Non-current assets held for sale	0	0
Total	**16**	**0**
Liabilities and equity		
Financial liabilities at fair value		
Liabilities to banks	0	0
Liabilities to customers	0	0
Certificated liabilities	0	0
Other derivatives	0	0
Derivatives designated for hedge accounting	0	0
Total	**0**	**0**

1) Adjusted presentation due to change in recognition (see Note 3)

Development of financial assets measured at fair value assigned to level 3 in financial year 2020[1)]

	Financial assets at fair value					
	Loans and advances to banks	Loans and advances to customers	Securities and investments	Other derivatives	Non-current assets held for sale	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 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**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Development of financial liabilities measured at fair value assigned to level 3 in financial year 2020[1)]

	Financial liabilities at fair value				
	Liabilities to banks	Liabilities to customers	Certificated liabilities	Other derivatives	Total
	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**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Development of financial assets measured at fair value assigned to level 3 in financial year 2019[1)]

	Financial assets at fair value					
	Loans and advances to banks	Loans and advances to customers	Securities and investments	Other derivatives	Non-current assets held for sale	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2019	**17**	**186**	**778**	**575**	**0**	**1,556**
A. Changes recognised in the income statement						
Net interest and commission income	0	–2	0	0	0	–2
Contracts still valid at year-end	*0*	*–1*	*0*	*2*	*0*	*1*
Net gains/losses from hedge accounting	0	0	0	0	0	0
Contracts still valid at year-end	*0*	*0*	*0*	*0*	*0*	*0*
Net gains/losses from other financial instruments at fair value through profit or loss	0	–27	39	214	0	226
Contracts still valid at year-end	*0*	*–27*	*31*	*283*	*0*	*288*
Total changes recognised in the income statement	**0**	**–28**	**39**	**214**	**0**	**224**
B. Changes recognised directly in equity						
Change of valuation method used	0	0	16	–1	0	14
Transfer from level 1 and level 2	0	0	143	0	0	143
Transfer to level 1 and level 2	0	0	–127	–1	0	–128
Additions	0	51	23	0	0	74
Disposals	–8	–25	–25	0	0	–59
Total changes recognised directly in equity	**–8**	**25**	**14**	**–1**	**0**	**30**
Changes in consolidated group	0	0	0	0	0	0
Exchange rate changes	0	2	11	21	0	34
Other changes	0	0	0	29	0	29
As of 31 Dec. 2019	**9**	**185**	**842**	**837**	**0**	**1,874**

1) Adjusted presentation due to change in recognition (see Note 3)

Development of financial liabilities measured at fair value assigned to level 3 in financial year 2019[1)]

	Financial liabilities at fair value				
	Liabilities to banks	Liabilities to customers	Certificated liabilities	Other derivatives	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2019	**0**	**0**	**55**	**97**	**152**
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	2	–75	–73
Contracts still valid at year-end	*0*	*0*	*2*	*–73*	*–71*
Total changes recognised in the income statement	**0**	**0**	**3**	**–75**	**–73**
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	–42	–1	–43
Transfer from level 1 and level 2	0	0	0	0	0
Transfer to level 1 and level 2	0	0	–42	–1	–43
Additions	0	0	0	0	0
Disposals	0	0	0	–1	–1
Total changes recognised directly in equity	**0**	**0**	**–42**	**–2**	**–44**
Exchange rate changes	0	0	1	0	1
Other changes	0	0	0	29	29
As of 31 Dec. 2019	**0**	**0**	**16**	**49**	**66**

[1)] Adjusted presentation due to change in recognition (see Note 3)

The following tables demonstrate how an alternative determination of relevant unobservable data, i.e. values in best and worst case scenarios, would impact fair values for significant products allocated to this level.

Information on unobservable data as of 31 December 2020

Major classes	Valuation method used	Relevant unobservable data with alternative determination	Range
Loans and advances to banks and loans and advances to customers	Discounted cash flow method[1]	Credit spread	–800 to +5,200 basis points
		Internal spread	–8 to +43 basis points
		Risk costs	+/– 10%
Securities and investments from equity finance business	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)
Derivatives with positive or negative fair values, which comprise a hedging instrument for customers with respect to export and project finance	Discounted cash flow method	Expected risk-free customer margin	7% to 13%
Certificated liabilities	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.

Information on unobservable data as of 31 December 2019

Major Classes	Valuation method used	Relevant unobservable data with alternative determination	Range
Loans and advances to customers	Discounted cash flow method[1]	Credit Spread	–500 to +2,000 basis points
		Internal spread	–6 to +45 basis points
		Risk costs	+/– 10%
Securities and investments from equity finance business	Discounted cash flow method[2]	Cost of capital	0.5% to 1.5% (absolute fluctuation)
		Long-term result	5% (relative fluctuation)
		Risk costs	+/– 10%
Derivatives with positive or negative fair values, which comprise a hedging instrument for customers with respect to export and project finance	Discounted cash flow method	Expected risk-free customer margin	7% to 13%
Certificated liabilities	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 2020[1]

	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	39	38	37
Loans and advances to customers	209	191	167
Securities and investments	795	710	637
Other derivatives	1,184	1,177	1,169
Non-current assets held for sale	74	59	47
Total	**2,302**	**2,174**	**2,057**

[1] Adjusted presentation due to change in recognition (see Note 3)

Sensitivity analysis for the financial liabilities measured at fair value assigned to level 3 as of 31 December 2020[1)]

	Best case scenario	Reported value	Worst case scenario
	EUR in millions	EUR in millions	EUR in millions
Financial liabilities at fair value			
Certificated liabilities	3	3	3
Other derivatives	18	18	18
Total	**21**	**21**	**22**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Sensitivity analysis for the financial assets measured at fair value assigned to level 3 as of 31 December 2019[1)]

	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 customers	203	185	166
Securities and investments	956	842	758
Other derivatives	843	837	831
Total	**2,001**	**1,864**	**1,755**

[1)] Adjusted presentation due to change in recognition (see Note 3)

Sensitivity analysis for the financial liabilities measured at fair value assigned to level 3 as of 31 December 2019[1)]

	Best case scenario	Reported value	Worst case scenario
	EUR in millions	EUR in millions	EUR in millions
Financial liabilities at fair value			
Certificated liabilities	16	16	16
Other derivatives	49	49	50
Total	**65**	**66**	**66**

[1)] Adjusted presentation due to change in recognition (see Note 3)

(55) Disclosures on micro fair value hedge accounting

Disclosures on hedged items in micro fair value hedge accounting by risk type – 2020[1)]

	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	28,007	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

[1)] Adjusted presentation due to change in recognition (see Note 3)

Disclosures on hedged items in micro fair value hedge accounting by risk type – 2019[1)]

	Carrying amount of hedged items	Accumulated hedge fair value adjustment (fair value of the hedged risk for the hedged item)	Hedge fair value adjustment to be amortised (discontinued hedge relationships)	Statement of financial position items in which the hedged items are reported	Fair value changes in hedged items to determine hedge ineffectiveness (income statement effect – hedged items)
	EUR in millions	EUR in millions	EUR in millions		EUR in millions
Assets					
Interest risk					
Securities and investments – Bonds and other fixed-income securities	26,301	428	0	Financial assets at amortised cost	204
Interest-currency risk					
Securities and investments – Bonds and other fixed-income securities	219	1	0	Financial assets at amortised cost	0
Liabilities and equity					
Interest risk					
Liabilities to banks/ customers – promissory note loans	2,254	412	3	Financial liabilities at amortised cost	–44
Certificated liabilities	141,458	4,613	649	Financial liabilities at amortised cost	–3,162
Interest-currency risk					
Liabilities to banks/ customers – promissory note loans	0	0	0	Financial liabilities at amortised cost	0
Certificated liabilities	148,741	4,003	–2	Financial liabilities at amortised cost	–1,993

1) Adjusted presentation due to change in recognition (see Note 3)

Disclosures on hedging instruments in micro fair value hedge accounting by risk type – 2020

	Par value of hedging instruments	Carrying amount of hedging instruments	Statement of financial position items in which the hedging instruments are reported	Fair value changes in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)	Average interest rate of hedging instruments[1]
	EUR in millions	EUR in millions		EUR in millions	%
Assets					
Interest risk					
Interest-related transactions: interest rate swap	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.

Disclosures on hedging instruments in micro fair value hedge accounting by risk type – 2019

	Par value of hedging instruments	Carrying amount of hedging instruments	Statement of financial position items in which the hedging instruments are reported	Fair value changes in hedging instruments to determine hedge ineffectiveness (income statement effect – hedging instruments)	Average interest rate of hedging instruments[1]
	EUR in millions	EUR in millions		EUR in millions	%
Assets					
Interest risk					
Interest-related transactions: interest rate swap	140,692	3,802	Derivatives designated for hedge accounting	–199	1.4
Interest-currency risk					
Currency-related transactions: cross-currency interest rate swap	154,793	7,038	Derivatives designated for hedge accounting	0	1.8[2]
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	28,641	260	Derivatives designated for hedge accounting	3,202	1.6
Interest-currency risk					
Currency-related transactions: cross-currency interest rate swap	70,799	2,468	Derivatives designated for hedge accounting	2,011	3.2[2]

[1] Average interest rate based on the coupon of the fixed leg of the derivatives weighted with nominal volume
[2] Cross-currency interest rate swaps are primarily used to hedge interest risks, but also to hedge foreign currency risks. The difference between the average interest rate of the interest rate swaps and the cross-currency interest rate swaps results from the different interest rate of the hedged currencies, among other factors.

Analysis of par values of hedging instruments by hedge relationship according to remaining terms as of 31 December 2020

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	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

Analysis of par values of hedging instruments by hedge relationship according to remaining terms as of 31 December 2019

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	3,134	500	6,956	78,760	51,342
Interest-currency risk					
Currency-related transactions: cross-currency interest rate swap	7,404	260	33,313	95,471	18,345
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	363	135	2,887	17,221	8,034
Interest-currency risk					
Currency-related transactions: cross-currency interest rate swap	1,028	288	27,987	31,712	9,785

(56) Disclosures on macro fair value hedge accounting

Disclosures on hedged items in macro fair value hedge accounting by risk type – 2020

	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		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[1)]*	*Value adjustments from macro fair value hedge accounting*	*1,779*
Liabilities and equity	*0*	*57*	*57*	*Financial liabilities at amortised cost[1)]*	*Value adjustments from macro fair value hedge accounting*	*18*

[1)] Adjusted item name due to change in recognition (see Note 3)

Disclosures on hedged items in macro fair value hedge accounting by risk type – 2019

	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	*193,602*	*10,887*	*764*	*Financial assets at amortised cost[1)]*	*Value adjustments from macro fair value hedge accounting*	*2,405*
Liabilities and equity	*0*	*77*	*77*	*Financial liabilities at amortised cost[1)]*	*Value adjustments from macro fair value hedge accounting*	*23*

[1)] Item name changed from previous year without change in content (see Note 3)

Disclosures on hedging instruments in macro fair value hedge accounting by risk type – 2020

	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	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

Disclosures on hedging instruments in macro fair value hedge accounting by risk type – 2019

	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	18,905	19	Derivatives designated for hedge accounting	96
Liabilities and equity				
Interest risk				
Interest-related transactions: interest rate swap	178,405	3,947	Derivatives designated for hedge accounting	–2,542

Analysis of par values of hedging instruments by remaining terms as of 31 December 2020

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	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

Analysis of par values of hedging instruments according to remaining terms as of 31 December 2019

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	300	0	589	8,329	9,687
Liabilities and equity					
Interest risk					
Interest-related transactions: interest rate swap	1,825	1,375	13,076	85,198	76,930

(57) Additional disclosures on derivatives

Analysis of derivatives by type of hedge[1)]

	Par value		Fair value 31 Dec. 2020		Fair value 31 Dec. 2019	
	31 Dec. 2020	31 Dec. 2019	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	540,913	490,412	10,126	5,584	8,134	5,188
Currency-related derivatives	156,986	200,301	3,180	8,047	8,072	3,916
Credit derivatives	0	0	0	0	0	0
Total	**697,898**	**690,714**	**13,306**	**13,631**	**16,205**	**9,104**

1) Item names changed from previous year without change in content

Cross-currency swaps are presented under Currency-related derivatives.

Analysis of derivatives by counterparty

	Par value		Fair value 31 Dec. 2020		Fair value 31 Dec. 2019	
	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions	positive EUR in millions	negative EUR in millions	positive EUR in millions	negative EUR in millions
OECD banks	685,952	677,606	12,125	13,580	15,368	8,978
Non-OECD banks	165	189	4	6	0	4
Other counterparties	10,824	10,554	1,149	18	816	28
Public sector	957	2,365	27	27	22	94
Total	**697,898**	**690,714**	**13,306**	**13,631**	**16,205**	**9,104**

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 627.3 billion as of 31 December 2020 (31 Dec. 2019: EUR 613.8 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 2019, 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 4,909 million as of 31 December 2020 (31 Dec. 2019: EUR 1,197 million) was provided, which is recognised under Financial assets at amortised cost – Loans and advances to banks or customers.

Unchanged from 31 December 2019, 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 3,446 million as of 31 December 2020 (31 Dec. 2019: EUR 8,846 million) was accepted, which was reported under Financial liabilities at amortised cost – Liabilities to banks or Liabilities to customers.

The volume of initial differences between the transaction price and model value arising from the use of a valuation technique that makes significant use of unobservable data which have yet to be amortised over the life of the financial instrument developed as follows during the reporting period:

Day one profit or loss

	2020 EUR in millions	2019 EUR in millions
As of 1 Jan.	**–104**	**–93**
Addition	–13	–23
Reversal	11	14
Exchange rate changes	5	–2
As of 31 Dec.	**–101**	**–104**

The net gains/losses from financial derivatives not qualifying for hedge accounting includes amortisation effects in the amount of EUR 9 million in 2020 (2019: EUR 8 million).

Management of the transition to new reference rates

A transition strategy needs to be determined as part of the reference rate switch to alternative risk-free rates, and implemented in line with the supervisory requirements. This involves considerable technical and procedural adjustments. KfW has drawn up a group-wide project structure and defined the main areas of focus in order to implement the resulting complex requirements on time.

Key assumptions relating to benchmark reform

- KfW assumes that EURIBOR-based reference rates will obtain supervisory approval in the near future. In the medium term, a transition for these instruments is therefore not necessary.
- As regards the derivatives portfolio, KfW expects a transition of the affected reference rates to take place largely in 2021 and 2022.
- The main reference rates affected by the transition that are relevant for KfW's hedging relationships are:
  - USD LIBOR: transition to SOFR
  - GBP LIBOR: transition to SONIA
  - CHF LIBOR: transition to SARON

The following derivative holdings (nominal) are affected by the benchmark reform:

Risk exposure/nominal amounts

Reference rate (floating leg)	Nominal volumes (gross) 31 Dec. 2020 EUR in billions
USD LIBOR	approx. 154
GBP LIBOR	approx. 9
CHF LIBOR	approx. 2

(58) Additional disclosures on financial liabilities at fair value

Disclosures on financial liabilities at fair value as of 31 December 2020[1)]

	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**

1) Adjusted presentation due to change in recognition (see Note 3)

Disclosures on financial liabilities at fair value as of 31 December 2019[1)]

	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	1,464	11,294	13,013
Repayment amount at maturity	245	2,234	12,267	14,747
Difference	**–10**	**770**	**973**	**1,734**
thereof borrowings for which the repayment amount builds up as a result of the capitalisation over time of interest due	**0**	**772**	**2,220**	**2,992**

1) Adjusted presentation due to change in recognition (see Note 3)

(59) Contractual payment obligations arising from financial instruments

Analysis of payment obligations by maturity range as of 31 December 2020[1), 2)]

	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	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)] Adjusted presentation due to change in recognition (see Note 3)
[2)] Net obligations arising from derivative financial instruments comprise payment obligations which are offset against the corresponding payment claims under 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.

Analysis of payment obligations by maturity range as of 31 December 2019[1), 2), 3)]

	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	9,517	2,728	120	282	2,117	14,764
Liabilities to customers	18	32	445	1,015	7,686	9,195
Certificated liabilities	36,303	25,042	53,185	221,385	96,746	432,661
Financial liabilities at fair value						
Liabilities to banks	0	0	1	5	251	257
Liabilities to customers	2	3	8	104	2,403	2,520
Certificated liabilities	44	16	357	3,528	11,218	15,163
Net obligations arising from derivative financial instruments	–1,118	–561	–2,530	–6,928	–5,288	–16,425
thereof Gross obligations arising from derivative financial instruments	*26,520*	*22,764*	*44,307*	*90,134*	*31,102*	*214,827*
Obligations arising from on-balance sheet financial instruments	**44,766**	**27,260**	**51,586**	**219,391**	**115,132**	**458,135**
Obligations arising from off-balance sheet transactions	**87,327**	**0**	**0**	**0**	**0**	**87,327**
Total	**132,093**	**27,260**	**51,586**	**219,391**	**115,132**	**545,462**

1) Adjusted presentation due to change in recognition (see Note 3)
2) Adjusted prior-year figures due to change in recognition (see Note 3)
3) 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).

(60) Disclosures on repurchase agreements

Disclosures on repo transactions[1]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 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	13,913	217
Financial liabilities at amortised cost – Liabilities to banks (countervalue)	13,324	217

[1] Item name changed from previous year without change in content

The fair value of interest-bearing securities sold under repo transactions that continue to be recognised in Securities and investments totals EUR 13,905 million as of 31 December 2020 (31 Dec. 2019: EUR 217 million). The fair value of the corresponding repayment obligations is EUR 13,324 million (31 Dec. 2019: EUR 217 million).

Moreover, as in 2019, 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 2019, 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 2019, the group neither pledged nor accepted any liquid collateral.

Disclosures on reverse repo transactions[1]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Financial assets at amortised cost – Loans and advances to banks (countervalue)	50	2,274
Financial assets at amortised cost – Loans and advances to customers (countervalue)	0	0
Total	**50**	**2,274**

[1] Item name changed from previous year without change in content

The fair value of interest-bearing securities purchased under reverse repos that are not recognised amounts to EUR 54 million as of 31 December 2020 (31 Dec. 2019: EUR 2,335 million).

Moreover, KfW Group did not receive any collateral (in the form of securities) under reverse repo transactions that can be resold or repledged at any time without payments by the protection seller being past due as of 31 December 2020, unchanged from 31 December 2019.

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 of 31 December 2020, unchanged from 31 December 2019.

As in 2019, the group neither pledged nor accepted any liquid collateral.

(61) Disclosure on offsetting financial instruments

KfW uses the EUREX central clearing system to settle part of its derivative transactions. This form of settling derivative transactions results in the recognition of a net amount in the statement of financial position for the transactions affected, as the involvement of EUREX as the central counterparty (CCP) meets all of the requirements for offsetting as set out in the relevant IFRS standard. This means that positive and negative fair values of derivatives for which EUREX acts as the central counterparty are offset against the corresponding collateral and reported in a net item in the statement of financial position.

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.

Disclosures on financial assets with netting agreements as of 31 December 2020

	Carrying amount of financial assets before offsetting (gross amount)	Netted figure as carrying amount of financial liabilities (gross amount)	Reported financial assets (net amount)	Carrying amount of non-offsettable financial liabilities	Fair value of collateral received	Total net amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OTC derivatives	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

In addition to the net amount, the classes Derivatives designated for hedge accounting and Other derivatives also include bifurcated embedded derivatives and derivatives not subject to netting agreements. In addition to the net amount, the disclosures on repo transactions also include funding via TLTRO III.

Receivables from reverse repo transactions are reported under Financial assets at amortised cost – Loans and advances to banks and Loans and advances to customers.

Disclosures on financial assets with netting agreements as of 31 December 2019

	Carrying amount of financial assets before offsetting (gross amount)	Netted figure as carrying amount of financial liabilities (gross amount)	Reported financial assets (net amount)	Carrying amount of non-offsettable financial liabilities	Fair value of collateral received	Total net amount
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OTC derivatives	21,416	6,044	15,372	7,419	7,920	33
Reverse repos	2,274	0	2,274	217	2,056	0
Total	**23,689**	**6,044**	**17,646**	**7,636**	**9,976**	**33**

Disclosures on financial liabilities with netting agreements as of 31 December 2019

	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	17,839	8,858[1)]	8,981	7,419	1,185	376
Repos	217	0	217	217	0	0
Total	**18,056**	**8,858**	**9,198**	**7,636**	**1,185**	**376**

[1)] Thereof receivables from cash collateral for OTC derivatives with EUREX as the central counterparty in the amount of EUR 2,815 million

Other notes

(62) Off-balance sheet transactions

Analysis by class[1)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Irrevocable loan commitments	105,282	83,108
Financial guarantee contracts	1,347	1,375
Contingent liabilities from financial guarantees	1,474	1,275
Other contingent liabilities	1,843	2,048
Total	**109,945**	**87,806**

[1)] Item name changed from previous year without change in content

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 deductible). 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.

(63) Trust activities and administered loans

Analysis of trust activities (transactions in KfW's own name but for the account of third parties)[1)]

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Loans and advances to banks	797	839
Loans and advances to customers	10,442	10,840
Securities and investments	6,244	5,196
Assets held in trust	**17,483**	**16,875**
Liabilities to banks	0	0
Liabilities to customers	17,483	16,875
Liabilities held in trust	**17,483**	**16,875**

[1)] Item name changed from previous year without change in content

As of 31 December 2020, EUR 12,551 million (31 Dec. 2019: EUR 12,494 million) of the assets held in trust are attributable to the business sector Promotion of developing countries and emerging economies. Additional transactions with the Federal Government as trustor in the amount of EUR 3,852 million (31 Dec. 2019: EUR 3,552 million) are transactions mandated by the German Federal Government in accordance with Article 2 (4) of the KfW Law and are included in Securities and investments.

Volume of administered loans granted (loans in the name and for the account of third parties)

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	EUR in millions
Administered loans	18,383	18,646

(64) Leasing transactions as lessee

In accordance with IFRS 16 “Leases”, KfW as lessee reports each right of use in Property, plant and equipment and the associated lease obligation in Other liabilities. The lessee shall measure the lease liabilities at the present value of the lease payments not paid at the measurement date, discounted at the lessee’s incremental borrowing rate. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. Accordingly, KfW determines the incremental borrowing rate of the basis of the refinancing rate it uses for its own issues.

Depreciation, amortisation and impairments of rights of use are reported in Administrative expense. Interest expense from discounting the rights of use and the interest compounded on lease liabilities are included in Other interest expense.

The effects on net assets, financial position and results of operations, which are only minimal, arise exclusively from the “leasing buildings” class.

The small number of contracts in which KfW Group acts as a lessor are classified as operating leases. The corresponding rental income is recognised in Other operating income.

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

Disclosures on lessee agreements as of 31 December 2019

	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)	11	45	14	70

(65) Average number of employees during the financial year

	2020	2019
Female employees	3,578	3,243
Male employees	3,804	3,462
Total	**7,382**	**6,705**
Staff not covered by collective agreements	*4,795*	*4,669*
Staff covered by collective agreements	*2,146*	*2,036*
Staff in external offices	*442*	*n.a.*

A total of 418 employees worked in external offices in the previous year. These are not included in the staff headcount for 2019.

(66) 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

	2020 EUR in thousands	2019 EUR in thousands
Members of the Executive Board	3,693.1[1)]	3,643.2
Former members of the Executive Board and their surviving dependants	4,540.1	4,674.9
Members of the Board of Supervisory Directors	204.1	190.6
Total	**8,437.3**	**8,508.7**

1) 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 the individual members of the Executive Board.

Annual remuneration of the Executive Board and additions to pension provisions in financial years 2020 and 2019[1)]

	Salary		Other remuneration		Total		Additions to pension provisions[2)]	
	2020	2019	2020	2019	2020	2019	2020	2019
	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)	785.3	772.5	28.3	30.7	813.6	803.2	291.5	868.4
Dr Ingrid Hengster	564.9	555.7	37.8	37.0	602.7	592.7	774.8	954.7
Melanie Kehr	532.2	436.8	28.6	29.5	560.8	466.3	530.9	313.0
Bernd Loewen	629.5	613.2	36.1	40.1	665.6	653.3	854.4	1,168.1
Prof. Dr Joachim Nagel[3)]	451.8	535.0	15.5	27.1	467.3	562.1	1,314.0	808.6
Dr Stefan Peiß	564.9	543.1	18.2	22.5	583.1	565.6	729.5	1,017.8
Total	**3,528.6**	**3,456.3**	**164.5**	**186.9**	**3,693.1**	**3,643.2**	**4,495.1**	**5,130.6**

1) Amounts in the table are subject to rounding differences.
2) The discount rate for pension obligations decreased in 2020 due to the development in long-term capital market rates, from 1.34% (31 December 2019) to 1.02% (31 December 2020).
3) Prof. Dr Joachim Nagel stepped down from the Executive Board of KfW as of 31 October 2020.

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 discussed remuneration issues during the reporting year, on 26 June 2020.

Fringe benefits

Other remuneration largely comprises the contractual fringe benefits. Executive Board members are entitled to a company car with driver services for business and personal use. Executive Board members reimburse KfW for using a company car with a driver for private 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 contain 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.

There were no senior management loans to any members of the Executive Board in 2020.

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. One member of the KfW Executive Board who was first appointed to the Board in 2006 and subsequently reappointed also has the option of retiring at their own request at the age of 63.

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 3.0 percentage points depending on the contract (from an initial 34.3% to a maximum of 49% of the final salary).

The Executive Board contracts contain additional individual provisions, in particular concerning vesting of pension benefits. The newer contracts also include provisions on retrospective pension contributions where pension benefits are not yet vested and the member in question has not been reappointed.

Pension payments to former Executive Board members or their surviving dependants were as follows in 2020 and 2019:

Pension payments to former Executive Board members or their surviving dependants

	Headcount 2020	EUR in thousands 2020	Headcount 2019	EUR in thousands 2019
Former members of the Executive Board	18	3,549.4	18	3,694.3
Surviving dependants	8	990.7	9	980.6
Total	**26**	**4,540.1**	**27**	**4,674.9**

Provisions for pension obligations to former members of the Executive Board and their surviving dependants in the amount of EUR 69,287 thousand (31 December 2019: EUR 72,896 thousand) were set up at the end of financial year 2020.

As in the previous year, no loans were granted to former Executive Board members or their surviving dependants in financial year 2020.

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, remuneration to members of the Federal Government who are members of the Board of Supervisory Directors pursuant to Article 7 (1) No. 1 and No. 2 of the KfW Law was set at EUR 0.

In the reporting year, remuneration for other members of the Board of Supervisory Directors pursuant to Article 7 (1) Nos. 3–7 of the KfW Law amounted to EUR 5,100 p.a.; remuneration for membership of a Board of Supervisory Directors committee was a standard amount of EUR 600 p.a. for each member. Committee chairs received no 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 2020; 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.

Remuneration of members of the Board of Supervisory Directors for financial year 2020

No.	Name	Dates of membership	Board of Supervisory Directors membership[1]	Committee membership[1]	Daily allowance[3]	Total
		2020	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[2]	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[2]	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[2]	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[2]	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[4]	1 Jan. – 31 Dec.	5.1	2.5	1.6	9.2
27.	Eckhardt Rehberg[5]		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[2]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
35.	Peter Strobel[2]	1 Jan. – 31 Dec.	5.1	1.1	1.0	7.2
36.	Heike Taubert[2]	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] The amounts had not yet been paid out as of the reporting date 31 December 2020.
[2] Amount governed by state law
[3] Amounts for financial year 2020 until the date of assessment. Any later claims will be included in the next report.
[4] The daily allowance includes payments for 2019.

[5] Payments for meeting attendance from 2016 to 2018

Remuneration of members of the Board of Supervisory Directors for financial year 2019

No.	Name	Dates of membership	Board of Supervisory Directors membership[1]	Committee membership[1]	Daily allowance[3]	Total
		2019	EUR in thousands	EUR in thousands	EUR in thousands	EUR in thousands
1.	Olaf Scholz	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
2.	Peter Altmaier	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
3.	Doris Ahnen[2]	1 Jan. – 31 Dec.	5.1	0.5	0.2	5.8
4.	Sören Bartol	1 Jan. – 31 Dec.	5.1	1.5	0.6	7.2
5.	Dr Holger Bingmann	1 Jan. – 31 Dec.	5.1	0.5	0.6	6.2
6.	Volker Bouffier[2]	1 Jan. – 31 Dec.	5.1	1.2	0.0	6.3
7.	Robert Feiger	1 Jan. – 31 Dec.	5.1	0.6	0.2	5.9
8.	Verena Göppert	1 Jan. – 31 Dec.	5.1	0.0	0.0	5.1
9.	Olav Gutting	1 Jan. – 31 Dec.	5.1	0.5	0.8	6.4
10.	Dr Louis Hagen	1 Jan. – 31 Dec.	5.1	1.2	0.2	6.5
11.	Reinhold Hilbers[2]	1 Jan. – 31 Dec.	5.1	1.8	0.4	7.3
12.	Reiner Hoffmann	1 Jan. – 31 Dec.	5.1	1.2	0.2	6.5
13.	Gerhard Hofmann	1 Jan. – 31 Dec.	5.1	1.2	1.0	7.3
14.	Dr Bruno Hollnagel	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
15.	Andreas Ibel	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
16.	Bartholomäus Kalb	1 Jan. – 31 Dec.	5.1	0.6	1.0	6.7
17.	Julia Klöckner	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
18.	Andrea Kocsis	1 Jan. – 31 Dec.	5.1	0.0	0.0	5.1
19.	Stefan Körzell	1 Jan. – 31 Dec.	5.1	1.2	0.4	6.7
20.	Dr Joachim Lang	1 Jan. – 31 Dec.	5.1	1.2	0.0	6.3
21.	Lutz Lienenkämper[2]	1 Jan. – 31 Dec.	5.1	1.2	0.4	6.7
22.	Heiko Maas	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
23.	Dr Gerd Müller	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
24.	Dr Hans-Walter Peters	1 Jan. – 31 Dec.	5.1	2.5	0.0	7.6
25.	Eckhardt Rehberg	1 Jan. – 31 Dec.	5.1	1.8	0.2	7.1
26.	Dr Johannes-Jörg Riegler	1 Jan. – 31 Dec.	5.1	0.6	1.0	6.7
27.	Joachim Rukwied	1 Jan. – 31 Dec.	5.1	0.6	0.0	5.7
28.	Andreas Scheuer	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
29.	Helmut Schleweis	1 Jan. – 31 Dec.	5.1	2.5	0.0	7.6
30.	Carsten Schneider	1 Jan. – 31 Dec.	5.1	1.2	0.6	6.9
31.	Svenja Schulze	1 Jan. – 31 Dec.	0.0	0.0	0.0	0.0
32.	Holger Schwannecke	1 Jan. – 31 Dec.	5.1	1.5	0.0	6.6
33.	Edith Sitzmann[2]	1 Jan. – 31 Dec.	5.1	0.0	0.4	5.5
34.	Peter Strobel[2]	1 Jan. – 31 Dec.	5.1	0.0	0.6	5.7
35.	Heike Taubert[2]	1 Jan. – 31 Dec.	5.1	0.0	0.2	5.3
36.	Dr Florian Toncar	1 Jan. – 31 Dec.	5.1	1.2	0.2	6.5
37.	Dr Martin Wansleben	1 Jan. – 31 Dec.	5.1	0.5	0.0	5.6
Total			**153.0**	**26.8**	**10.0**	**189.8**

[1] The amounts had not yet been paid out as of the reporting date 31 December 2019.
[2] Amount governed by state law
[3] Amounts for financial year 2019 until the date of assessment. Any later claims will be included in the next report.

There are no pension obligations for members of the Board of Supervisory Directors.

Members of the Board of Supervisory Directors did not receive remuneration in the reporting year for personal services provided.

No loans were granted to members of the Board of Supervisory Directors in the reporting year.

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.

(67) 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 2020 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 2020, KfW Group reported receivables in the amount of EUR 20.5 billion (31 Dec. 2019: EUR 21.3 billion) arising from business relationships with shareholders, resulting in particular from the promotional mandate. These include, for example, the holding arrangements and the BAföG government loans. Securities and investments in the amount of EUR 3.5 billion (31 Dec. 2019: EUR 3.3 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 641 million (31 Dec. 2019: EUR 626 million); these were offset in the same amount by liabilities relating to agency agreements with the Federal Government. Assets are offset by liabilities of EUR 5.4 billion (31 Dec. 2019: EUR 5.6 billion), which primarily include the liabilities from dividend income to be paid to the Federal Government. Interest rate swaps are also contracted with the Federal Government to hedge interest risk positions. This resulted in a negative fair value of the hedging instruments of EUR 27 million (31 Dec. 2019: EUR 93 million).

As of 31 December 2020, irrevocable loan commitments of around EUR 12.8 billion (31 Dec. 2019: EUR 13.0 billion) were granted under the BAföG government loans. On the other hand, the group had received loan commitments and guarantees from the shareholders in the amount of EUR 112.5 billion as of 31 December 2020 (31 Dec. 2019: EUR 65.1 billion), including for stabilisation measures engaged in by providing extensive liquidity assistance for businesses during the coronavirus pandemic, for the market funds business of the business sector Promotion of developing countries and emerging economies, for project and real estate financing, and for additional mandated transactions.

Transactions with shareholders resulted in Net interest income of EUR 31.8 million as of 31 December 2020 (31 Dec. 2019: EUR 30 million). This also included EUR 20.3 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 31 December 2021. There were also agency agreements between the Federal Government and KfW, which are in particular reflected in Net commission income. Please refer to the information provided in the Notes on revenue from contracts with customers, net commission income and trust activities.

Transactions with interests held by the Federal Government

As of 31 December 2020, KfW maintained credit balances at Deutsche Bundesbank in the amount of EUR 44.2 billion (31 Dec. 2019: EUR 28.2 billion). This resulted in negative interest income of EUR 145 million (2019: EUR 122 million). Under liabilities to Deutsche Bundesbank, the group reported repo transactions in the amount of EUR 13.3 billion in connection with refinancing operations (TLTRO III) for the first time in 2020 (see also note on government grants).

Funding for the KfW Special Programme 2020, which KfW launched based on a mandate by the Federal Government to support the German economy during the COVID-19 pandemic, 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 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 658 million (31 Dec. 2019: EUR 592 million) in connection with corporate financing, securities and investments of EUR 26 million (31 Dec. 2019: EUR 27 million) in the form of notes from the liquidity portfolio and loan commitments and guarantees granted of EUR 29 million (31 Dec. 2019: EUR 137 million). This resulted in net interest income in the amount of EUR 6 million (2019: EUR 11 million).

Transactions with group companies

As of 31 December 2020, transactions with group companies resulted in loans of EUR 1 million (31 Dec. 2019: EUR 1 million). These were offset by other liabilities to tbg of EUR 44 million (31 Dec. 2019: EUR 36 million). Net interest income in the amount of EUR 0 million (2019: EUR 6 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 education financing grants or direct loans of EUR 56 thousand (31 Dec. 2019: EUR 12 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.

(68) Auditor's fees

	2020	2019
	EUR in thousands	EUR in thousands
Audit	4,462	3,880
Other attestation services	973	885
Tax advisory services	0	0
Other services	0	0
Total	**5,435**	**4,766**

(69) 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 its 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 had been added in 2020 and which currently consists of securities issued since 2004.

As of 31 December 2020, the carrying amount of the positions held totalled EUR 6.0 billion (31 Dec. 2019: EUR 5.5 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 2020, the carrying amount of the positions held totalled EUR 2.9 billion (31 Dec. 2019: EUR 3.0 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 2020, the carrying amount of the positions held totalled EUR 0.2 billion (31 Dec. 2019: EUR 0.2 billion).

The following table presents the carrying amounts of assets relating to unconsolidated structured entities and the maximum possible loss that could result from these exposures.

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**

Maximum risk of loss as of 31 December 2019:

	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	2,856	5,606	20	238
Risk and other provisions	19	1	0	0
Max. risk of loss	**2,837**	**5,606**	**20**	**238**

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.

(70) Disclosures on shareholdings

Subsidiaries included in the consolidated financial statements

Name/registered office	Capital share	Equity (IFRS) as of 31 Dec. 2020	Equity (IFRS) as of 31 Dec. 2019
	%	EUR in millions	EUR in millions
KfW IPEX-Bank GmbH, Frankfurt am Main, Germany	100.0	3,463	3,459
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany	100.0	2,351	2,852
KfW Beteiligungsholding GmbH, Bonn, Germany	100.0	3,177	3,267
Interkonnektor GmbH, Frankfurt am Main, Germany	100.0	76	92
KfW Capital GmbH & Co. KG, Frankfurt am Main, Germany	100.0	383	241

Associates included in the consolidated financial statements using the equity method

Name/registered office	Capital share	Equity as of 30 Sept. 2020	Equity as of 30 Sept. 2019
	%	EUR in millions	EUR in millions
Microfinance Enhancement Facility S. A., Luxembourg, Luxembourg	20.3	431	517
Green for Growth Fund, Southeast Europe S. A., Luxembourg, Luxembourg	10.0	480	411
AF Eigenkapitalfonds für deutschen Mittelstand GmbH & Co KG, Munich, Germany	47.5	0	85
coparion GmbH & Co. KG, Cologne, Germany	16.4	126	84
Name/registered office	**Capital share**	**Equity as of 31 Dec. 2020**	**Equity as of 31 Dec. 2019**
	%	**EUR in millions**	**EUR in millions**
DC Nordseekabel GmbH und Co. KG, Bayreuth, Germany	50.0	901	760

Microfinance Enhancement Facility S.A. (MEF) has been accounted for using the equity method since 2009. MEF, a KfW investment in a refinancing facility for microfinance institutions, is part of the business sector Promotion of developing countries and emerging economies.

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).

KfW (business sector Individualfinanzierung & Öffentliche Kunden [*Customised Finance* & *Public Clients*]) initiated the Eigenkapitalfonds für deutschen Mittelstand (*German SME Equity Fund*) together with Commerzbank in July 2010, each providing funds of almost EUR 100 million. It is accounted for using the equity method. The fund focuses on small and medium-sized (family) companies with a maximum annual revenue of EUR 500 million. The fund acquires minority interests and provides the company with real equity particularly for the purpose of financing growth. KfW’s stakes in AF Eigenkapitalfonds für deutschen Mittelstand GmbH & Co. KG were divested in financial year 2020.

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

Five subsidiaries, two joint ventures, seven 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.

List of KfW Group shareholdings as of 31 December 2020

No.	Name	Place	Capital share in %	CC[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2020[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	2,291,037	–181,158
2	Interkonnektor GmbH[6]	Frankfurt am Main	100.0	EUR	1.0000	69,265	–13,958
3	KfW Beteiligungsholding GmbH[6]	Bonn	100.0	EUR	1.0000	1,591,392	–364,120
4	KfW Capital GmbH & Co. KG[6]	Frankfurt am Main	100.0	EUR	1.0000	343,001	0
B. Subsidiaries not included in the consolidated financial statements							
5	Finanzierungs- und Beratungsgesellschaft mbH[6]	Berlin	100.0	EUR	1.0000	5,043	146
6	tbg Technologie-Beteiligungsgesellschaft mbH[6]	Bonn	100.0	EUR	1.0000	54,160	-3,424
C. Joint ventures not included in the consolidated financial statements							
7	Deutsche Energie-Agentur GmbH (dena)[5]	Berlin	26.0	EUR	1.0000	5,574	395
D. Other shareholdings (only capital shares totalling at least 20%)							
8	Berliner Energieagentur GmbH[5]	Berlin	25.0	EUR	1.0000	7,137	622
9	eCapital Technologies Fonds II GmbH & Co. KG[5]	Münster	24.8	EUR	1.0000	13,110	79
Shareholdings of KfW IPEX-Bank GmbH							
A. Subsidiaries not included in the consolidated financial statements							
1	Bussard Air Leasing Ltd. i.L.[5]	Dublin, Ireland	100.0	USD	1.2271	–2,152	165
2	Sperber Rail Holdings Inc.[5]	Wilmington, USA	100.0	USD	1.2271	320	–58
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	4,173,127	0

List of KfW Group shareholdings as of 31 December 2020

No.	Name	Place	Capital share in %	CC[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2020[2]	Equity in TCU[2), 3)]	Net income in TCU[2), 3)]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
A. Joint ventures not included in the consolidated financial statements							
1	PCC-DEG Renewables GmbH	Duisburg	40.0	EUR	1.0000	16,663	385
B. Other shareholdings (only capital shares totalling at least 20%)							
2	Aavishkaar Frontier Fund	Ebène Cyber-City, Mauritius	20.8	USD	1.2271	30,319	–4,145
3	Ace Power Embilipitiya Pvt Ltd.	Colombo, Sri Lanka	26.0	LKR	226.5610	5,590,515	1,437,742
4	ACON Latin America Opportunities Fund IV-A, L.P.	Toronto, Canada	39.9	USD	1.2271	41,472	3,860
5	ACON Latin America Opportunities Fund-A, L.P.	Toronto, Canada	40.0	USD	1.2271	20,126	707
6	ACON Retail MXD, L.P.	Toronto, Canada	100.0	USD	1.2271	[5)]	[5)]
7	Adobe Social Mezzanine Fund I, L.P.	Montreal, Canada	24.8	USD	1.2271	13,676	223
8	ADP Enterprises W.L.L.	Manama, Bahrain	23.3	EUR	1.0000	252,132	10,089
9	ADP II Holding 11 S.A.R.L.	Munsbach, Luxembourg	33.3	USD	1.2271	[5)]	[5)]
10	Advent Latin American Private Equity Fund III-B, L.P.	Wilmington, USA	100.0	USD	1.2271	1,861	-61
11	AEP China Hydro Ltd.	Ebène Cyber-City, Mauritius	30.2	USD	1.2271	37,037	-13,542
12	AfricInvest III – SPV 1	Port Louis, Mauritius	21.8	EUR	1.0000	58,018	–42
13	Agrofundo Brasil VI Fundo de Investimento em Participações Multiestratégia	São Paulo, Brazil	29.9	BRL	6.3735	554,465	101,639
14	AO Bucharagips	Kogon, Uzbekistan	24.9	EUR	1.0000	[5)]	[5)]
15	Apis Growth 2 Ltd.	Ebène Cyber-City, Mauritius	25.6	USD	1.2271	43,494	3,586
16	Banque Nationale de Développement Agricole S. A.	Bamako, Mali	21.4	XOF	655.9570	59,244,162	9,879,493
17	Banyan Tree Growth Capital, LLC	Mauritius, Mauritius	27.0	USD	1.2271	29,394	929
18	Benetex Industries Ltd.	Dhaka, Bangladesh	28.3	BDT	103.3375	[5)]	[5)]
19	Berkeley Energy Wind Mauritius Ltd.	Ebène Cyber-City, Mauritius	25.8	EUR	1.0000	48,584	-19,540
20	CGFT Capital Pooling GmbH & Co. KG	Berlin, Germany	40.0	EUR	1.0000	[5)]	[5)]
21	CoreCo Central America Fund I, L.P.	Wilmington, USA	22.0	USD	1.2271	26,451	520
22	Crescera Investimentos Growth Capital Fund I-B, L.P.	Wilmington, USA	20.0	USD	1.2271	36,504	-499

List of KfW Group shareholdings as of 31 December 2020

No.	Name	Place	Capital share in %	CC[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2020[2]	Equity in TCU[2), 3]	Net income in TCU[2), 3]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
23	Darby Latin American Private Debt Fund IIIA, L.P.	Toronto, Canada	37.6	USD	1.2271	13,298	668
24	Deep Catch Namibia Holdings (Pty) Ltd.	Windhoek, Namibia	38.6	NAD	17.9170	141,539	16,908
25	DEG Impact GmbH	Cologne, Germany	100.0	EUR	1.0000	[4]	[4]
26	ECP Africa Fund IV LLC	Ebène Cyber-City, Mauritius	34.6	USD	1.2271	40,241	–1,534
27	Emerald Sri Lanka Fund I Ltd.	Ebène Cyber-City, Mauritius	23.5	USD	1.2271	18,388	–1,103
28	Emerging Europe Leasing and Finance (EELF) B.V.	Amsterdam, Netherlands	25.0	EUR	1.0000	[5]	[5]
29	EMF NEIF I (A), L.P.	Fareham, United Kingdom	28.1	USD	1.2271	26,894	–8,425
30	EMX Capital Partners, L.P.	Toronto, Canada	20.1	USD	1.2271	67,311	–1,045
31	Evonik Lanxing (Rizhao) Chemical Industrial Co. Ltd.	Rizhao, China	41.0	CNY	8.0225	47,065	3,944
32	Fortio Co. Ltd.	George Town, Grand Cayman, Cayman Islands	46.2	USD	1.2271	[4]	[4]
33	Frontier Bangladesh II, L.P.	George Town, Cayman Islands	20.0	USD	1.2271	14,579	–3,348
34	Grand Bremner Corp Pte. Ltd.	Singapore, Singapore	24.7	USD	1.2271	[4]	[4]
35	Grassland Finance Ltd.	Hong Kong, Hong Kong	24.9	CNY	8.0225	424,981	10,780
36	Kandeo Fund II (A), L.P.	Toronto, Canada	53.1	USD	1.2271	42,147	–71
37	Kendall Court Mezzanine (Asia) Bristol Merit Fund, L.P.	George Town, Cayman Islands	24.4	USD	1.2271	11,011	–1,761
38	Kibele B.V.	Amsterdam, Netherlands	22.3	USD	1.2271	[5]	[5]
39	Knauf Gips Buchara OOO	Bukhara, Uzbekistan	25.0	EUR	1.0000	[5]	[5]
40	Knauf Gypsum Philippines Inc.	Makati, Philippines	25.0	PHP	59.1250	1,546,796	–184,520
41	Landsberg Investments S.L.	Barcelona, Spain	49.8	EUR	1.0000	11,384	–7,429
42	Leiden PE II, L.P.	Toronto, Canada	26.6	USD	1.2271	66,712	7,148
43	Lereko Metier REIPPP Fund Trust	Sandhurst, South Africa	32.3	ZAR	18.0219	946,447	96,132
44	Lereko Metier Solafrica Fund I Trust	Johannesburg, South Africa	47.5	ZAR	18.0219	218,958	16,974

List of KfW Group shareholdings as of 31 December 2020

No.	Name	Place	Capital share in%	CC[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2020[2]	Equity in TCU[2), 3]	Net income in TCU[2), 3]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
45	Lovcen Banka AD	Podgorica, Montenegro	25.1	EUR	1.0000	19,419	1,880
46	MC II Pasta Ltd.	Qormi, Malta	32.2	EUR	1.0000	[5]	[5]
47	Metier Retailability en Commandite Partnership	Sandhurst, South Africa	22.1	ZAR	18.0219	707,694	275,722
48	Navegar II (Netherlands) B.V.	Amsterdam, Netherlands	29.2	USD	1.2271	[5]	[5]
49	Nepherin ITG SL	Madrid, Spain	25.9	EUR	1.0000	[5]	[5]
50	Novel Sky Global Limited	Road Town, Brit. Virgin Islands	25.0	USD	1.2271	[5]	[5]
51	OAO Belgips	Minsk, Belarus	50.0	BYN	3.1815	[5]	[5]
52	Operadora de Servicios Mega, S.A. de C.V., SOFOM E.R.	Zapopan, Mexico	21.9	MXN	24.4160	1,407,950	410,362
53	Orilus Investment Holdings Pte. Ltd.	Singapore, Singapore	33.0	USD	1.2271	83,339	–232
54	Rent 2 Own Holdings Pte Ltd.	Singapore, Singapore	21.1	USD	1.2271	[5]	[5]
55	Russia Partners Technology Fund, L.P.	George Town, Cayman Islands	21.6	USD	1.2271	172,959	1,659
56	SEAF Central and Eastern Europe Growth Fund LLC	Wilmington, USA	23.9	USD	1.2271	[5]	[5]
57	Sierra Madre Philippines I, L.P.	George Town, Cayman Islands	20.0	USD	1.2271	15,468	–1,254
58	Siguler Guff Global Emerging Markets Co-Investment Opportunities (AIF), LP	London, United Kingdom	99.9	USD	1.2271	[5]	[5]
59	Stratus Capital Partners B, L.P.	Edinburgh, United Kingdom	75.0	USD	1.2271	20,884	983
60	Stratus SCP Fleet Fundo de Investimento em Participações – Multiestratégia	São Paulo, Brazil	39.7	BRL	6.3735	40,777	–3,288
61	Takura II Feeder Fund Partnership	Cape Town, South Africa	25.0	USD	1.2271	47,431	–78,737
62	The Kibo Fund II LLC.	Ebène Cyber-City, Mauritius	20.0	USD	1.2271	60,385	3,996
63	Tolstoi Investimentos S.A.	São Paulo, Brazil	31.1	BRL	6.3735	[5]	[5]
64	TOO Isi Gips Inder	Inderborskij, Kazakhstan	40.0	EUR	1.0000	2,430	1,008

List of KfW Group shareholdings as of 31 December 2020

No.	Name	Place	Capital share in%	CC[1]	Exchange rate EUR 1.00 = CU as of 31 Dec. 2020[2]	Equity in TCU[2), 3]	Net income in TCU[2), 3]
Shareholdings of DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH							
B. Other shareholdings (only capital shares totalling at least 20%)							
65	TOO Knauf Gips Kaptschagaj	Kapchagay, Kazakhstan	40.0	EUR	1.0000	14,974	7,294
66	Triple P SEA Financial Inclusion Fund LP	Singapore, Singapore	25.2	USD	1.2271	34,579	23,574
67	Vietnam Opportunity Fund II PTE. Ltd.	Singapore, Singapore	32.0	USD	1.2271	27,706	1,883
68	Whitlam Holding PTE. Ltd.	Singapore, Singapore	38.7	USD	1.2271	[5]	[5]
69	Worldwide Group, Inc	Charlestown, Saint Kitts and Nevis	33.4	USD	1.2271	25,030	–490
70	wpd Duqueco S.p.A.	Santiago de Chile, Chile	24.5	CLP	868.9400	[4]	[4]
71	wpd Malleco S.p.A.	Santiago Providencia, Chile	24.5	CLP	868.9400	[4]	[4]
72	wpd Negrete S.p.A.	Santiago Providencia, Chile	24.5	CLP	868.9400	[4]	[4]
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	449,850	30,000
B. Joint ventures not included in the consolidated financial statements							
2	DC Nordseekabel Beteiligungs GmbH	Bayreuth	50.0	EUR	1.0000	32	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	44	9

[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 2020 is available.
The data is based on the most recent annual financial statements of the investee (where available).

Attestations

Independent auditor's report[1)]

To KfW

Report on the audit of the consolidated financial statements and of the group management report

Opinions

We have audited the consolidated financial statements of KfW, Frankfurt am Main and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2020, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the fiscal year from January 1, 2020 to December 31, 2020, and notes to the financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of KfW for the fiscal year from January 1, 2020 to December 31, 2020. In accordance with the German legal requirements, we have not audited the content of the sections "Declaration of compliance" and "Non-financial statement" 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, 2020 and of its financial performance for the fiscal year from January 1, 2020 to December 31, 2020, 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 statement" 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.

Other information

According to Art. 8 KfW Bylaws, the Board of Supervisory Directors is responsible for the preparation of the annual Report of the Board of Supervisory Directors. According to Art. 19 KfW Bylaws, the Executive Board and the Board of Supervisory Directors are required to annually declare that they recognise the Public Corporate Governance Code und to publish the declaration of compliance as part of the Corporate Governance Report. In all other respects, the Executive Board is responsible for the other information. The other information comprises the sections “Declaration of compliance” and “Non-financial statement” of the group management report, the Corporate Governance Report and the Statement of the Executive Board, which we obtained prior to the date of this auditor’s report, and the Letter from the Executive Board, the Report of the Board of Supervisory Directors as well as the sections „Executive Board, Directors and Managing Directors of KfW Group“ and “Members and tasks of the Board of Supervisory 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.

Auditor’s responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group’s position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 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.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the Executive Board in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the Executive Board as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other legal and regulatory requirements

Report on the assurance in accordance with Sec. 317 (3b) 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 (3b) 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+KLB_ESEF-2020-12-31.zip" 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, 2020 to December 31, 2020 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 (3b) HGB and the Exposure Draft of IDW Assurance Standard: Assurance in Accordance with Sec. 317 (3b) HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410). 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.

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

The Executive Board is also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and audited group management report as well as other documents to be published to the operator of the Federal Gazette.

The Board of Supervisory Directors is responsible for overseeing the preparation of the ESEF documents as part of the financial reporting process.

Group auditor's responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of 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.

Eschborn/Frankfurt am Main, 2 March 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Müller-Tronnier	Koch
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Exhibit (f)

Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statement under Schedule B (No. 333-238461) of KfW and in the related Prospectus of our report dated March 2, 2021, with respect to the consolidated financial statements as at December 31, 2020 and for the fiscal year from January 1, 2020 to December 31, 2020 of KfW included in this Annual Report on Form 18-K of KfW for the year ended December 31, 2020.

/s/ Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

Eschborn, Germany
May 17, 2021

Exhibit (g)

CONSENT OF THE FEDERAL REPUBLIC OF GERMANY

On behalf of the Federal Republic of Germany, I hereby consent to the making of the statements with respect to the Federal Republic of Germany included in the Annual Report on Form 18-K of KfW for the year ended December 31, 2020 and to the incorporation by reference of such information in the Registration Statement under Schedule B of KfW filed with the Securities and Exchange Commission of the United States of America.

May 17, 2021

By: /s/ CHRISTOF HARZER
Name: Christof Harzer
Title: Ministerialrat, Federal Ministry of Finance, Berlin