



Financial Report

2020

»»» As a bank committed to responsibility, KfW promotes sustainable prospects for people, companies, the environment and society.

KfW is one of the world's leading promotional banks. It applies its decades of experience to improve economic, social and environmental living conditions across the globe on behalf of the Federal Republic of Germany and the federal states. In the Covid year 2020, KfW recorded a promotional business volume of EUR 135.3 billion. Of this total, EUR 50.9 billion were provided for measures to mitigate the economic impact of the coronavirus pandemic in Germany and abroad. KfW has no retail branches and does not hold any customer deposits. To fund its business activities, KfW raised EUR 66.4 billion in the international capital markets. As part of the KfW Special Programme 2020, it accessed additional funding sources via the Economic Stabilisation Fund and TLTRO III, thereby raising funds totalling EUR 52.4 billion. In Germany, KfW Group has offices in Frankfurt am Main, Berlin, Bonn and Cologne. Its global network includes around 80 local and representative offices.

Key figures of KfW Group

Promotional business volume

	2020	2019
	EUR in billions	EUR in billions
	135.3	77.3

Key figures of the income statement

	2020	2019
	EUR in millions	EUR in millions
Net interest income (before promotional expense)	2,601	2,484
Net commission income (before promotional expense)	584	512
Administrative expense (before promotional expense)	1,330	1,320
Operating result before valuation (before promotional expense)	1,855	1,677
Risk provisions for lending business	-777	-174
Net gains/losses from hedge accounting and other financial instruments at fair value through profit or loss	-412	-10
Net gains/losses from securities and investments and from investments accounted for using the equity method	25	10
Operating result after valuation (before promotional expense)	691	1,503
Net other operating income or loss	-2	46
Profit/loss from operating activities (before promotional expense)	688	1,549
Promotional expense	88	159
Taxes on income	76	23
Consolidated profit	525	1,367
Consolidated profit before IFRS effects	633	1,447
Cost-income ratio (before promotional expense) ¹⁾	41.8%	44.0%

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).

Key figures of the statement of financial position

	31 Dec. 2020	31 Dec. 2019
	EUR in billions	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%

Key regulatory figures

	31 Dec. 2020	31 Dec. 2019
	EUR in billions	EUR in billions
Risk position	124.2	138.8
Tier 1 capital	29.9	29.5
Regulatory capital	30.1	29.5
Tier 1 capital ratio	24.1%	21.3%
Total capital ratio	24.3%	21.3%

Employees of KfW Group¹⁾

	2020	2019
	7,382	6,705

¹⁾ Average number of employees during the financial year

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Fast and effective
support

CRISIS AID

EUR 50.9 billion for
short-term coronavirus
aid measures in
Germany and abroad





Dr Günther Bräunig

Letter from the Executive Board

Dear readers,

In the course of its seven decades of existence, KfW has helped overcome crises time and again. The coronavirus year 2020 will go down in KfW's history as a time of unprecedented challenges for our financial, human and technical resources. This extraordinary year has also

demonstrated what special value a promotional system that has been developed over many decades has for our society in times of crisis. Alongside our fight against the impacts of the pandemic, we have not wavered in our commitment to sustainable development, digitalisation and innovation.



Tackling
challenges

PROMOTION SYSTEM



Loans, grants and
other financings
totalling
EUR 106.4 billion
for one million
beneficiaries in
Germany



Dr Ingrid Hengster

Commitments in 2020

In the year 2020, the total volume of business grew to a record high EUR 135.3 billion. KfW committed around one million loans, grants and other financings in the amount of EUR 106.4 billion in Germany alone. The SME Bank & Private Clients business sector contributed the most to this growth. Driven by KfW's coronavirus aid, its commitment volume rose nearly two and a half-fold to EUR 86.3 billion. The promotional programmes in the area of energy-efficient construction and refurbishment in the housing segment also made a strong contribution, with commitments climbing 140% to EUR 26.8 billion. A major success was the grant scheme launched in late November to promote the installation of charging infrastructure for electric cars on private premises. For this, KfW approved around 137,000 grant applications by the end of the year.

At EUR 16.6 billion, the commitment volume in the Export and project finance business sector was significantly less than in the record year 2019 because of the global coronavirus crisis but remained within the range of the previous years. Commitments in the KfW Capital business sector amounted to a total of EUR 871 million in 2020, including commitments made under the German Federal Government's coronavirus package of measures for start-ups. In spite of the pandemic, commitments under the 'ERP Venture Capital Fund Investments' programme were increased as planned by around 19% to EUR 184 million. The business sector Promotion of developing countries and emerging economies increased its business volume by 16% to EUR 12.4 billion. Some EUR 11 billion of this amount was accounted for by KfW Development Bank and EUR 1.4 billion by DEG.



Taking
responsibility

ANNUAL REVIEW



Promotional
business volume at
historical high of
EUR 135.3 billion
due to coronavirus
aid programmes



Bernd Loewen

Our result in 2020

The global coronavirus pandemic has had a substantial impact on KfW's income, financial position and assets. With a consolidated profit of EUR 0.5 billion, the earnings position therefore was much lower than in the previous year (EUR 1.4 billion). By contrast, the operating result before valuation (before promotional expense) was EUR 1.9 billion as a result of higher net interest and commission income and nearly unchanged administrative expenses, exceeding both the previous year's level (2019: EUR 1.7 billion) and expectations.

The valuation effects of the coronavirus pandemic weighed on the valuation result, reducing consolidated profit by EUR 1.2 billion (2019: EUR -0.2 billion).

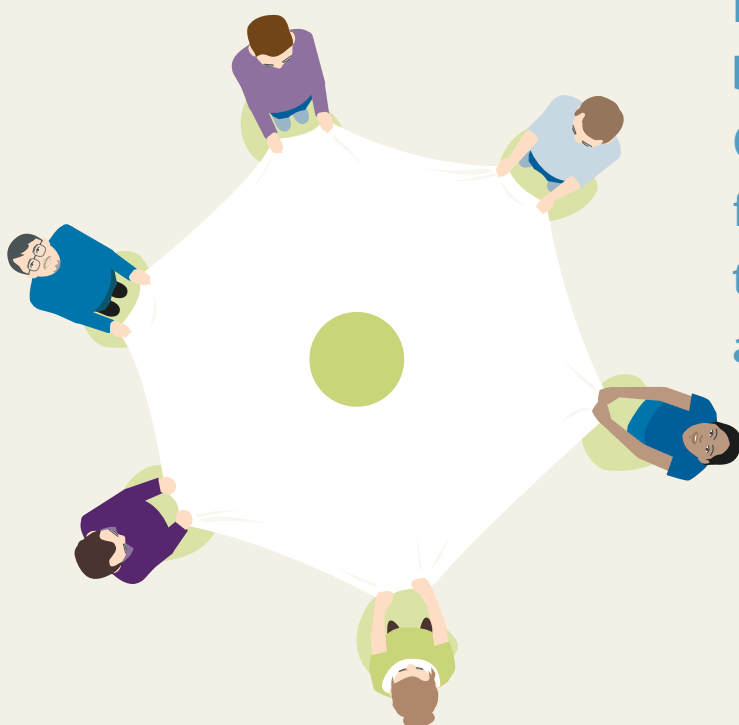
This was caused by net charges from risk provisions for lending business in the sum of EUR 777 million and a negative contribution of the equity investment portfolio in the amount of EUR 281 million. IFRS effects from hedging in the amount of EUR 109 million weighed additionally on the valuation result.

Consolidated total assets rose by EUR 40.4 billion to EUR 546.4 billion in financial year 2020. This is mainly the result of increased net loan receivables under the KfW Special Programme 2020.



Establishing effective
aid programmes

COOPERATION



Efficient collaboration
between Federal
Government, KfW and
financing partners,
to quickly implement
aid measures



Dr Stefan Peiß

KfW coronavirus aid

When the severe economic impact of the coronavirus pandemic became foreseeable at the end of the first quarter of 2020, we succeeded within a very short time in setting up an effective support programme. There were only a few days between the announcement of KfW's coronavirus aid and the start of applications. This would not have been possible without the very efficient collaboration between the Federal Government, KfW and the financing partners. Another decisive

factor was the performance capability of our IT systems, which were indispensable for the automated processing of a large number of loan applications. This shows that the modernisation of our IT infrastructure has borne fruit. By the end of the year, KfW had committed more than 100,000 loans in a volume of around EUR 46 billion. Small and medium-sized businesses were the recipients of 97% of all commitments. KfW's coronavirus aid has thus effectively strengthened the backbone of the German economy.



Automating
processes

DIGITA LISATION



Efficient IT systems
were able to manage
100,000 loan
applications by the
end of the year



Melanie Kehr

Agenda DNA

KfW put digitalisation, sustainability and Africa at the centre of its actions already in 2018. The bank devoted itself to these topics in the coronavirus year 2020 as well. It continued and expanded the initiatives previously launched to promote digital projects. We must now take advantage of the imminent recovery and prepare our economy for the challenges of digitalisation and climate change.

KfW has declared the promotion of sustainability as one of the cornerstones of its business strategy. It is closely interwoven with the mandate we received from the Federal Government to accompany Germany as a transformative promotional bank in the country's transition to

a climate-neutral economy. We systematically followed this mandate in the year 2020 as well. Our long-term goal is to completely decarbonise our financing portfolio by the year 2050.

Many African countries have made significant development progress in the past years. But the coronavirus crisis is threatening to reverse much of that progress. KfW therefore supports African partner countries in mitigating the impact of the crisis on behalf of the German Federal Government. To this end, KfW launched a EUR 4 billion coronavirus emergency programme for Africa within a matter of months and expanded new instruments for promoting economic development that are specifically tailored to Africa.



Outlook

After the coronavirus year 2020, we are now in coronavirus year 2021. To be sure, the hope of overcoming the current crisis is growing day by day, but it will continue to keep us busy in both new and portfolio business. The challenges of digitalisation and transitioning to a sustainable, climate-neutral economy require huge investment, but parts of the business landscape have been severely weakened. KfW will do all it can to support the recovery and upswing.

A functioning start-up culture is of particular importance for the economic recovery. The Federal Government has mandated KfW Capital

to structure and implement the ten-billion-euro Future Fund. We expect this fund to generate critical momentum for the development of innovative and groundbreaking solutions in the years ahead, not least in the strategic areas of digitalisation and sustainability.

The year 2020 was one of unexpected and unprecedented challenges for KfW. The highly motivated and hard-working men and women on our staff were the crucial factor that enabled us to master them. We take this opportunity to thank them very sincerely for their extraordinary and outstanding work in the past year, and we are counting on them again in 2021.



The Executive Board


Dr Günther Bräunig
 (Chief Executive Officer)


Dr Ingrid Hengster


Melanie Kehr


Bernd Loewen


Dr. Stefan Peiß

Executive Board

Dr Günther Bräunig (Chief Executive Officer)

Dr Ingrid Hengster

Melanie Kehr

Prof. Dr Joachim Nagel (until 31/10/2020)

Bernd Loewen

Dr Stefan Peiß

Directors

Tim Armbruster (since 1/5/2020)

Dr Stefan Breuer

Jörg Brombach

Dr Frank Czichowski (until 30/6/2020)

Andreas Fichelscher

Dr Lutz-Christian Funke

Helmut Gauges

Werner Genter

Dr Karsten Hardraht

Detlev Kalischer

Dirk Kuhmann

Dr Stephan Lauer

Dr Katrin Leonhardt (until 31/1/2020)

Andreas Müller

Stephan Opitz

Gaetano Panno

Dr Ralf Prinzler

Wolfgang Reuß

Matthias Schwenk

Mirko Sedlacek

Roland Siller

Birgit Spors

Robert Szwedo

Klaus Weirich

Eva Witt (since 1/1/2020)

Members of the Management Board of KfW IPEX-Bank GmbH

Klaus R. Michalak (CEO and CFO)

Markus Scheer

Claudia Schneider (CRO)

Andreas Ufer

KfW IPEX-Bank is responsible for the export and project finance business sector. Since the beginning of 2008, it has been a legally independent subsidiary of KfW which is subject to the German Banking Act (Kreditwesengesetz – KWG) and banking supervisory regulations.

Members of the Management Board of DEG -Deutsche Investitions- und Entwicklungsgesellschaft mbH)

Christiane Laibach (Chair)

Monika Beck

Philipp Kreutz

DEG was founded in 1962 and has been a wholly-owned subsidiary of KfW Bankengruppe since 2001. DEG is one of the largest European development finance institutions for long-term project and corporate financing. It has been financing and structuring investments by private companies in developing and emerging market countries for more than 50 years.

Report of the Board of Supervisory Directors

Meetings of the Board of Supervisory Directors

The Board of Supervisory Directors and its committees constantly monitored the conduct of KfW's business activities and the management of its assets. It has taken the necessary decisions on the provision of financing and the conduct of other business in accordance with the conditions set forth in the KfW Law and Bylaws. The Board of Supervisory Directors, the Presidial and Nomination Committee, and the Remuneration Committee each met three times in 2020 for this purpose; the Audit Committee four times and the Risk and Credit Committee seven times – primarily virtually in the form of conference calls and video conferences due to the pandemic.



Olaf Scholz, Federal Minister of Finance

At the meetings, the Board of Supervisory Directors acknowledged the information provided by the Executive Board on:

- KfW's 2019 annual and consolidated financial statements;
- the business activities and current developments in each of KfW's business sectors, including KfW IPEX-Bank GmbH, DEG and KfW Capital;
- the group's net assets, its general financial, earnings and risk position, and on sensitive risk areas in particular;
- banking supervisory issues relating to KfW, current consultations with the banking supervisory authorities, compliance with regulatory capital requirements, audits completed and ongoing and the resulting measures, as well as potential effects of future regulatory changes;
- the Climate action campaign for SMEs launched together with the Federal Ministry for Economic Affairs and Energy ("BMWi");
- the status of creation of a fund for forward-looking technologies;
- the further development of KfW as a transformative promotional bank for a net-zero greenhouse gas future;
- KfW's digital agenda and its role in promoting digitalisation as well as supporting and shaping digital structural change; and
- the impact of the coronavirus and the steps taken under KfW coronavirus aid.

In addition, the Board of Supervisory Directors addressed the following key issues based on the reports submitted by the Executive Board on the individual business sectors:

- As regards **domestic promotional business** activities, the introduction of the special programme for coronavirus aid was a key factor in limiting the negative financial impact of the pandemic. The financing offers guaranteed by the Federal Government, some with full exemption from liability, reached the various target groups, but in particular SMEs. In addition to the development and take-up of these financing offers, the Board of Supervisory Directors was also informed about the expansion of promotion for start-ups and attractive terms for student loans.
- With a view to the business sector **Promotion of developing countries and emerging economies**, the Board of Supervisory Directors discussed key issues of Financial Cooperation including KfW's commitment in Africa and the pandemic-related promotional programmes of the Federal Ministry for Economic Cooperation and Development ("BMZ").
- As for KfW IPEX-Bank GmbH, i.e. the **Export and project finance** business sector, the focus was on the support the bank provides to German and European investors and exporters, and the effects of the pandemic, e. g. due to forbearance measures.
- The Board of Supervisory Directors received regular reports on capital market development and KfW's funding status. KfW's funding on the capital market was optimised in mid-2020 via new sources of funding, such as the Economic Stabilisation Fund ("WSF") in particular, but also the targeted longer-term refinancing operations ("TLTRO III") through the Bundesbank.
- The Board of Supervisory Directors also monitored KfW Group's environmental and sustainability commitment and was informed about the sustainable finance concept, which involves inclusion of the objective of transforming the

economy and society to improve economic, environmental and social living conditions around the globe in KfW's strategic target system.

The Board of Supervisory Directors was informed at the meetings as well as quarterly, in writing, of the group's net assets, financial, earnings and risk position, the development of its promotional business, and Internal Auditing's activity. The Executive Board also kept the Chair of the Board of Supervisory Directors and his deputy informed of key developments at the bank between meetings.

The Board of Supervisory Directors discussed key aspects of the business strategy and approved the planning for 2021. It acknowledged the multi-year business strategy, the risk strategy, and the IT strategies for the group and the individual group companies.

The Board of Supervisory Directors also resolved a modernisation of the KfW Bylaws to promote digital business processes.

Each member of the Board of Supervisory Directors is obliged to inform the Chair of the Board of Supervisory Directors or the relevant committee about potential conflicts of interest before a resolution is made.

No members of the Board of Supervisory Directors attended fewer than half of the board meetings in the reporting year. The same applies to the Presidial and Nomination Committee, the Remuneration Committee, the Audit Committee and the Risk and Credit Committee.

Members of the Board of Supervisory Directors attended three training events and four individual training sessions in 2020 to gain and maintain the expertise required in accordance with the German Banking Act.

Committees of the Board of Supervisory Directors

In exercising its responsibilities prescribed in the Bylaws, the **Presidial and Nomination Committee** discussed Executive Board matters, in particular filling vacant positions, resolved an adjustment to the remuneration of the Executive Board, updated job descriptions for Executive Board roles and a temporary redistribution of responsibilities due to the international finance vacancy on the Executive Board since the beginning of November. It also resolved further steps regarding the investment fund for forward-looking technologies and strategic guidelines for 2021, relating to the implementation of KfW's basic business policy.

It was also informed about banking supervisory issues, KfW Stiftung and legal disputes. It conducted an evaluation of the KfW bodies, making relevant recommendations to the Board of Supervisory Directors.

The **Remuneration Committee** discussed remuneration issues and the reports in accordance with the Remuneration Ordinance for Institutions (*Institutsvergütungsverordnung* - "IVV"). It was informed of the annual risk analysis to identify risk takers. As part of this risk analysis, KfW, both as an individual institution and at group level, has to identify staff members whose work could have a material impact on the risk profile of the institution/the group. It reviewed and confirmed the appropriateness of the Executive Board members' remuneration. The group-wide remuneration strategy and the assessment base for variable employee remuneration were also discussed.

The **Risk and Credit Committee** reviewed the commitments, equity investments, and loans to members of executive bodies that must be presented to it under the KfW Law and KfW Bylaws, as well as the scope of borrowings required by KfW for its funding, and the related swap transactions necessary for hedging, and addressed the risk situation and the effectiveness of the risk management system. It also dealt with KfW's exposure in various countries, regions and sectors, the development and assessment of political risks in relevant areas of activity, measures to further develop the risk culture, details of stress testing and market price risks, including further development of their measurement, the potential effects of regulatory measures currently under discussion, the risk profile of financing in certain sectors, and the remuneration system, with a particular focus on the IVV. The report on shadow banks initiated an in-depth discussion on the topic. The current coronavirus developments and their effects on KfW's risk situation were also addressed in detail. The regulatory capital requirements of KfW, in particular the requirements under Basel IV were also repeatedly discussed. And lastly, the committee discussed the risk strategy, including capital planning for the next few financial years.

The **Audit Committee** addressed the accounting process, KfW's net assets, financial and earnings position, the reports by Internal Auditing and Compliance and the annual financial statements of KfW Group 2019. It made corresponding recommendations to the Board of Supervisory Directors for the approval of the annual financial statements 2019 and the appointment of the auditor for 2021. The committee monitored the public call for tender of the framework agreement for the audit of KfW Group and its companies for financial years 2022 to 2025, with an option to extend for financial year 2026. Based on information supplied by the Executive Board, it evaluated the efficiency of the risk management system, the internal control system (ICS) and the internal audit system. In addition, it addressed auditor independence, determined focal points of the 2020 financial statements audit and discussed the initial results of the 2020 financial statements audit (audit report part I). The committee approved the audit plan of the Internal Auditing department for 2021. It monitored banking supervisory issues and closely reviewed the banking supervisory assessments, along with the resulting measures and projects to remedy the findings.

The committee chairpersons reported to the Board of Supervisory Directors regularly on the work of the committees.

Changes on the boards

Prof. Dr Nagel stepped down from the Executive Board at his own request with effect from 31 October 2020. The Board of Supervisory Directors would like to thank him for his commitment to the role.

In accordance with Article 7 (1) no. 1 of the KfW Law, in my capacity as Federal Minister of Finance, I assumed the Chair of the Board of Supervisory Directors for 2021 from my colleague Peter Altmaier, Federal Minister for Economic Affairs and Energy.

Dr André Berghegger, Ingeborg Esser, Albert Füracker, Johannes Kahrs and Alois Karl joined the Board of Supervisory Directors with effect from 1 January 2020. Dr Florian Toncar resigned from the Board of Supervisory Directors with effect from 31 March 2020, and Michael Theurer was appointed with effect from 1 April 2020. Prof. Dr Johannes-Jörg Riegler stepped down with effect from the end of 2020. The Board of Supervisory Directors would like to thank the members stepping down for their work.

The following members stepped down with effect from 31 December 2020 and were reappointed according to schedule: Dr Bruno Hollnagel and Michael Theurer (each with effect from 1 January 2021), Robert Feiger, Reiner Hoffmann, Stefan Körzell, Dr Joachim Lang, Dr Hans-Walter Peters and Helmut Schleweis (each with effect from 6 January 2021 after the reporting period). Rainer Neske also joined the Board of Supervisory Directors after the reporting period with effect from 6 January 2021.

Annual financial statements

Ernst & Young GmbH, which was appointed auditor for financial year 2020, has audited the annual financial statements and the management report of KfW as well as the consolidated financial statements and the group management report of KfW Group, all of which were prepared as of 31 December 2020 by the Executive Board, and issued an unqualified auditor's report thereon. The financial statements and the management report were prepared in accordance with the provisions of the German Commercial Code (HGB) and the consolidated financial statements and the group management report were prepared in accordance with International Financial Reporting Standards (IFRS) as applicable within the European Union.

At its meeting on 24 March 2021, the Board of Supervisory Directors approved the financial statements and the consolidated financial statements, both of which were prepared by the Executive Board, as stipulated in Article 9 (2) of the KfW Law, following a recommendation by the Audit Committee.

Frankfurt am Main, 24 March 2021

THE BOARD OF SUPERVISORY DIRECTORS



Chair

Members and tasks of the Board of Supervisory Directors

The Board of Supervisory Directors supervises the conduct of KfW's business and the administration of its assets. It approves, among other things, the annual financial statements. The Board of Supervisory Directors consists of 37 members. In the year under review, the Chair was held by the Federal Minister for Economic Affairs and Energy, and the Deputy Chair by the Federal Minister of Finance.

Olaf Scholz

Federal Minister of Finance
Chair
(since 1 January 2021)
Deputy Chair
(1 January 2020 – 31 December 2020)

Peter Altmaier

Federal Minister for Economic Affairs
and Energy
Deputy Chair
(since 1 January 2021)
Chair
(1 January 2020 – 31 December 2020)

Doris Ahnen

Minister of State at the Ministry
of Finance of the State
of Rhineland-Palatinate
Member appointed by the
German Bundesrat

Sören Bartol

Member of the German Bundestag
Member appointed by the
German Bundestag

Dr André Berghegger

Member of the German Bundestag
Member appointed by the
German Bundestag
(since 1 January 2020)

Dr Holger Bingmann

Former President of the Federation
of German Wholesale, Foreign Trade
and Services (BGA)
Representative of trade

Volker Bouffier

Minister President
of the State of Hesse
Member appointed by the
German Bundesrat

Ingeborg Esser

Managing Director of the Federal
Association of German Housing and
Real Estate Companies (GdW)
Representative of the
housing industry
(since 1 January 2020)

Robert Feiger

Chair of the Federal Executive
Committee of the IG Bauen-Agrar-
Umwelt (IG Bau) trade union
Representative of the trade unions
(until 31 December 2020)
(since 6 January 2021)

Albert Füracker

State Minister at the Bavarian
State Ministry of Finance and for
Regional Identity
Member appointed by the
German Bundesrat
(since 1 January 2020)

Verena Göppert

Permanent Deputy of the Executive
Director of the Association of
German Cities
Representative of the municipalities

Olav Gutting

Member of the German Bundestag
Member appointed by the
German Bundestag

Dr Louis Hagen

Chief Executive Officer
of Münchener Hypothekenbank eG
Representative of the mortgage banks

Reinhold Hilbers

Minister of Finance
of the State of Lower Saxony
Member appointed by the
German Bundesrat

Reiner Hoffmann

Chair of the Confederation of
German Trade Unions (DGB)
Representative of the trade unions
(until 31 December 2020)
(since 6 January 2021)

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 the German Bundestag
Member appointed by the
German Bundestag

Johannes Kahrs

Former member of the German Bundestag
Member appointed by the
German Bundestag
(since 1 January 2020)

Alois Karl

Member of the German Bundestag
Member appointed by the
German Bundestag
(since 1 January 2020)

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 Federal Executive
Board of the Confederation of
German Trade Unions (DGB)
Representative of the trade unions
(until 31 December 2020)
(since 6 January 2021)

Dr Joachim Lang

Director General of the Federation
of German Industries (BDI)
Representative of industry
(until 31 December 2020)
(since 6 January 2021)

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-Württemberg (LBBW)
Representative of industrial credit

Dr Hans-Walter Peters

President of the Association
of German Banks (BdB)
Representative of the
commercial banks
(until 31 December 2020)
(since 6 January 2021)

Prof. Dr Johannes-Jörg Riegler

Former President of the Association
of German Public Banks (VÖB)
Representative of industrial credit
(until 31 December 2020)

Joachim Rukwied

President of the German Farmers'
Association (DBV)
Representative of agriculture

Andreas Scheuer

Federal Minister of Transport
and Digital Infrastructure

Helmut Schleweis

President of the German Savings
Banks Association (DSGV)
Representative of the savings banks
(until 31 December 2020)
(since 6 January 2021)

Svenja Schulze

Federal Minister for the Environment,
Nature Conservation and
Nuclear Safety

Holger Schwannecke

Secretary General of the German
Confederation of Skilled Crafts (ZDH)
Representative of the skilled crafts

Edith Sitzmann

Minister of Finance
of the State of Baden-Württemberg
Member appointed by the
German Bundesrat

Peter Strobel

Minister of Finance and European
Affairs of the State of Saarland
Member appointed by the
German Bundesrat

Heike Taubert

Minister of Finance
of the State of Thuringia
Member appointed by the
German Bundesrat

Michael Theurer

Member of the German Bundestag
Member appointed by the
German Bundestag
(since 1 April 2020)

Dr Florian Toncar

Member of the German Bundestag
Member appointed by the
German Bundestag
(until 31 March 2020)

Dr Martin Wansleben

Chief Executive of the Association
of German Chambers of Commerce
and Industry (DIHK)
Representative of industry

Corporate Governance Report

As the promotional bank of the Federal Republic of Germany, KfW has committed itself to making responsible and transparent action comprehensible. The Executive Board and the Board of Supervisory Directors of KfW recognise the Public Corporate Governance Code (*Public Corporate Governance Kodex* – “PCGK”) of the Federal Republic of Germany. A declaration of compliance with the recommendations of the PCGK was issued for the first time on 6 April 2011. Since then any potential deviations are disclosed and explained on an annual basis.

KfW is a public law institution under the Law Concerning KfW (KfW Law). The Law sets out KfW’s main structural features. For example, KfW does not have a general shareholders’ meeting. The shareholders are represented on the Board of Supervisory Directors of KfW and exercise control and shareholder functions (e.g. approval of the financial statements and adopting resolutions concerning the KfW Bylaws). The number of members, composition and duties of the Board of Supervisory Directors are set out in the KfW Law. The KfW Law also provides that the Board of Supervisory Directors is subject to legal supervision by the Federal Ministry of Finance in consultation with the Federal Ministry for Economic Affairs and Energy as well as direct control of the Federal Audit Office (*Bundesrechnungshof*). The KfW Law in conjunction with the Regulation concerning key banking supervision standards under the German Banking Act (*Gesetz über das Kreditwesen* – “KWG”) to be declared applicable by analogy to KfW and supervision of compliance to these standards to be assigned to the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* – “BaFin”) (KfW Regulation), dated 20 September 2013, further stipulates that KfW is subject to supervision by BaFin in collaboration with the Bundesbank.

Declaration of compliance

The Executive Board and Board of Supervisory Directors of KfW hereby declare: “Since the last Declaration of Compliance issued on 1 April 2020, the recommendations of the PCGK, as adopted by the Federal Government on 1 July 2009, were and will be fulfilled to the extent applicable to KfW as a public law institution with the exception of the following recommendations.”

D&O insurance excess

KfW has taken out D&O insurance for members of the Executive Board and the Board of Supervisory Directors, which – in derogation of clause 3.3.2 of the PCGK – only contains the option of including a policy excess for members of the Board of Supervisory Directors. Exercise of the option is decided on in consultation with the Chair of the Board of Supervisory Directors and his deputy.

Delegation to committees

The KfW Law sets out the size of the Board of Supervisory Directors at 37 members. To ease the work of the Board of Supervisory Directors, committees more specialised in the subject matter and flexible in terms of time are in place, whose establishment is prescribed by law. In some cases, the committees not only prepare the decisions of the Board of Supervisory Directors but also – in derogation of clause 5.1.8 of the PCGK – make final decisions. This is done for reasons of practicality and efficiency.

- The **Presidial and Nomination Committee** takes final decisions in the following cases: It adopts measures dealing with important legal and administrative matters and can make urgent decisions in pressing matters. It also draws up job descriptions with candidate profiles for Executive Board positions and for appointments to the Board of Supervisory Directors. It grants approval for the distribution of responsibilities within the Executive Board and for significant changes thereto, resolves the remuneration system for the Executive Board, with the decision on the basic structure of the remuneration system nonetheless remaining the responsibility of the Board of Supervisory Directors. In derogation of clause 4.4.3 of the PCGK, the Chair of the Presidial and Nomination Committee also accepts information on Executive Board member conflicts of interest, in lieu of the Board of Supervisory Directors. The Chair of the Presidial and Nomination Committee approves secondary employment of Executive Board members instead of the Chair of the Board of Supervisory Directors, in derogation of clause 4.4.4 of the PCGK.

- The **Risk and Credit Committee** takes final decisions on all financing requiring approval pursuant to the KfW Bylaws as well as on funding through the issue of bonds or taking out loans in foreign currencies and via swap transactions. It is standard procedure at banks for the final decision in such matters to be taken by a committee. It serves to accelerate and bundle expertise in the committee.

Loans to board members

Pursuant to its bylaws, KfW may not grant individual loans to members of the Executive Board or Board of Supervisory Directors. For equal treatment reasons, this does not apply to utilisation of promotional loans made available under the KfW programmes. Due to standardisation of lending and the principle of on-lending through applicants' own banks, there is no danger of conflicts of interest concerning programme loans. The Board of Supervisory Directors must, however, be informed of programme loans granted to members of the Executive Board and Board of Supervisory Directors.

Cooperation between Executive Board and Board of Supervisory Directors

The Executive Board and Board of Supervisory Directors work closely together for the benefit of KfW. The Executive Board maintains regular contact with the Chair and Deputy Chair of the Board of Supervisory Directors and discusses important issues concerning the management of the bank and strategy with them. The Chair of the Board of Supervisory Directors informs the Board of Supervisory Directors of serious issues and, if necessary, convenes an extraordinary meeting.

During the reporting year, the Executive Board informed the Board of Supervisory Directors about all relevant matters regarding the bank's planning, results of operations including the impact of the coronavirus pandemic, risk situation, strategy and management, IT strategy, remuneration strategy and financial position.

Executive Board

The Executive Board is responsible for managing the activities of KfW pursuant to the KfW Law, the KfW Regulation, the KfW Bylaws and the procedural rules for the Executive Board. A schedule of responsibilities stipulates business responsibilities within the Executive Board. As of 1 August 2014, the Executive Board requires prior approval of the Presidial and Nomination Committee regarding significant changes to responsibility within the Executive Board. Until Prof. Dr Nagel stepped down from the Executive Board as of 31 October 2020, the KfW Executive Board member department responsibilities in the reporting year were as follows:

- Dr Günther Bräunig – Chief Executive Officer, General Secretariat, Group Development and Economics, Legal, Financial Markets, Internal Auditing and also Sustainability;
- Dr Ingrid Hengster – Domestic Finance, including the Individualfinanzierung & Öffentliche Kunden (*Customised Finance & Public Clients*) and Mittelstandsbank & Private Kunden (*SME Bank & Private Clients*) business sectors, New Business Credit Service, Domestic Marketing and Digital Channels, KfW Capital GmbH & Co. KG, and Central Services;
- Melanie Kehr – Information Technology and Transaction Management;
- Bernd Loewen – Accounting, Portfolio Credit Service, Organisation and Consulting and Human Resources;
- Prof. Dr Joachim Nagel – International Finance, including KfW Development Bank, DEG, and Export and Project Finance (KfW IPEX-Bank GmbH);
- Dr Stefan Peiß – Chief Risk Officer/Head of Risk Controlling, Credit Risk Management, and Compliance.

Due to Prof. Dr Joachim Nagel's resignation as of 31 October 2020, the Executive Board decided in its meeting of 22 September 2020 to temporarily assign responsibilities, effective 1 November 2020, as follows:

- Dr Günther Bräunig – Chief Executive Officer, General Secretariat, Group Development and Economics, Legal, Internal Auditing, KfW Development Bank and also Sustainability;
- Dr Ingrid Hengster – Domestic Finance, including the Individualfinanzierung & Öffentliche Kunden (*Customised Finance & Public Clients*) and Mittelstandsbank & Private Kunden (*SME Bank & Private Clients*) business sectors, New Business Credit Service, Domestic Marketing and Digital Channels, as well as KfW Capital GmbH & Co. KG, DEG and Export and Project Finance (KfW IPEX-Bank GmbH);
- Melanie Kehr – Information Technology and Transaction Management, and Central Services;
- Bernd Loewen – Accounting, Portfolio Credit Service, Organisation and Consulting, Human Resources and Financial Markets;
- Dr Stefan Peiß – Chief Risk Officer/Head of Risk Controlling, Credit Risk Management, and Compliance.

Executive Board members are obliged to act in the best interests of KfW, may not consider personal interests in their decisions, and are subject to a comprehensive non-competition clause during their employment with KfW. Executive Board members must inform their Board colleagues of any conflicts of interests prior to adopting resolutions and disclose them to the Chair of the Presidial and Nomination Committee without delay.

Board of Supervisory Directors

The Board of Supervisory Directors supervises and advises the Executive Board in the management of the bank.

In accordance with the KfW Law, the Board of Supervisory Directors consists of 37 members. In accordance with the law, seven Federal Ministers are members of the Board of Supervisory Directors. In addition, the German Bundestag and Bundesrat appoint seven members each. The remaining members of the Board of Supervisory Directors are appointed by the Federal Government after consultation with stakeholder groups. The Federal Minister of Finance and the Federal Minister for Economic Affairs and Energy alternate on a yearly basis as Chair of the Board of Supervisory Directors. The Chair of the Board of Supervisory Directors in the reporting year was Federal Minister Peter Altmaier. There were eight female members on the Board of Supervisory Directors during the reporting year.

No member of the Board of Supervisory Directors may have business or private dealings with KfW or its Executive Board members which are based on a substantial and more than temporary conflict of interests. Each member of the Board of Supervisory Directors informs the Chair of the Board of Supervisory Directors or the relevant committee about conflicts of interest before a resolution is adopted.

No members of the Board of Supervisory Directors attended fewer than half of the board meetings in the reporting year.

Committees of the Board of Supervisory Directors

The Board of Supervisory Directors has created four committees in accordance with Section 25d KWG in order to increase efficiency in performance of its duties. These committees are listed below in line with the KfW bylaws.

The **Presidial and Nomination Committee** is responsible for all legal and administrative matters, as well as the bank's business and corporate policy matters such as the strategic guidelines for the Executive Board; it also makes urgent decisions in pressing matters. The Presidial and Nomination Committee is also responsible for handling nominations. The Presidial and Nomination Committee draws up job descriptions with candidate profiles for Executive Board positions and for appointments to the Board of Supervisory Directors. It identifies candidates to fill positions on the Executive Board and thus ensures with the Executive Board that long-term succession planning is in place for it. It can support the government bodies which make the appointments in selecting the individuals to be appointed to the Board of Supervisory Directors. The Presidial and Nomination Committee's tasks include advising and adopting resolutions on the remuneration system for the Executive Board, including in respect of contract components and their regular review, notwithstanding the tasks of the Remuneration Committee. The Board of Supervisory Directors decides on the basic structure of the Executive Board remuneration system.

The **Remuneration Committee** deals with remuneration matters. It deals in particular with the appropriate structure of the remuneration system for the KfW Executive Board and employees and advises the Presidial and Nomination Committee on remuneration of the Executive Board members.

The **Risk and Credit Committee** is responsible for advising the Board of Supervisory Directors on risk issues, such as, in particular, the group's overall risk tolerance and strategy. The Risk and Credit Committee is also in charge of handling credit matters and the approval of KfW's fundraising and swap transactions.

The **Audit Committee** is responsible for accounting and risk management issues. In particular, it deals with monitoring the accounting process, the effectiveness of the internal controlling system, the internal audit system and risk management system, auditing the annual and consolidated financial statements, the required independence of the auditor, determining the focus areas of the audit, and monitoring the prompt elimination by the Executive Board of any deficiencies found by the auditor.

The chairs of the committees report to the Board of Supervisory Directors on a regular basis.

The Board of Supervisory Directors provides information about its work and that of its committees during the reporting year in its report. An overview of the members of the Board of Supervisory Directors and its committees is available on KfW's website.

Shareholders

The Federal Government owns 80% of KfW's share capital, the German federal states 20%. In accordance with Article 1a of the KfW Law, the Federal Republic of Germany is liable for certain of KfW's liabilities. There is no profit distribution. The KfW Law does not require a general shareholders' meeting; the Board of Supervisory Directors performs the function of a general shareholders' meeting.

Supervision

In accordance with Article 12 of the KfW Law, KfW is subject to legal supervision by the Federal Ministry of Finance in consultation with the Federal Ministry for Economic Affairs and Energy. The supervising authority has the power to take all measures necessary to ensure that KfW operates its business activities in accordance with the law, the KfW Bylaws and other rules and regulations.

KfW is not considered a credit institution within the meaning of Section 2 (1) no. 2 KWG. The KfW Regulation dated 20 September 2013 declares central banking supervision regulations henceforth applicable by analogy to KfW, and subjects KfW to supervision by the German Federal Financial Supervisory Authority (BaFin) in collaboration with the Bundesbank regarding KfW's compliance with these regulations.

The group companies KfW IPEX-Bank GmbH and DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG) are, on the other hand, credit institutions within the meaning of the KWG. KfW IPEX-Bank GmbH is subject to the provisions of the KWG in full, while DEG is only subject to it with certain restrictions.

Transparency

KfW provides all important information about the bank's annual and consolidated financial statements, the quarterly and semi-annual reports and the financial calendar on its website. Investor relations activities and corporate communications also involve regular announcements on the latest company developments. The annual corporate governance reports of KfW and the group companies KfW IPEX-Bank GmbH, KfW Capital GmbH & Co. KG and DEG including the declaration of compliance with the PCGK, are always available on KfW's website.

Risk management

Risk management and risk control are primary responsibilities of overall bank management at KfW. In its risk strategy, the Executive Board defines the framework for the bank's business activities regarding risk tolerance and risk-bearing capacity. This ensures that KfW fulfils its particular responsibilities with an appropriate risk profile effectively and for the long term. The bank's overall risk situation is subject to comprehensive analysis in monthly risk reports to the Executive Board. The Board of Supervisory Directors regularly receives detailed information on the bank's risk situation, at least once a quarter. The Risk and Control Committee was kept constantly informed about the effects of the coronavirus pandemic.

Compliance

The success of KfW Group is largely based on the confidence its shareholders, customers, business partners, employees and the general public place in its efficiency and above all in its integrity. This confidence rests to a large extent on the implementation of and compliance with relevant statutory, supervisory and internal regulations and other relevant laws and rules. Compliance at KfW includes, in particular, measures for data protection and securities compliance, and for financial sanctions, as well as for the prevention of money laundering, terrorist financing and other criminal activities. There are therefore binding rules and procedures that influence the day-to-day implementation of values and the corporate culture and are continually updated to reflect current law as well as market requirements. Compliance's responsibilities also include collaboration with financial regulators BaFin and Bundesbank as well as the central function for compliance in accordance with MaRisk. Regular training sessions on all compliance issues are held for KfW's employees. E-learning programmes are available in addition to classroom seminars.

Accounting and auditing

As the supervisory authority, the Federal Ministry of Finance in consultation with the Federal Audit Office appointed Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft as auditor for financial year 2020 on 13 January 2020. The appointment was based on the proposal made by KfW's Board of Supervisory Directors on 11 December 2019. The Audit Committee prepared this recommendation. The bank and the auditor agreed that the Chair of the Audit Committee would be informed without delay of any findings and incidents discovered during the audit that are significant to the duties of the Board of Supervisory Directors. It was furthermore agreed that the auditor would inform the Audit Committee Chair and remark in the auditor's report if it noticed any facts in performing the audit that represent misstatements in the declaration of compliance with the PCGK.

Efficiency review of the Board of Supervisory Directors

Since Section 25d (11) KWG became applicable as of 1 July 2014, the Presidial and Nomination Committee has been required to evaluate the efficiency of both the Board of Supervisory Directors and the Executive Board on an annual basis. Both evaluations are performed on a yearly basis, for the first time in mid-2015 and most recently in June 2020.

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.

Frankfurt am Main, 24 March 2021

The Executive Board

The Board of Supervisory Directors



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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)	<ul style="list-style-type: none"> – 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)	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – Investments in German and European venture capital and venture debt funds
Export and project finance	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – Central interest rate and currency management – Strategic equity investments

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

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	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	2019
	EUR in billions	EUR in billions
Domestic business	106.4	43.4
Mittelstandsbank & Private Kunden (<i>SME Bank & Private Clients</i>)	86.3	36.0
Individualfinanzierung & Öffentliche Kunden (<i>Customised Finance & Public Clients</i>)	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 commitments¹⁾	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

	2020	2019
	EUR in millions	EUR in millions
Key figures of the income statement		
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%
	2020	2019
	EUR in millions	EUR in millions
Consolidated profit before IFRS effects	633	1,447
	31. Dec. 2020	31. Dec. 2019
	EUR in billions	EUR in billions
Key figures of the statement of financial position		
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

	EUR in millions	Reconciliation 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** amounted 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.

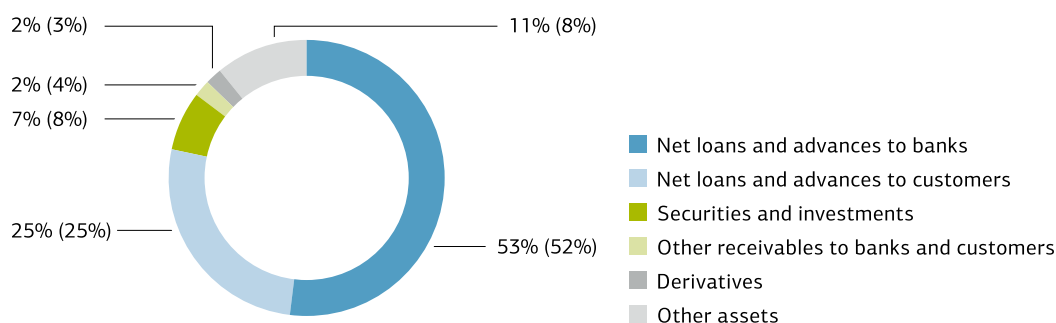
Consolidated profit before IFRS effects from hedging is another key financial figure based on Consolidated profit in accordance with IFRS to reflect the fact that KfW uses derivative financial instruments solely for hedging purposes. Under IFRS, the requirements for the recognition and valuation of derivatives 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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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.

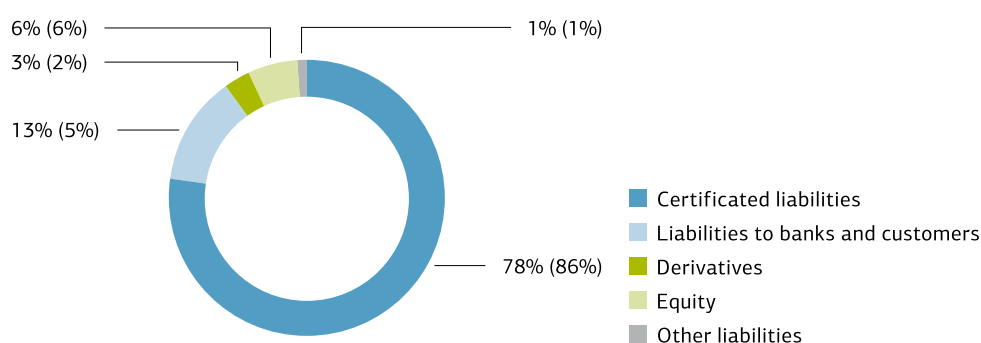
Derivatives with positive fair values, which are primarily used to hedge refinancing transactions, declined from EUR 16.2 billion in 2019 to EUR 13.3 billion. This was a result of value adjustments from micro hedging decreasing from EUR 10.9 billion to EUR 8.0 billion.

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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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

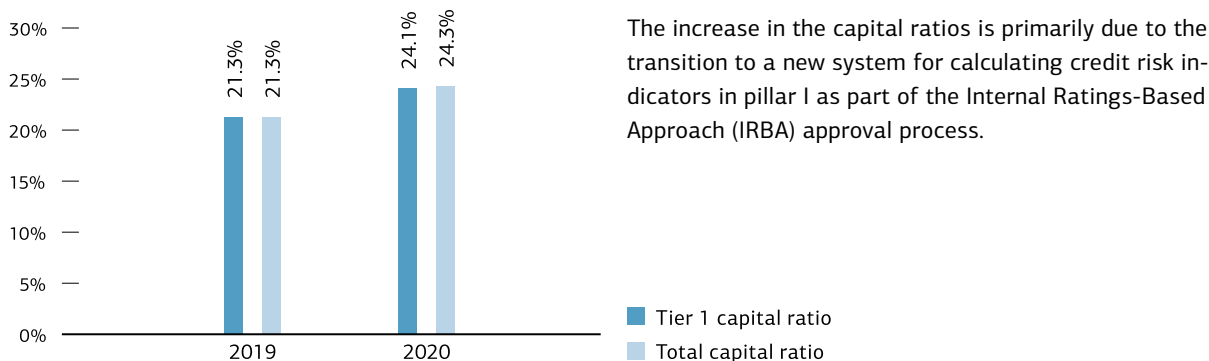
The consolidated profit was allocated to retained earnings.

Risk report

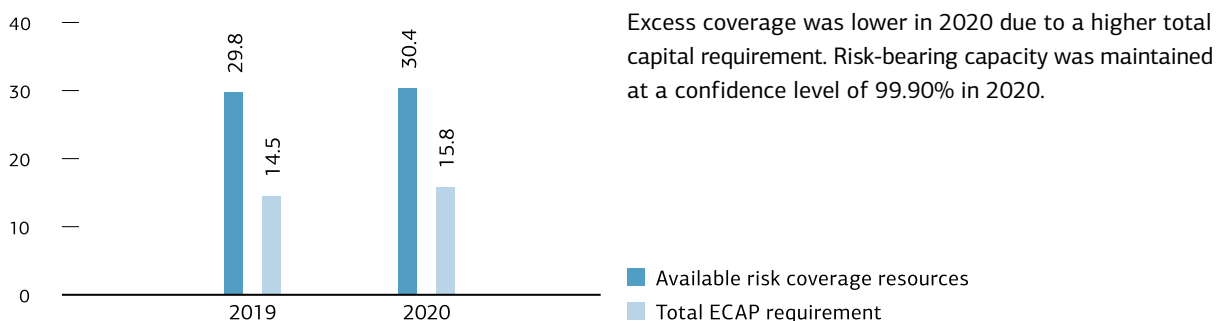
Overview of key indicators

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:

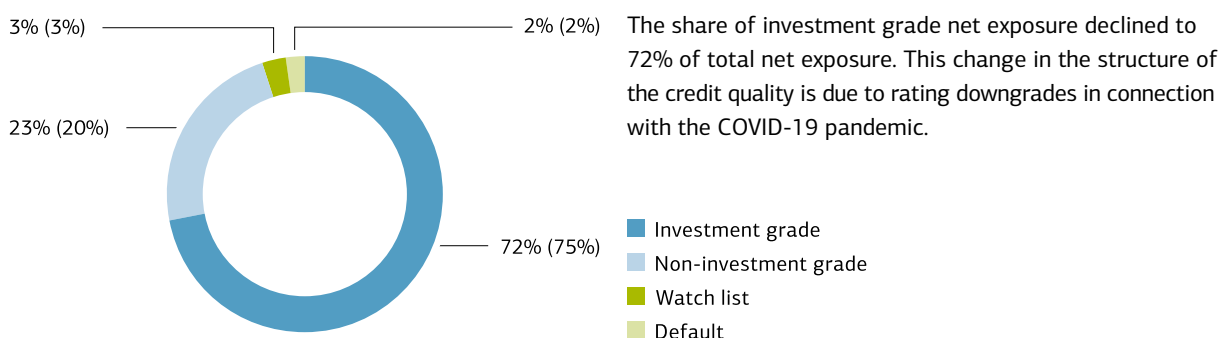


Economic risk-bearing capacity: (EUR in billions)



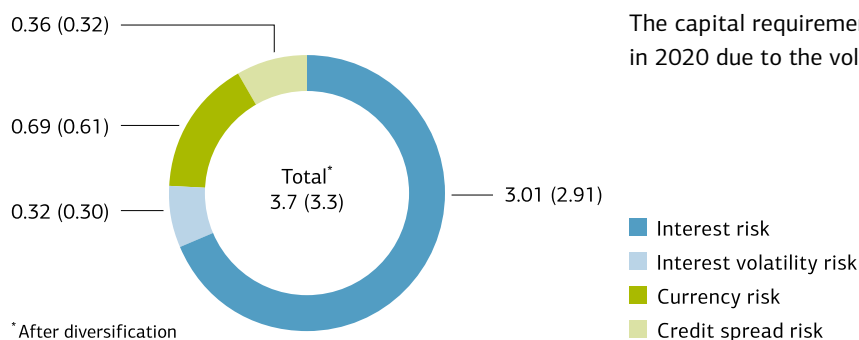
Credit risk:

2020 (2019), Net exposure breakdown



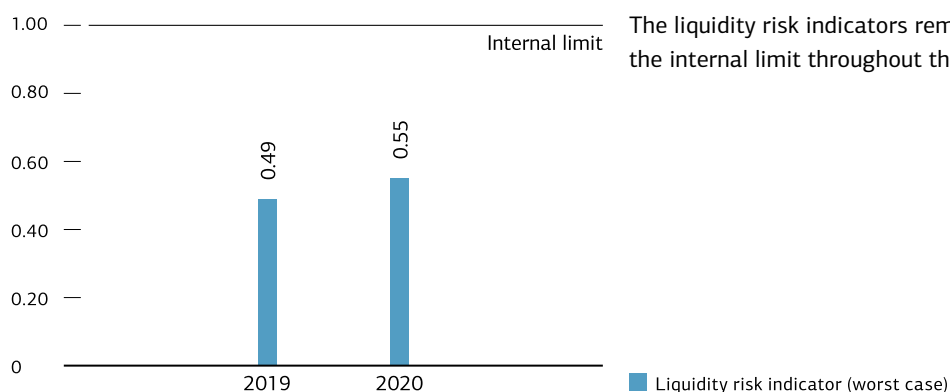
Market price risk:

2020 (2019), ECAP (EUR in billions)



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

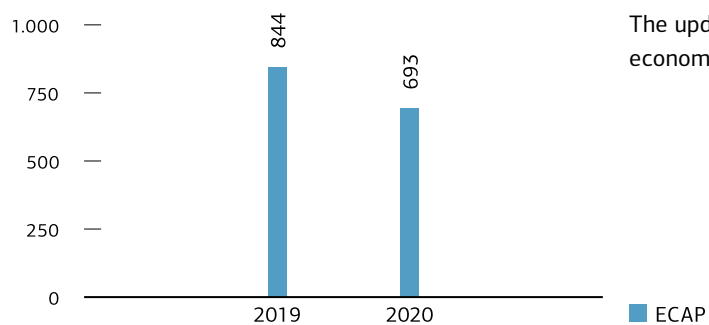
Liquidity risk:



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.

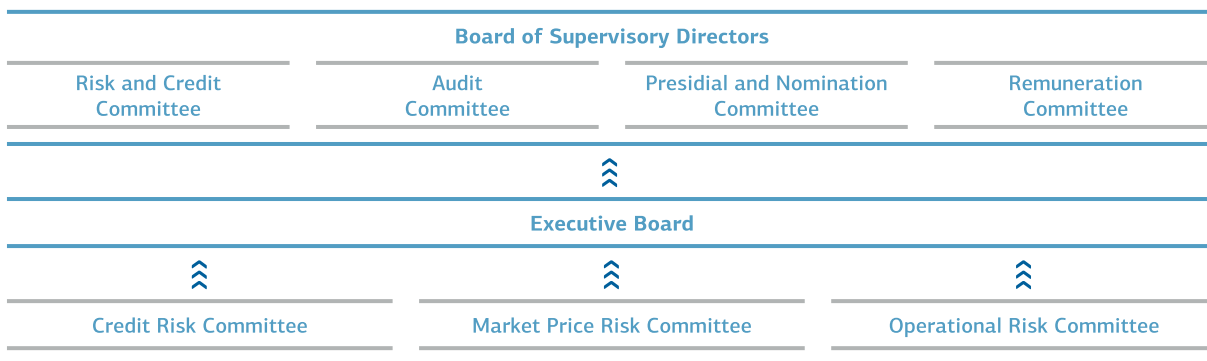
In order to cushion the impact of the effects referred to above, the German Federal Government has launched coronavirus aid measures for companies. Loans extended on behalf of the Federal Government in this context are secured in full by federal guarantees and do not put any pressure on the group's risk 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.

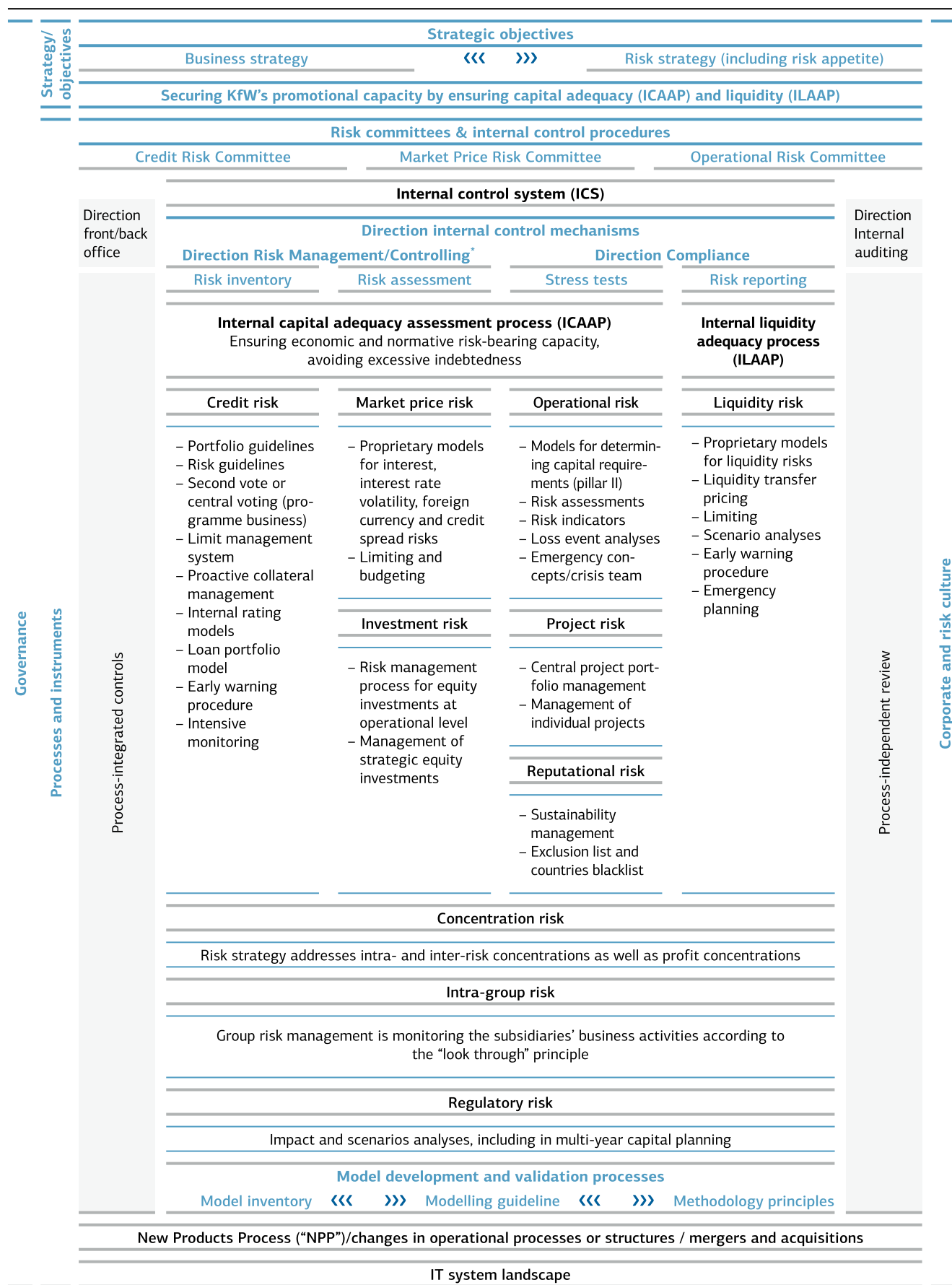
Market Price Risk Committee

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.



* 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	31 Dec. 2019
	EUR in millions	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.

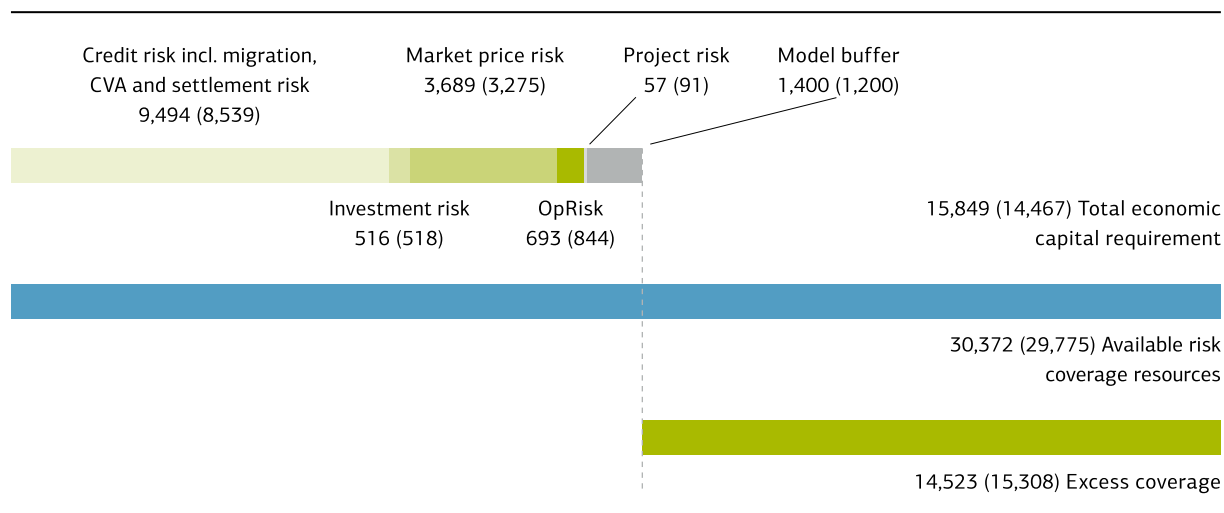
Project risks are also taken into account in the risk-bearing capacity concept. Both quantified individual risks from projects and general assumptions about potential losses in the project portfolio are included in risk measurement.

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 risks¹⁾ 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
	Exposure at default			
Business level	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 scorecards²⁾ 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 collat-

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.

eral 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 exposures³⁾, 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.

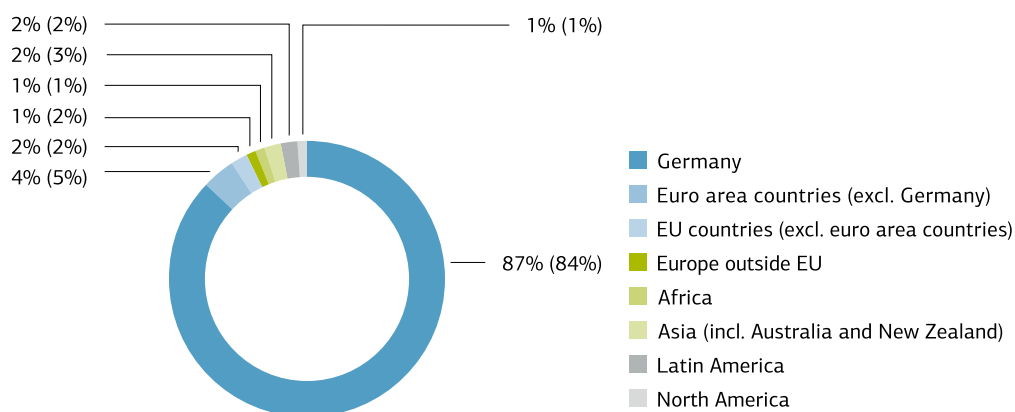
Portfolio structure

The interaction of the risks associated with the individual exposures in KfW Group's loan portfolio⁴⁾ 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)

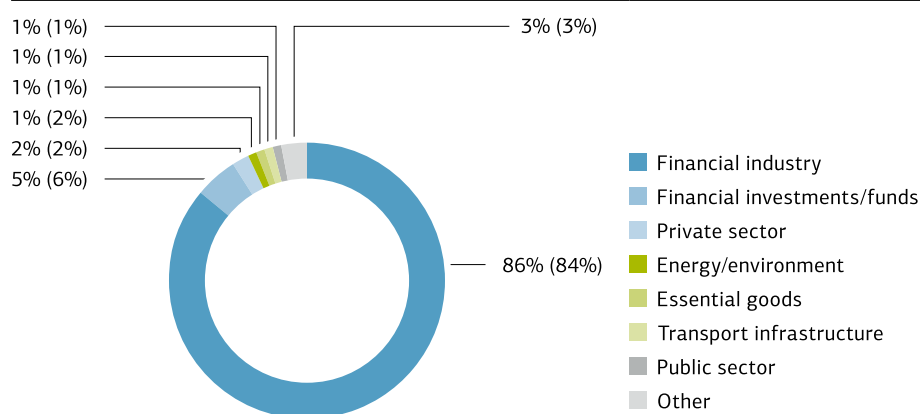


Regions

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)

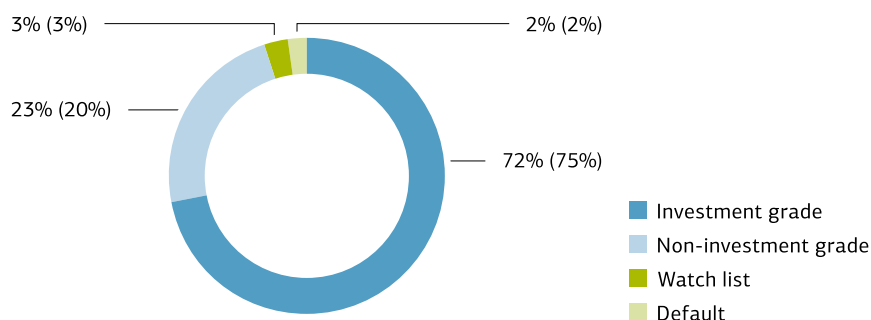


Sectors

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 exposure⁵⁾ 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 securitisations	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) requirements⁶⁾, in particular those set forth in the KWG and MaRisk, and the market standard COSO model⁷⁾.

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 number 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 de-

mand-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 in-

volves 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 efficiency; (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 enter-

prises 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.

Declaration of compliance

The Executive Board and the Board of Supervisory Directors of KfW have resolved to recognise the Public Corporate Governance Code (*Public Corporate Governance Kodex* – “PCGK”) of the Federal Republic of Germany. The Corporate Governance Report of KfW contains the declaration of compliance with the recommendations of the PCGK.

Non-financial statement

Information on the “Summarised non-financial statement of KfW as the parent company and of KfW Group” can be found in the separate Global Reporting Initiative (GRI) standard report of the 2020 Sustainability report. The GRI Report can be accessed online at:

<https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/Nachhaltigkeitsbericht-2020.pdf> .



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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 EUR in millions	31 Dec. 2019 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 EUR in millions	31 Dec. 2019 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 equity¹⁾

	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 reserves¹⁾

	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
<i>Other comprehensive income</i>	-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
<i>Other comprehensive income</i>	-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	2019
	EUR in millions	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

	31 Dec. 2019	Financial assets at amortised cost			Financial assets at fair value				31 Dec. 2019 adjusted	New statement of financial position structure
		Loans and advances to banks	Loans and advances to customers	Securities and investments	Loans and advances to banks	Loans and advances to customers	Securities and investments	Other derivatives		
	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	
Previous statement of financial position structure										
Cash reserves	28,195	0	0	0	0	0	0	0	28,195	Cash reserves
Loans and advances to banks	281,912	-281,902	0	0	-9	0	0	0	-	-
Loans and advances to customers	129,416	0	-119,798	0	0	-9,618	0	0	-	-
Risk provisions for lending business	-1,670	242	1,428	0	0	0	0	0	-	-
-	-	281,660	118,370	34,511	0	0	0	0	434,542	Financial assets at amortised cost
-	-	0	0	0	9	9,618	3,285	5,383	18,295	Financial assets at fair value
Value adjustments from macro fair value hedge accounting	10,887	0	0	0	0	0	0	0	10,887	Value adjustments from macro fair value hedge accounting
Derivatives designated for hedge accounting	10,859	0	0	0	0	0	0	0	10,859	Derivatives designated for hedge accounting
Other derivatives	5,383	0	0	0	0	0	0	-5,383	-	-
Securities and investments	37,795	0	0	-34,511	0	0	-3,285	0	-	-
Investments accounted for using the equity method	609	0	0	0	0	0	0	0	609	Investments accounted for using the equity method
Property, plant and equipment	1,021	0	0	0	0	0	0	0	1,021	Property, plant and equipment
Intangible assets	188	0	0	0	0	0	0	0	188	Intangible assets
Income tax assets	703	0	0	0	0	0	0	0	703	Income tax assets
Other assets	723	0	0	0	0	0	0	0	723	Other assets
Total	506,022	0	0	0	0	0	0	0	506,022	Total

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

	31 Dec. 2019	Financial liabilities at amortised cost			Financial liabilities at fair value				31 Dec. 2019 adjusted	New statement of financial position structure
		Liabilities to banks	Liabilities to customers	Certificated liabilities	Liabilities to banks	Liabilities to customers	Certificated liabilities	Other derivatives		
	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	
Previous statement of financial position structure										
Liabilities to banks	14,899	-14,644	0	0	-255	0	0	0	-	-
Liabilities to customers	10,131	0	-8,667	0	0	-1,464	0	0	-	-
Certificated liabilities	436,191	0	0	-424,897	0	0	-11,294	0	-	-
-	-	14,644	8,667	424,897	0	0	0	0	448,208	Financial liabilities at amortised cost
-	-	0	0	0	255	1,464	11,294	2,453	15,466	Financial liabilities at fair value
Value adjustments from macro fair value hedge accounting	77	0	0	0	0	0	0	0	77	Value adjustments from macro fair value hedge accounting
Derivatives designated for hedge accounting	6,674	0	0	0	0	0	0	0	6,674	Derivatives designated for hedge accounting
Other derivatives	2,453	0	0	0	0	0	0	-2,453	-	-
Provisions	3,335	0	0	0	0	0	0	0	3,335	Provisions
Income tax liabilities	358	0	0	0	0	0	0	0	358	Income tax liabilities
Other liabilities	542	0	0	0	0	0	0	0	542	Other liabilities
Equity	31,362	0	0	0	0	0	0	0	31,362	Equity
Total	506,022	0	0	0	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 in 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	<i>Loans and advances to banks</i>	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	<i>Loans and advances to customers</i>	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	<i>Securities and investments</i>	Bonds and other fixed-income securities
Financial assets at fair value	<i>Loans and advances to banks</i>	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	<i>Loans and advances to customers</i>	Money-market transactions
		Loans and advances
		Promissory note loans
		Other receivables
	<i>Securities and investments</i>	Bonds and other fixed-income securities
		Shares and other non-fixed income securities
		Equity investments
		Shares in non-consolidated subsidiaries
Financial liabilities at amortised cost	<i>Other derivatives</i>	Interest-related derivatives
		Currency-related derivatives
		Other derivatives
	<i>Liabilities to banks</i>	Money-market transactions
		Promissory note loans
		Other financial liabilities
	<i>Liabilities to customers</i>	Money-market transactions
		Promissory note loans
		Other financial liabilities
Financial liabilities at fair value	<i>Certificated liabilities</i>	Money-market issues
		Bonds and notes
		Interest-related derivatives
	<i>Liabilities to banks</i>	Currency-related derivatives
		Other derivatives
		Money-market transactions
	<i>Liabilities to customers</i>	Promissory note loans
		Other financial liabilities
		Money-market issues
	<i>Certificated liabilities</i>	Bonds and notes
		Interest-related derivatives
		Currency-related 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 (*Beitragsbemessungsgrenze*). There is a risk that the basis of assessment will develop differently than was assumed.

Pension obligations are calculated by an independent qualified actuary in accordance with the projected unit credit method on the basis of group-wide uniform parameters such as age, length of company service and salary. The pension provision is recognised at the present value of the defined-benefit obligations as of the reporting date. The discount factor is based on current market conditions for a portfolio of high-quality corporate bonds/bonds from supranational issuers with a maturity matching that of the obligations. The definition of the portfolio takes into account current market conditions. Additional demographic factors (including the 2018 G Heubeck actuarial tables) and actuarial assumptions (rate of salary and pension increases, rate of staff turnover, etc.) are taken into account.

No plan assets were defined for the pension obligations of KfW Group, so the related special accounting rules do not apply. Provisions for pensions and similar obligations are financed in-house with sufficient assets with corresponding maturities.

Actuarial gains and losses are immediately recognised at the time they occur. They occur as a result of remeasurement of pension obligations as of the reporting date compared to the figures forecast at the beginning of the year.

Additions to pension provisions distinguish between service cost and interest expense. Service cost is reported under Administrative expense; interest expense is reported under Other interest expense. The pension provision changes recognised directly in equity comprise the actuarial gains and losses reported in Revaluation reserves; these are reported in Other comprehensive income.

Pension-like obligations include commitments for deferred compensation, early retirement and partial retirement. Actuarial reports are prepared and a provision is recognised accordingly for these types of commitments as well. No actuarial gains or losses are incurred.

Other provisions, including those for obligations to employees and for audit and consultancy services, are recognised at the estimated expenditure. Long-term provisions are discounted where the effect is material. Added to this are obligations arising from the assumption of the tasks of the State Insurance Company of the German Democratic Republic in liquidation (*Staatliche Versicherung der Deutschen Demokratischen Republik in Abwicklung* – “SinA” institution under public law), which are offset by receivables in the same amount from the Federal Agency for Special Tasks Arising from Unification (*Bundesanstalt für vereinigungsbedingte Sonderaufgaben* – “BvS”) reported under Other assets. If the provision is not required in full or if the reason for creating the provision no longer applies, the provision is reversed via the same income statement item that was used in creating the provision.

(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 transaction¹⁾

	2020	2019
	EUR in millions	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	2019
	EUR in millions	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

	Mittelstands-bank & Private Kunden (SME Bank & Private Clients)	Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients)	KfW Capital	Export and project finance	Promotion of developing countries and emerging economies	Financial markets	Head office	KfW Group
2020	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

	Mittelstands-bank & Private Kunden (SME Bank & Private Clients)	Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients)	KfW Capital	Export and project finance	Promotion of developing countries and emerging economies	Financial markets	Head office	KfW Group
2019	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 EUR in millions	2019 EUR in millions
Revenue in current period resulting from services performed in the previous period(s)	17	42

Analysis of Commission expense

	2020	2019
	EUR in millions	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	2019	
	EUR in millions	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	2019
	EUR in millions	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	2019
	EUR in millions	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	2019
	EUR in millions	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	2019
	EUR in millions	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	2019
	EUR in millions	EUR in millions
Net gains/losses from investments accounted for using the equity method	31	15

(27) Administrative expense

Analysis of Administrative expense

	2020	2019
	EUR in millions	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
<i>of which impairments of rights of use arising from leases</i>	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	2019
	EUR in millions	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	2019
	EUR in millions	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	2019
	EUR in millions	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)	<ul style="list-style-type: none"> – 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)	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – Investments in German and European venture capital and venture debt funds
Export and project finance	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – 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	<ul style="list-style-type: none"> – 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 method¹⁾. 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 funding²⁾ 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 value³⁾ 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 centres⁴⁾. 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

	Mittelstands-bank & 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

	Mittelstands-bank & Private Kunden (SME Bank & Private Clients)	Individual-finan-zierung & 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	Recon-ciliation/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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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 type¹⁾

	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 banks¹⁾

	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
<i>of which recently purchased or issued financial assets</i>	294,777	276	23	295,076	195,517	27	0	195,545
<i>of which current business</i>	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
<i>of which financial assets written off</i>	-305,292	-160	-160	-305,613	-216,909	-126	-51	-217,086
<i>of which default on receivables</i>	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 customers¹⁾

	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
<i>of which recently purchased or issued financial assets</i>	24,572	421	214	25,207	10,673	5	104	10,782
<i>of which current business</i>	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
<i>of which financial assets written off</i>	-16,234	-2,153	-955	-19,342	-14,672	-1,090	-493	-16,256
<i>of which default on receivables</i>	-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 investments¹⁾

	Financial year 2020				Financial year 2019			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan.	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
<i>of which recently purchased or issued financial assets</i>	19,842	0	0	19,842	15,364	0	0	15,364
<i>of which current business</i>	32	0	0	32	17	0	0	17
Disposals	-18,617	0	-12	-18,629	-13,957	-30	-13	-14,001
<i>of which financial assets written off</i>	-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 transactions¹⁾

	Financial year 2020				Financial year 2019			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan.	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
<i>of which recently purchased or issued financial assets</i>	775	4	0	779	1,685	0	0	1,685
<i>of which current business</i>	405	50	5	460	589	5	0	595
Disposals	-826	-77	-36	-940	-2,156	-36	-10	-2,201
<i>of which financial assets written off</i>	-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 banks¹⁾

	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 customers¹⁾

	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 investments¹⁾

	Financial year 2020				Financial year 2019			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan.	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	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan.	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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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 instrument¹⁾

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	Accumulated depreciation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 2020	1,487	-466	1,021
Additions/reversals of impairment losses	57	0	57
Disposals	-17	15	-2
Depreciation	0	-67	-67
Impairment losses	0	-10	-10
Carrying amount as of 31 Dec. 2020	1,527	-528	999

Development of Property, plant and equipment in financial year 2019

	Acquisition/ production cost	Accumulated depreciation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 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	31 Dec. 2019
	EUR in millions	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	Accumulated amortisation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 2020	466	-277	188
Additions/reversals of impairment losses	38	0	38
Disposals	-5	5	0
Amortisation	0	-54	-54
Impairment losses	0	0	0
Carrying amount as of 31 Dec. 2020	498	-326	172

Development of Intangible assets in financial year 2019

	Acquisition/ production cost	Accumulated amortisation, impairment and reversal of impairment losses	Net carrying amount
	EUR in millions	EUR in millions	EUR in millions
Carrying amount as of 1 Jan. 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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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 re-purchases 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	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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 instrument¹⁾

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	Early retirement	Partial retirement	Total
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 2020	2,424	84	14	2,523
Additions	113	0	1	114
<i>Current service cost</i>	80	0	1	81
<i>Interest cost</i>	33	0	0	33
Actuarial gains and losses	126	0	0	126
<i>Changes in demographic assumptions</i>	-1	0	0	-1
<i>Changes in financial assumptions</i>	168	0	0	168
<i>Changes in experience adjustments</i>	-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
<i>Other additions</i>	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	31 Dec. 2019
	EUR in millions	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 item¹⁾

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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	2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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⁾		Derivatives designated for hedge accounting	Total
				FVM	FVD		
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Interest income	4,799 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 2020¹⁾

	Carrying amount (statement of financial position)	Fair value			Total	Difference from carrying amount
		Level 1	Level 2	Level 3		
	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 2019¹⁾

	Carrying amount (statement of financial position)	Fair value			Total	Difference from carrying amount
		Level 1	Level 2	Level 3		
	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 2020¹⁾

	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 2019¹⁾**

	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 2020¹⁾**

	Financial assets at fair value					Total EUR in millions
	Loans and advances to banks EUR in millions	Loans and advances to customers EUR in millions	Securities and investments EUR in millions	Other derivatives EUR in millions	Non-current assets held for sale 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
<i>Contracts still valid at year-end</i>	0	-3	0	21	0	18
Net gains/losses from hedge accounting	0	0	0	0	0	0
<i>Contracts still valid at year-end</i>	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
<i>Contracts still valid at year-end</i>	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 2020¹⁾**

	Financial liabilities at fair value				Total
	Liabilities to banks	Liabilities to customers	Certificated liabilities	Other derivatives	
	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
<i>Contracts still valid at year-end</i>	0	0	0	0	0
Net gains/losses from hedge accounting	0	0	0	0	0
<i>Contracts still valid at year-end</i>	0	0	0	0	0
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	3	-34	-31
<i>Contracts still valid at year-end</i>	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
<i>Contracts still valid at year-end</i>	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 2019¹⁾**

	Financial assets at fair value					Total
	Loans and advances to banks	Loans and advances to customers	Securities and investments	Other derivatives	Non-current assets held for sale	
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
As of 1 Jan. 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
<i>Contracts still valid at year-end</i>	0	-1	0	2	0	1
Net gains/losses from hedge accounting	0	0	0	0	0	0
<i>Contracts still valid at year-end</i>	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
<i>Contracts still valid at year-end</i>	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 2019¹⁾**

	Financial liabilities at fair value				Total
	Liabilities to banks	Liabilities to customers	Certificated liabilities	Other derivatives	
	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
<i>Contracts still valid at year-end</i>	0	0	0	0	0
Net gains/losses from hedge accounting	0	0	0	0	0
<i>Contracts still valid at year-end</i>	0	0	0	0	0
Net gains/losses from other financial instruments at fair value through profit or loss	0	0	2	-75	-73
<i>Contracts still valid at year-end</i>	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
<i>Contracts still valid at year-end</i>	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)
		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.

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)
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	Risk costs	+/- 10%
		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 2020¹⁾

	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 2020¹⁾**

	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 2019¹⁾**

	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 2019¹⁾**

	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 – 2020¹⁾

	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 – 2019¹⁾

	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

	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
Due	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

				Statement of financial position items in which the hedged items are reported		
	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)	Carrying amount before value adjustment from macro fair value hedge accounting	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				Financial assets at amortised cost ¹⁾	Value adjustments from macro fair value hedge accounting	
	214,054	12,220	382			1,779
Liabilities and equity				Financial liabilities at amortised cost ¹⁾	Value adjustments from macro fair value hedge accounting	
	0	57	57			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

				Statement of financial position items in which the hedged items are reported		
	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)	Carrying amount before value adjust- ment from macro fair value hedge accounting	Value adjust- ment 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				Financial assets at amortised cost ¹⁾	Value adjustments from macro fair value hedge accounting	
	193,602	10,887	764			2,405
Liabilities and equity				Financial liabilities at amortised cost ¹⁾	Value adjustments from macro fair value hedge accounting	
	0	77	77			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 hedge¹⁾

	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	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
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	2019
	EUR in millions	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

	Nominal volumes (gross)
Reference rate (floating leg)	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 2020¹⁾

	Financial liabilities at fair value			Total EUR in millions
	Liabilities to banks	Liabilities to customers	Certificated liabilities	
	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 2019¹⁾

	Financial liabilities at fair value			Total EUR in millions
	Liabilities to banks	Liabilities to customers	Certificated liabilities	
	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
<i>thereof Gross obligations arising from derivative financial instruments</i>	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
<i>thereof Gross obligations arising from derivative financial instruments</i>	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 transactions¹⁾

	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 transactions¹⁾

	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 class¹⁾

	31 Dec. 2020	31 Dec. 2019
	EUR in millions	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	31 Dec. 2019
	EUR in millions	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 2019¹⁾

	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 Schلهweis	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	Agrofundos 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	Kandao 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 Solafra 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 Duquenco 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

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Statement by the Executive Board

To the best of our knowledge, and in accordance with the applicable accounting principles, the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of KfW Group, and the group management report includes a fair review of the development and performance of the business and the position of KfW Group, together with a description of the principal risks and rewards associated with the expected development of KfW Group.

Frankfurt am Main, 23 February 2021
KfW



Dr Günther Bräunig
(Chief Executive Officer)



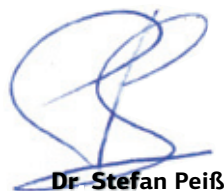
Dr Ingrid Hengster



Melanie Kehr



Bernd Loewen



Dr Stefan Peiß

Independent auditor's report¹⁾

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

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Multi-picture collage of the Executive Board | Pages 14/15
(from left to right, 1st line)
KfW Group/Alex Habermehl
KfW Photo Archive/Alexander Kempf
KfW Group/Stephan Pick
KfW Group/Alex Habermehl

(from left to right, 2nd line)
KfW Group /Alex Habermehl
KfW Photo Archive/Alexander Kempf
KfW Group /Alex Habermehl
KfW Group /Alexander Kempf

(from left to right, 3rd line)
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KfW Group
Palmengartenstrasse 5-9
60325 Frankfurt am Main
Germany
Phone +49 69 7431 0
Fax +49 69 7431 2944
infocenter@kfw.de
www.kfw.de

600 000 4791