Management Report and Financial Statements 2020

Key figures of KfW

Overall activities of KfW

	2020	2019	2018
	EUR in millions	**EUR in millions**	**EUR in millions**
Financial statements			
Volume of business	643,716	583,999	567,019
Total assets	543,320	505,991	489,634
Bonds issued	412,754	430,394	419,370
Own funds	28,431	26,832	25,552
Net interest income before promotional expense	2,050	2,067	1,996
Net commission income before promotional expense	460	394	263
Administrative expense before promotional expense	1,034	1,039	1,265
Promotional expense	88	159	216
Profit for the year	1,599	1,280	884

Key regulatory figures

	31. Dec. 2020	31. Dec. 2019	31. Dec. 2018
	in %	**in %**	**in %**
Cost-income ratio before promotional expense	41.2	42.2	56.0
Tier 1 capital ratio[1)]	24.1	21.3	20.1
Total capital ratio[1)]	24.3	21.3	20.1

[1)] The figures relate to the group as a whole; data are based on the IFRS consolidated financial statements.

Employees of KfW

	2020	2019	2018
	5,977	5,475	5,184

Development of number of staff between 2019 and 2020 is described in the notes under no. 32 Personnel.

The figures in tables were calculated exactly and added up. Figures presented may not add to totals because of independent rounding. Actual zero amounts and amounts rounded to zero are presented as EUR 0 million.

Responsible Banking

Contents

Management report

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%.

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

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 which summarise the results reported on the income statement prepared in accordance with commercial law on the basis of their economic substance.

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" economic report 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 items Loans and advances to banks or Loans and advances to customers. 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 accounting policies, loans and advances to banks or customers, 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).

Development of KfW

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 and earnings position. 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 120.5 billion (2019: EUR 62.5 billion).

Despite financial effects of the coronavirus pandemic, KfW's **earnings position** in financial year 2020 was up on the previous year as a result of higher operating income and non-recurring effects. Net interest income before promotional expense remained at approximately the same level as the previous year despite the persistent low interest rates. Net commission income before promotional expense was considerably above the previous year's level as a result of the remuneration for the coronavirus special programme. Administrative expense fell slightly. The cost-income ratio (before promotional expense) declined due to lower administrative expense and higher net commission income, to 41.2% (2019: 42.2%). The charges from the coronavirus pandemic were completely compensated by non-recurring effects. KfW strengthened its capital base due to its earnings position, with a profit for the year of EUR 1,599 million.

Total assets rose from EUR 506.0 billion to EUR 543.3 billion, with business volume increasing from EUR 584.0 billion to EUR 643.7 billion.

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

A. Promotional business volume
KfW reached a historic high in 2020 with a promotional business volume of EUR 120.5 billion (+92.7%). 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 Entrepreneur 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. 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. 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.

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.

Commitments in **International Financing** of EUR 13.7 billion were below the prior-year level (2019: EUR 17.8 billion). In Export and project finance, the impact of the COVID-19 crisis on global trade and large areas of the global economy as a whole was reflected in new business, as expected. Commitments of EUR 2.8 billion were considerably below those of the previous year (EUR 9.0 billion). The decline affected all segments in the business sector. The largest share was attributable to Shipping CIRR and the ERP Export Financing Programme including AKA CIRR (from EUR –2.8 billion to EUR 0.7 billion), Maritime Industries (from EUR –1.5 billion to EUR 0 billion) and Power, Renewables and Water (from EUR –0.7 billion to EUR 0.6 billion).

At EUR 11.0 billion, the promotion of developing countries and emerging economies was higher than in the previous year (EUR 8.8 billion), with commitments under the coronavirus immediate aid 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.

KfW promotional business volume

	31. Dec. 2020	31. Dec. 2019	Change
	EUR in millions	EUR in millions	EUR in millions
Domestic business	**106,358**	**43,352**	**63,006**
Mittelstandsbank & Private Kunden (SME Bank & Private Clients)	86,274	35,979	50,295
Individualfinanzierung & Öffentliche Kunden (Customised Finance & Public Clients)	19,213	7,217	11,996
KfW Capital	871	156	715
Financial markets	**400**	**1,402**	**–1,002**
International business	**13,736**	**17,774**	**–4,038**
Export and project finance	2,753	8,973	–6,220
Promotion of developing countries and emerging economies	10,983	8,801	2,182
Volume of new commitments	**120,494**	**62,528**	**57,966**

B. Operating result above prior-year level

The operating result before valuation and before promotional expense for financial year 2020 stood at EUR 1,630 million and thus above the previous year's figure of EUR 1,435 million. This is due to the rise in net commission income from EUR 394 million to EUR 460 million as well as the rise in net other operating income from EUR 13 million to EUR 155 million. Net interest income decreased year-on-year from EUR 2,067 million to EUR 2,050 million.

C. Valuation result and risk provisioning

Risk provisions for lending business made a positive earnings contribution of EUR 44 million, despite the effects of the coronavirus pandemic. In risk provisions for lending business, net additions were made to the individual risk provisions in the business sector Export and project finance, in particular in the sector Aviation, Mobility and Transport, as well as in the business sector Mittelstandsbank & Private Kunden (*SME Bank & Private Clients*), particularly in education financing. Moreover, additions were made to general risk provisions, primarily in crisis sectors and countries. The effects were completely compensated by reversing hidden reserves in accordance with Section 340f of the German Commercial Code (*Handelsgesetzbuch – HGB*), in part also by recoveries on loans written off.

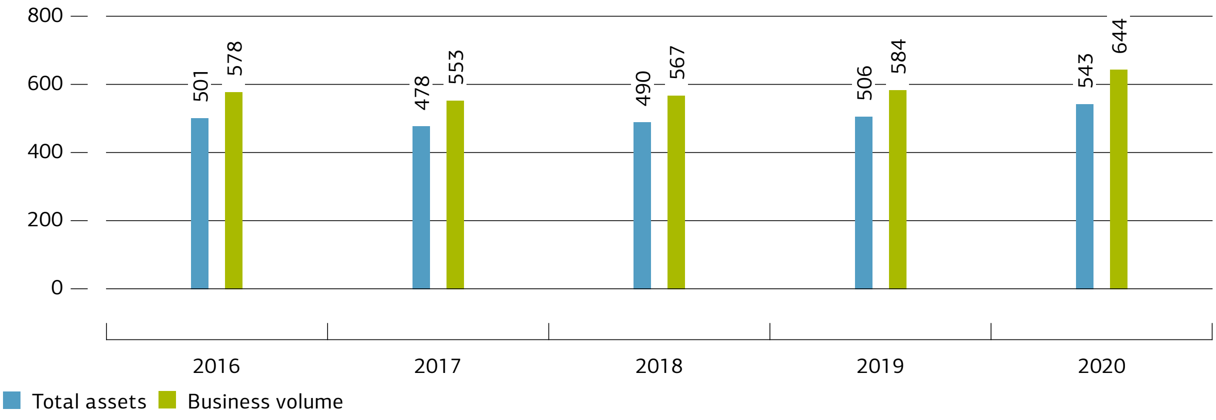
The valuation result of equity investments stood at EUR –9 million (2019: EUR 0 million) largely due to impairments or capital losses on equity investments. Earnings on the securities portfolio decreased to EUR 0 million (2019: EUR 8 million).

D. Interest rate reductions in the persistent low interest rate environment
KfW's domestic promotional expense, which had a negative impact on KfW Group's earnings position in the financial year, dropped to EUR 88 million (2019: EUR 159 million). The key components of promotional expense are reductions of interest rates, which reached a volume of EUR 54 million (2019: EUR 137 million) and were thus lower than the previous year. The reason for the decline is less need in the low-interest environment for interest rate reductions to achieve our promotional business volume target in our target system. The volume of commitments subsidised with KfW funds decreased from the previous year to EUR 2.8 billion (2019: EUR 7.7 billion).

Development of net assets, financial position and earnings position

KfW saw both its total assets and its volume of business increase in financial year 2020.

Total assets and volume of business
EUR in billions



Volume of receivables

The volume of receivables (loans and advances to banks and customers, including irrevocable loan commitments, loans held in trust and guarantees) rose from EUR 500.7 billion to EUR 545.7 billion. The change over the previous year of EUR 44.5 billion is the result of the coronavirus special programme. The KfW Entrepreneur Loan and KfW Instant Loan programmes and the Corona Direct special programme contributed in particular, with a total of EUR 42.6 billion. Overall, disbursements in new lending business more than compensated for the repayments.

The volume of loans held in trust, which primarily comprise loans to promote developing countries financed by budget funds provided by the Federal Republic of Germany, declined to EUR 10.8 billion in 2020 (2019: EUR 11.2 billion).

Guarantees remained unchanged at EUR 0.7 billion while irrevocable loan commitments rose by EUR 22.4 billion to EUR 99.7 billion.

Volume of receivables

	31. Dec. 2020 EUR in millions	31. Dec. 2019 EUR in millions	Change EUR in millions
Loans and advances to banks	323,153	309,496	13,657
Loans and advances to customers	111,362	101,923	9,439
Loans held in trust	10,799	11,229	–430
Contingent liabilities from financial guarantees	667	671	–4
Irrevocable loan commitments	99,729	77,337	22,392
Total	**545,711**	**500,656**	**45,055**

Funding

KfW raised EUR 66.4 billion in the capital markets to fund its business activities (2019: EUR 80.6 billion). A total of 172 bonds were issued in 14 currencies. The 14 "Green Bonds – Made by KfW" with a volume of EUR 8.3 billion made a 12.6% contribution to funding.

As part of the KfW coronavirus Special Programme 2020, new funding sources were opened up with access to federal auctions via the government-owned Economic Stabilisation Fund (*Wirtschaftsstabilisierungsfonds – "WSF"*) and participation in the targeted longer-term funding of the Eurosystem via TLTRO III. KfW raised funds in the amount of EUR 39.0 billion (including premiums) and EUR 13.4 billion respectively within this framework.

Bonds issued decreased by EUR 17.6 billion year-on-year and totalled EUR 412.8 billion as of 31 December 2020. Fluctuations in foreign exchange rates, particularly in that of the US dollar, had an impact on portfolio development, as did new issues and maturities.

Bonds issued accounted for 74.4% of borrowed funds, which was below the previous year's level (89.0%). Proportionally, they therefore remain KfW's largest source of funding. The euro market share of 64.2% was greater than that of the previous year (2019: 52.0%) and the US dollar market share of 23.9% smaller than that of the previous year (2019: 25.7%). Thus the euro made up for the lower volume of other currencies, in particular the pound sterling with a share of 5.0% or less than half its volume in the previous year (2019: 12.7%).

KfW raised funds via the Economic Stabilisation Fund (WSF), among other sources, to fund loans under the coronavirus special programme. As of 31 December 2020, KfW had raised funds via the WSF by means of promissory note loans (*Schuldscheindarlehen*) of EUR 38.0 billion (nominal, disbursed amount EUR 39.0 billion, of which EUR 1.0 billion recognised as deferred income).

The share of funds from banks and customers (excluding federal budget funds) at 5.0% of borrowed funds is above the previous year's share (2019: 4.3%). This includes cash collateral received primarily to reduce counterparty risk from the derivatives business in the amount of EUR 4.8 billion (2019: EUR 9.8 billion). Liabilities to banks included the TLTRO III transactions amounting to EUR 13.4 billion.

Borrowings

	31. Dec. 2020 EUR in millions	31. Dec. 2019 EUR in millions	Change EUR in millions
Federal Republic of Germany			
– ERP Special Fund	216	382	–166
– Federal budget	5,077	5,227	–150
– Economic Stabilisation Fund (WSF)	38,000	0	38,000
	43,294	**5,609**	**37,685**
Other lenders	3,681	3,952	–271
Liabilities to customers	**46,974**	**9,561**	**37,413**
Liabilities to banks	**23,941**	**16,946**	**6,995**
Bonds issued	16,825	27,990	–11,165
Bearer securities (incl. commercial paper)	393,925	399,902	–5,978
Accrued interest and interest payable	2,004	2,502	–497
Bonds and notes issued	**412,754**	**430,394**	**–17,640**
Total	**483,669**	**456,901**	**26,768**

Own funds

The fund for general banking risks remained unchanged from the previous year at EUR 0.6 billion. The entire profit of EUR 1,599 million was allocated to retained earnings.

KfW's own funds thus amounted to EUR 28.4 billion as of 31 December 2020, 6.0% up on the previous year. This increase was due exclusively to the net profit allocated to retained earnings.

Own funds

	31. Dec. 2020 EUR in millions	31. Dec. 2019 EUR in millions	Change EUR in millions
KfW's subscribed capital	3,750	3,750	0
Uncalled outstanding contributions	–450	–450	0
Capital reserve	8,447	8,447	0
Reserve from the ERP Special Fund	1,191	1,191	0
Retained earnings			
a) Statutory reserve under Article 10 (2) KfW Law	1,875	1,875	0
b) Special reserve under Article 10 (3) KfW Law	12,971	11,372	1,599
c) Special reserve under Article 17 (4) D-Mark Balance Sheet Act[1)]	48	48	0
Fund for general bank risks under Section 340g HGB	600	600	0
Total	**28,431**	**26,832**	**1,599**

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

The regulatory total capital ratio was 24.3% and the tier 1 capital ratio 24.1% for 2020 (2019: both 21.3%). Ratios are determined based on IFRS figures for the group.

Changes in other significant items in the statement of financial position

Total bonds and other fixed-income securities declined by EUR 1.4 billion to EUR 38.6 billion (2019: EUR 40.0 billion). Holdings of repurchased own issues also recorded a decline to EUR 3.7 billion from EUR 6.2 billion in the previous year. This was equivalent to 1.0% of bonds issued.

At a total amount of EUR 34.9 billion, holdings of securities of other issuers, which make up 90.5% of the total holdings of all bonds and other fixed-income securities, slightly exceeded the previous year's level of EUR 33.9 billion by EUR 1.1 billion. Of the securities from other issuers, 76.5% is eligible as collateral for funding operations with the European Central Bank (ECB).

In addition to the Treasury securities portfolios, KfW holds asset backed securities (ABS) with a carrying amount of EUR 6.3 billion, (2019: EUR 5.9 billion), related to its securitisation and SME finance activities. Potential risks are sufficiently addressed by appropriate risk provisioning.

The value of shares in affiliated companies amounted to EUR 3.6 billion (2019: EUR 3.5 billion). KfW's assets held in trust rose by EUR 0.6% to EUR 17.2 billion (2019: EUR 16.6 billion).

Other assets declined by EUR 1.9 billion to EUR 0.7 billion particularly through reporting the currency adjustment item under liabilities in the current year. Moreover, this item includes the receivable of EUR 0.6 billion due from the Federal Agency for Special Tasks associated with Unification (*Bundesanstalt für vereinigungsbedingte Sonderaufgaben – BvS*), due to the transfer of the rights and obligations of the State Insurance Company of the GDR in liquidation (SinA) to KfW as of 1 January 2008. However, BvS remains the beneficial owner of the SinA obligations. This receivable is offset by actuarial provisions in the same amount. Other liabilities increased by EUR 0.1 billion to EUR 7.3 billion particularly due to the reported currency adjustment item from foreign currency derivatives in the amount of EUR 7.1 billion.

The primary component of deferred charges are the differences between the repayment amount and the lower issuing amount in the context of borrowed funds (discounts and placing commissions) and upfront payments for derivative financial instruments which are amortised pro rata temporis. Deferred income includes in particular premiums from certificated liabilities and accrued upfront payments for derivative financial instruments deferred pro rata temporis.

Provisions rose by EUR 0.1 billion to EUR 2.7 billion. The total amount includes provisions for pensions and similar obligations (EUR 1.6 billion) and other provisions (EUR 1.0 billion). Other provisions include in particular the actuarial provisions relating to SinA, provisions for credit risks, provisions for early retirement and provisions for variable compensation components.

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 at short notice.

Earnings position

KfW's operating result before valuation and promotional expense was EUR 1,630 million, which was higher (by EUR 195 million) than the previous year's figure of EUR 1,435 million.

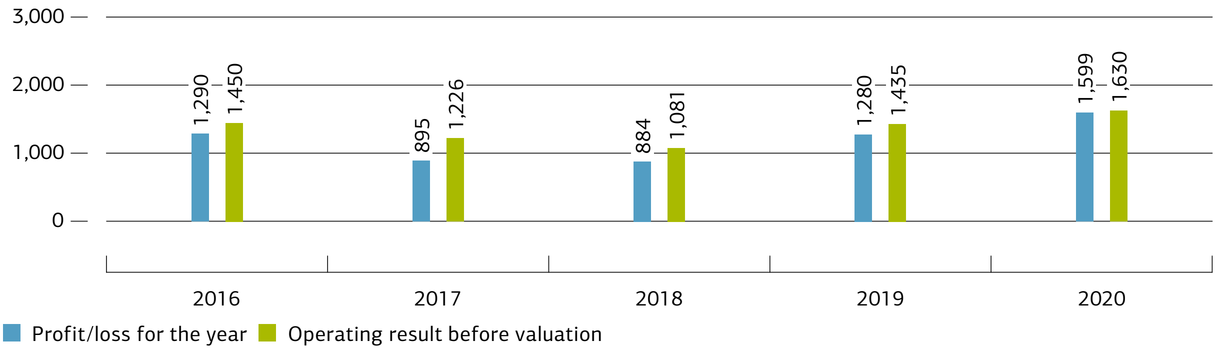
At EUR 2,050 million, **net interest income (before promotional expense)** decreased over the previous year (EUR 2,067 million). The decrease was due to lower interest income in the lending and money market business and was partially offset by a reduction in interest expense.

Net commission income (before promotional expense) of EUR 460 million was EUR 66 million above the previous year's level of EUR 394 million. The increase was largely due to remuneration for the KfW coronavirus Special Programme of EUR 99 million. Commission income totalling EUR 217 million (2019: EUR 240 million) from the administration of German Financial Cooperation in the business sector Promotion of developing countries and emerging economies and from the "Baukindergeld" scheme of EUR 67 million (2019: EUR 85 million) decreased. The remuneration from the Federal Government was offset by related administrative expense.

Administrative expense (before promotional expense) declined by EUR 4 million to EUR 1,034 million. The decrease is primarily due to lower old-age provision expenses and lower travel expenses as a result of the coronavirus pandemic.

Net other operating income (before promotional expense) was EUR 155 million (2019: EUR 13 million) due to income collected from the margin fund of the Special Programme 2009 recognised in profit or loss and the derecognition of the liability to the Federal Government of EUR 144 million.

Operating result before valuation and before promotional expense and profit/loss for the year
EUR in millions



The **negative valuation result** of EUR 10 million (2019: EUR 8 million income) is primarily attributable to impairments or capital losses on equity investments, partially offset by the equity investment result realised.

Risk provisions generated income of EUR 44 million (2019: EUR 18 million expense). Net additions to specific valuation allowances, particularly from the "Aviation, Mobility and Transport" sector due to the coronavirus pandemic, and in particular in education financing, were offset by income from the successful recovery of loans previously written off. There were also net additions made to general risk provisions, particularly due to the impact of the coronavirus pandemic. These effects, however, were completely compensated by reversing hidden reserves in accordance with Section 340f HGB. There was an increase in specific valuation allowances and specific provisions for lending business from EUR 490 million to EUR 602 million. There was in increase in the general valuation allowances and general provisions for lending business from EUR 399 million to EUR 605 million. Non-performing loans in the amount of EUR 75 million were written off in financial year 2020 (2019: EUR 79 million).

KfW's domestic **promotional expense**, which has a negative impact on the its earnings position, amounted to EUR 88 million in 2020, following EUR 159 million in 2019, and was thus below the prior-year level and below projections. The key component of KfW's promotional expense is interest rate reductions of EUR 54 million, granted during the first fixed interest rate period in addition to passing on its favourable refinancing conditions. Moreover, promotional expenses reported in net commission income and administrative expense were incurred in the amount of EUR 23 million (2019: EUR 22 million).This spending was aimed, among other things, at the sale of KfW's promotional products. Since 2020, Other operating expense has also included promotional grants awarded as a supplement to the lending business as a promotional expense.

Income from profit pooling, profit and loss transfer and partial profit transfer agreements includes interest on the silent contribution to KfW IPEX-Bank GmbH of EUR 18 million and KfW Capital GmbH profits transferred of EUR 13 million.

Financial year 2020 closed with a **profit for the period** of EUR 1,599 million (2019: EUR 1,280 million), which was fully allocated to retained earnings.

Reconciliation of earnings position before promotional expense to the income statement prepared in accordance with commercial law for financial year 2020

Earnings position		Promotional expense	Cross compensation		German Commercial Code income statement form
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	
Net interest income (before promotional expense)	2,050	–54		1,996	Net interest income incl. current income
Net commission income (before promotional expense)	460	–11		449	Net commission income
General administrative expense (before promotional expense)	1,034	12		1,046	General administrative expenses incl. depreciation, amortisation and impairments on property, plant and equipment and intangible assets
Other operating income and expenses	155	–12		143	Other operating income and expenses
Operating result (before risk provisions/ valuation/promotional expense)	**1,630**	**–88**		**1,542**	**Operating result (before risk provisions/ valuation)**
Valuation result	–10		1	–9	Impairments of and valuation allowances on equity investments, shares in affiliated companies and securities held as fixed assets
Risk provisions for lending business	44		–1	43	Income from the reversal of impairment losses on receivables and certain securities and the reversal of provisions for loan losses
Net result from transfer agreements	31			31	Income from profit pooling, profit and loss transfer and partial profit transfer agreements
Profit/loss from operating activities (before promotional expense)	**1,695**	**–88**		**1,607**	**Profit/loss from operating activities**
Promotional expense	88	–88		0	–
Taxes on income	6			6	Taxes on income
Other taxes	2			2	Other taxes
Profit for the year	**1,599**			**1,599**	**Profit for the year**

Reconciliation of earnings position before promotional expense to the income statement prepared in accordance with commercial law for financial year 2019

Earnings position		Promotional expense	Cross compensation		German Commercial Code income statement form
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	
Net interest income (before promotional expense)	2,067	–137		1,929	Net interest income incl. current income
Net commission income (before promotional expense)	394	–13		381	Net commission income
General administrative expense (before promotional expense)	1,039	9		1,047	General administrative expenses incl. depreciation, amortisation and impairments on property, plant and equipment and intangible assets
Other operating income and expenses	13			13	Other operating income and expenses
Operating result (before risk provisions/ valuation/promotional expense)	**1,435**	**–159**		**1,276**	**Operating result (before risk provisions/ valuation)**
Valuation result	8		–8	0	Income from reversals of write-downs of equity investments, shares in affiliated companies and securities held as fixed assets
Risk provisions for lending business	–18		8	–9	Impairment of receivables and certain securities and additions to provisions for loan losses
Net result from transfer agreements	19			19	Income from profit pooling, profit and loss transfer and partial profit transfer agreements as well as expense from loss absorption
Profit/loss from operating activities (before promotional expense)	**1,445**	**–159**		**1,287**	**Profit/loss from operating activities**
Promotional expense	159	–159		0	–
Taxes on income	5			5	Taxes on income
Other taxes	1			1	Other taxes
Profit for the year	**1,280**			**1,280**	**Profit for the year**

Comparison with the previous year's forecast

As business sector planning and earnings projections are prepared at KfW Group level, the forecasts contained in the 2019 forecast and opportunity report are for KfW Group. The KfW Group target figures are thus compared below with the actual group figures recorded.

	2019 Forecast for 2020 (KfW Group)	2020 Actual (KfW Group)
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 KfW Group promotional business volume in financial year 2020 at EUR 135.3 billion exceeded expected new business volume of EUR 77.0 billion.

The earnings position in 2020 with a consolidated profit of EUR 0.6 billion is below projections (EUR 0.8 billion) and below the strategic objective of EUR 1 billion. The increase in net interest income (before promotional expense) was due to interest rate and spread management and interest margin income in the lending business. In contrast, return on equity declined. Net commission income (before promotional expense) was above expectations due 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). Administrative expense (before promotional expense) rose to EUR 1,330 million, but was still lower than expected (approx. EUR 1.4 billion). The savings against budget of EUR 79 million in administrative expense resulted from a lower-than-projected increase in FTEs and lower costs for external capacity support. The CIR declined to 41.8% as a result of the higher income from interest and commissions as well as lower administrative expense.

Pandemic-induced charges arising from risk provisions for lending business in the group totalled EUR 777 million in 2020.

KfW's domestic promotional expense, which has a negative impact on its own earnings position, was EUR 0.1 billion in financial year 2020, and thus lower than projected (EUR 0.3 billion). This was primarily the result of a decline in interest rate reductions, due in particular to the limited need in the low-interest environment for interest rate reductions to achieve our promotional business volume target.

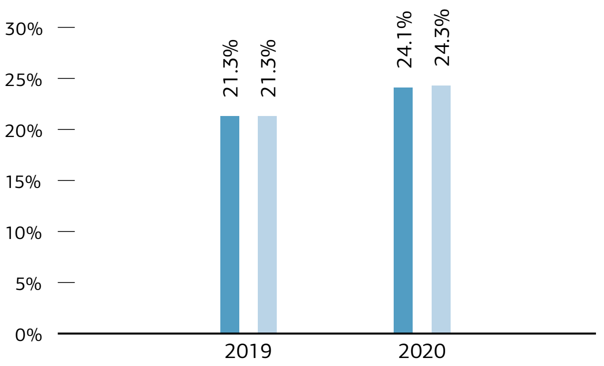
Risk report

This risk report corresponds in structure, scope and content to the group risk report published in the group management report. As risk management and risk controlling are focused on KfW Group, a risk report is not prepared at single institution level.

Overview of key indicators

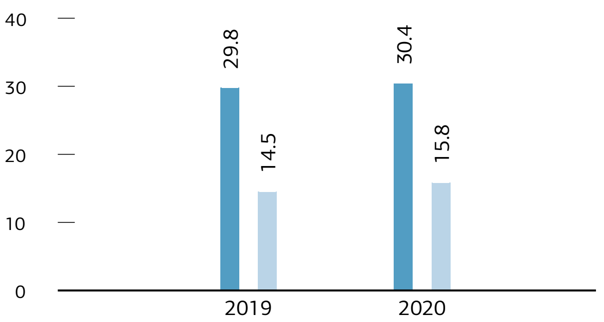
Risks are reported on a group level in accordance with KfW Group's internal risk management. The key risk indicators are presented below:

Regulatory capital ratios:



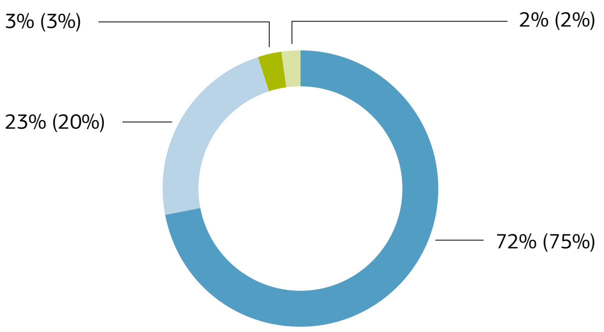
The increase in the capital ratios is primarily due to the transition to a new system for calculating credit risk indicators in pillar I as part of the Internal Ratings-Based Approach (IRBA) approval process.

Economic risk-bearing capacity:
(EUR in billions)



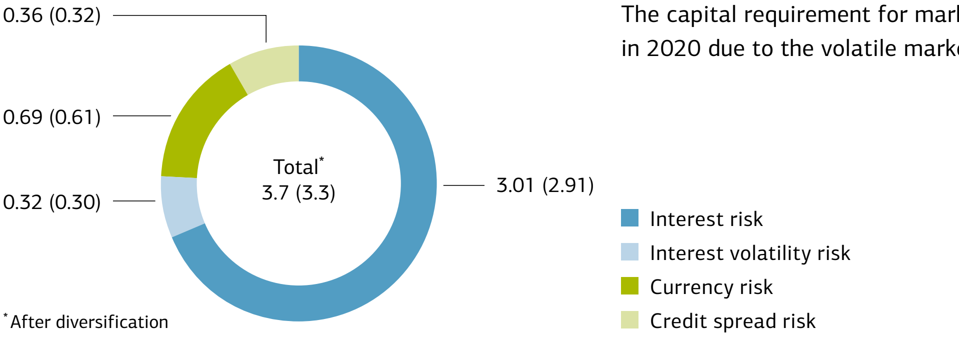
Excess coverage was lower in 2020 due to a higher total capital requirement. Risk-bearing capacity was maintained at a confidence level of 99.90% in 2020.

Credit risk:
2020 (2019), Net exposure breakdown



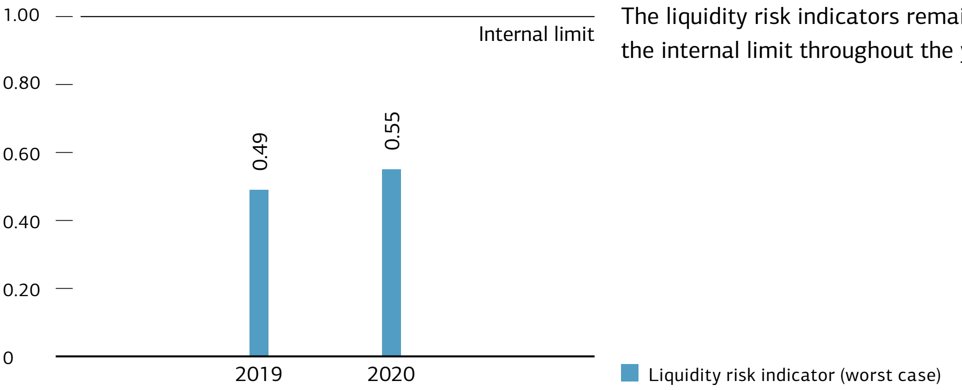
The share of investment grade net exposure declined to 72% of total net exposure. This change in the structure of the credit quality is due to rating downgrades in connection with the COVID-19 pandemic.

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



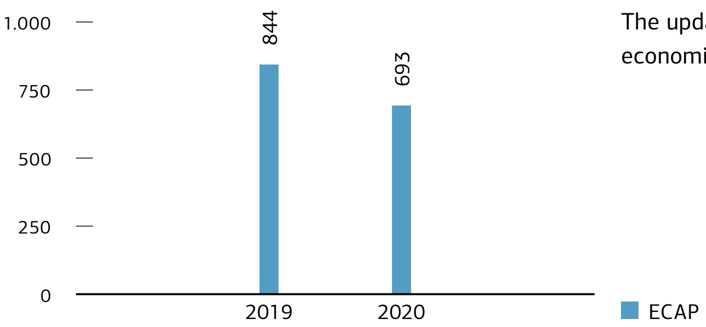
The capital requirement for market price risk increased in 2020 due to the volatile market environment.

Liquidity risk:



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

Operational risk:
ECAP (EUR in millions)



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

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

Basic principles and objectives of risk management

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

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

Current developments

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

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

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

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

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

Organisation of risk management and monitoring

Risk management bodies and responsibilities

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

Group risk management is carried out by various interconnected decision-making bodies. At the top of the system is the Executive Board, which takes the key decisions on risk policy. There are three risk committees below the level of the Executive Board (Credit Risk Committee, Market Price Risk Committee and Operational Risk Committee) which prepare decisions for the Executive Board and also take their own decisions within their remits. The committees also perform KfW Group management functions; thus, representatives from KfW subsidiaries are also included. Working groups such as the Rating Systems Working Group, Collateral Working Group, Country Rating Working Group, Corporate Sector Risk Working Group, Market Price Risk Working Group, Hedge Committee and OpRisk Working Group support the committees. Committee resolutions are adopted by simple majority with middle and back office departments (*Marktfolge*) or Risk Controlling entitled to veto decisions. Escalation to Executive Board level is possible in all committees.

Credit Risk Committee

The Credit Risk Committee is chaired by the Chief Risk Officer and meets once a week. The committee's other voting members are the Director of Credit Risk Management, members of the Executive Board with front-office responsibilities and KfW IPEX-Bank's Chief Risk Officer ("CRO"). The CRO of DEG has guest status. The weekly meetings of the Credit Risk Committee involve in particular making important lending decisions in line with the credit approval policy, with KfW subsidiary exposures also being presented. In addition, current developments in the loan portfolio, including country and sector risks, are discussed once a month on an ad hoc basis; DEG's CRO is also entitled to vote in these discussions and the managing director of KfW Capital responsible for risk issues has guest status. Also once a month, the Credit Risk Committee acknowledges the submissions addressed in the working groups on the basis of the minutes and discusses and makes decisions on general credit risk matters. These include in particular reports and draft resolutions on the risk situation and risk management as well as on credit risk methods and principles. Reports are also made on the development of regulatory requirements, their impact and the progress of implementation projects in KfW Group. To this end, membership of the Credit Risk Committee has been expanded to include the Director of Risk Controlling, the DEG CRO and the managing director of KfW Capital responsible for risk issues. Internal Auditing has guest status.

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

Market Price Risk Committee

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

Operational Risk Committee

The Operational Risk Committee meets once a quarter and provides support to the Executive Board in cross-functional management and the necessary decisions and acknowledgements in respect of operational and reputational risk, and group security including business continuity management. The Chief Risk Officer is responsible for chairing the Operational Risk Committee meetings. In principle, all areas of the bank are represented in the committee – in selected cases based on a representation concept. Moreover, the managing director level of KfW IPEX-Bank, DEG and KfW Capital is represented on the committee. Internal Auditing participates in the meetings but is not entitled to vote. The committee makes decisions on group-wide management measures. Moreover, the committee discusses the risk status on the basis of the findings obtained through different methods and instruments and evaluates any group-wide need for action, with the aim of adequate risk management. The results of the validation of the OpRisk model are acknowledged. In the area of business continuity management ("BCM") the committee establishes crisis-prevention and emergency-planning measures using the results of the annual business impact analysis. Monitoring is based on reports about planned or implemented emergency and crisis team tests and significant disruptions to business. The committee meeting documents, together with the minutes and the resolutions and recommendations contained therein, are submitted to the Executive Board. The committee formed the Group Security Board ("GSB") to take up matters relating to group security and business continuity management ("BCM") and the OpRisk Working Group as a working group for exchange with the decentralised department coordinators for operational risk and business continuity management ("BOB").

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

Risk management approach of KfW Group

OVERVIEW

Strategy/objectives

Strategic objectives

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

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

Governance

Risk committees & internal control procedures

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

Processes and instruments

Internal control system (ICS)

Direction front/back office

Direction Internal auditing

Process-integrated controls

Process-independent review

Direction internal control mechanisms

Direction Risk Management/Controlling* | **Direction Compliance**

Risk inventory | Risk assessment | Stress tests | Risk reporting

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

Internal liquidity adequacy process (ILAAP)

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

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

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

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

Project risk
- Central project portfolio management
- Management of individual projects

Reputational risk
- Sustainability management
- Exclusion list and countries blacklist

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

Concentration risk

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

Intra-group risk

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

Regulatory risk

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

Model development and validation processes

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

Corporate and risk culture

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

IT system landscape

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

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

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

In order to determine its material risks, KfW Group conducts a **risk inventory** at least once a year. The risk inventory identifies and defines types of risks relevant to the group and then subjects them to a materiality evaluation. The materiality of a risk type depends on the potential danger for KfW Group's net assets, earnings and liquidity. The materiality evaluation looks at both the quantified net risk (taking existing risk mitigation instruments into account) and the gross risk. The key outcome of the risk inventory is an overall risk profile, which provides an overview of KfW Group's material and immaterial risk types. The 2020 inventory identified that KfW Group faces the following material risks: credit, market price, liquidity, operational, equity investment, regulatory, project, reputational and intra-group risks. Risk concentrations associated with material risks either within a risk type or across various risk types are taken into account in the risk inventory. In addition, the risk inventory process involved looking at the impact of ESG (environmental, social and governance) risks and the COVID-19 pandemic on the overall risk profile.

The Executive Board is informed about KfW Group's risk situation on a monthly basis. A risk report is issued quarterly to KfW Group's supervisory bodies. The respective bodies are informed on an ad hoc basis as required. As a result of the COVID-19 pandemic, ad hoc COVID-19 risk reporting on a weekly basis was introduced as of 9 April 2020 and changed to every two weeks from 30 June 2020 onwards. This reporting process involves reporting to the CRO on developments in normative risk-bearing capacity, credit risk, the yellow list and forbearance measures, rating downgrades, market price and liquidity risk, compliance risk indicators and country-specific topics. The overall risk report has also been expanded to include a section for special matters relating to COVID-19. Ad hoc COVID-19 risk reporting was suspended at the end of 2020 and will be resumed as and when required.

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

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

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

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

The aim of the ICAAP's normative perspective is in particular the continuity of operations. To this end, the regulatory and supervisory capital requirements of Pillar I in accordance with the Capital Requirements Regulation ("CRR") and the German Banking Act (*Kreditwesengesetz – "KWG"*) are to be ensured both on an ongoing basis, and in a longer-term view (normative capital planning). In addition to a base scenario, the total capital ratio is also considered in adverse scenarios. This is intended to enable early identification of any capital bottlenecks. Achievement of the strategic risk-bearing capacity objectives is also monitored in KfW's planning and management process. To avoid excessive debt, the leverage ratio is integrated into the normative perspective as a further control variable.

The economic perspective of the ICAAP serves to protect creditors from economic loss. This is achieved by comparing the capital available as of a reporting date (available financial resources) with the risk assumed as of the same date (economic capital requirement or ECAP for all material risks to capital). Both capital and risk figures are present value-based and static, i.e. they do not take into account new business or expected results. Available financial resources are based on regulatory capital, adjusted for impaired assets and accrued profits. The amount of economic capital required is largely determined by the confidence level for risk measurement. The multi-year capital planning process does not include a regular forecast of economic risk-bearing capacity, although an indicative forecast of economic risk-bearing capacity may be produced if necessary, if future developments which may have a material impact on risk-bearing capacity are identified via a list of questions.

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

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

Budgets based on total risk exposure in accordance with Art. 92 CRR at the level of each business sector/department are taken into account to ensure risk-bearing capacity. The allocated budgets are available to the business sectors/departments for backing existing and new business for the various types of risk. Capital allocation is conducted as part of KfW Group's annual business sector planning process. In addition to the requirements induced by business sector and area planning, this process also takes into account the risk objectives and the bank's risk appetite. Budget compliance is checked on a monthly basis and action is taken, if necessary. Moreover, economic capital budgets are set for material risk types as their central control and limit variable, and are monitored monthly.

Normative risk-bearing capacity

Key regulatory figures (pursuant to advanced IRBA)

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

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

Minimum requirements for total capital ratios

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

Economic risk-bearing capacity

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

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

Credit risk is the risk of losses if business partners fail to meet their payment obligations to KfW Group at all, in due time or in full (default) or if their credit ratings deteriorate (migration). Credit risk includes settlement risk in connection with derivative transactions, and credit valuation adjustment risk ("CVA" risk) in relation to derivative exposures. The economic capital requirement for credit risk is quantified by the Risk Controlling department, largely with the help of statistical models. For counterparty and migration risks, the loss potential is computed using a loan portfolio model and the risk measure of "credit value-at-risk". The difference between credit value-at-risk and expected loss is referred to as the economic capital requirement. The economic capital requirement for CVA risk is based on the CVA charge of Pillar I, which is adjusted for economically relevant aspects (including consideration of other risk-relevant items and the use of internal ratings). For settlement risks, a buffer determined on the basis of different quantification approaches, which is reviewed annually, is applied in calculating economic risk-bearing capacity.

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

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

The economic capital requirement for **operational risk** is calculated using an internal statistical model, which was derived from regulatory requirements for advanced measurement approaches. It takes a risk-sensitive approach to internal and external event data and risk scenarios. The capital requirement is calculated at group level, taking into account diversification effects, and then allocated to the business sectors. Moreover, the measurement of the quality of operational risk management within the group can generate premiums that are then applied to the capital requirement.

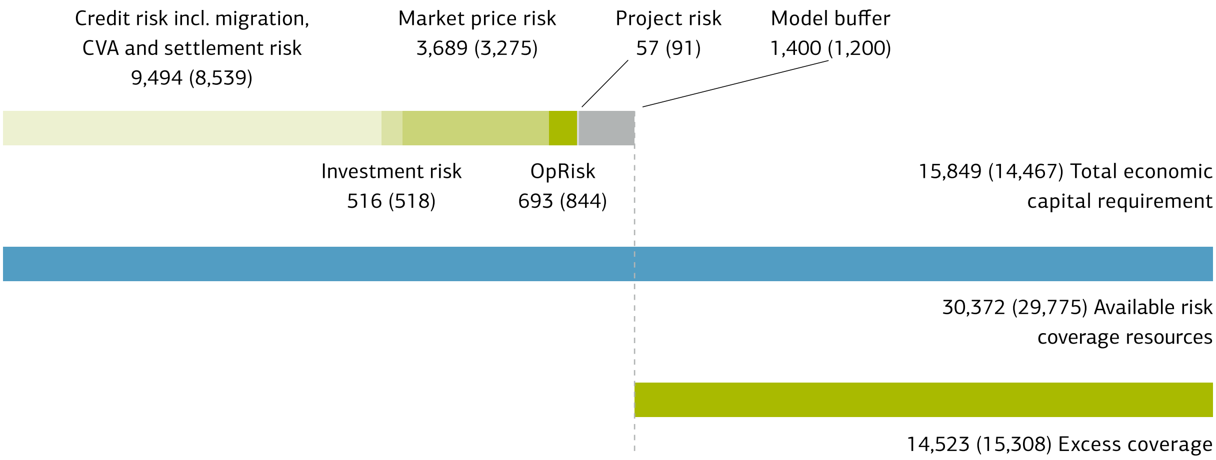
Project risks are also taken into account in the risk-bearing capacity concept. Both quantified individual risks from projects and general assumptions about potential losses in the project portfolio are included in risk measurement.

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

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

Economic risk-bearing capacity as of 31 December 2020

EUR in millions



In brackets: figures as of 31 December 2019

The group manages **liquidity risks** primarily on the basis of internal risk indicators. Moreover, maximum liquidity gap limits (outflows on a monthly and yearly basis), available liquidity (liquidity potential) and the difference between the average residual maturity of inflows and outflows (maturity gap) are monitored. On the basis of the KfW Law, KfW's liquidity risks are additionally limited by the utilisation threshold in accordance with Article 4 of the KfW Law. The utilisation threshold compares current and non-current liabilities and must not exceed 10%. Internal indicators relating to the liquidity situation are based on comparing liquidity requirements and liquidity potential as a ratio in stress scenarios of differing severity. No capital is currently allocated as part of calculating risk-bearing capacity.

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

Each risk identification model represents a simplification of a complex reality and builds on the assumption that risk parameters observed in the past can be considered representative of the future. Not all possible inputs and their complex interactions can be identified and modelled for the risk development of a portfolio. This is addressed by including safety margins in the design of the model, and a supplementary model buffer in the calculation of risk-bearing capacity. This is one reason why KfW Group carries out stress tests with both the credit risk models and the market price risk models. The group continues to develop its risk models and processes in line with current banking regulations.

Stress and scenario calculations

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

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

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

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

Stress testing activities in 2020 focused on simulating the potential impact of the COVID-19 pandemic. Brexit, which has now been completed, as well as the risk of excessive sovereign debt in a number of EU countries and in many developing countries and emerging markets were also taken into account. In addition to the scenarios motivated by current macroeconomic risk potentials, further stress tests are regularly carried out to examine the resilience of KfW Group's economic and normative risk-bearing capacity, as well as its liquidity resources. In addition to sensitivity analyses and standard stress tests, concentration and inverse stress tests are also carried out to demonstrate how concentration risks and other potential dangers could jeopardise KfW Group's business model. In this context, the stress tests conducted in 2020 simulated how the Group's capital ratios could develop going forward if the COVID-19 scenarios were combined with the potential effects of the planned regulatory changes associated with the finalisation of Basel III ("Basel IV"). A stress test on transition climate risks was also developed in 2020. The scenario calculations and stress tests performed only point to a need for action with regard to KfW Group's risk-bearing capacity and liquidity resources in terms of the potential impact of the finalisation of Basel III. The group is keeping a close eye on developments relating to the finalisation of the supervisory requirements.

Types of risk

COUNTERPARTY DEFAULT RISK

KfW Group faces counterparty default risks[1)] in the context of its promotional mandate. The majority of final borrower default risks are borne by the on-lending institutions in the domestic promotional lending business. Due to the business model, this results in a large proportion of bank risks in the portfolio. Other main risks result from promotional activities in the area of start-up finance for SMEs and equity investments. Particularly in these segments of domestic promotion, KfW Group bears the risk stemming from final borrowers. In addition, KfW Group faces risks in the business sectors Export and project finance as well as Promotion of developing countries and emerging economies.

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

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

Validation and further development processes

Counterparty default risk is measured by estimating the probability of default, the exposure at default and the loss given default. The product of the three aforementioned variables is the loss that can be expected, statistically, on average over many years. The expected loss is taken into account when determining risk-bearing capacity by deducting it from the available financial resources in accordance with the supervisory requirements of Article 158 of the CRR.

KfW Group uses internal rating procedures to determine the probability of default for banks, countries, corporates, small and medium-sized enterprises (SMEs), start-ups and investment funds. These procedures are based on score-cards[2)] and generally follow a uniform model architecture consisting of a machine rating, a checklist, a group logic and a manual override. Simulation and cash flow-based rating procedures are used for significant parts of special financing and structured products, some of which were licensed from an external provider. For structured products, tranche ratings are determined on the basis of the default pattern of the asset pool and the waterfall structure of the transactions. The existing small-ticket retail positions (e.g. in the area of education financing) are valued using an automated procedure specially set up for this purpose. The rating procedures aim to predict the probability of default on a one-year basis. As a rule, the middle and back office departments are responsible for preparing ratings for risk-bearing business. Ratings for these exposures are updated regularly, at least once per year. Several enhance-ments 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 prob-abilities 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 pro-cedure. 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 exposures[3)], process responsibility lies with restructuring units, to ensure involvement of specialists and professional management of problematic loans. The objective of this system is to achieve recovery of a loan through restructuring, reorganisation and workout arrangements. If the business partner is deemed incapable or unworthy of restructuring, the priority becomes optimum realisation of the asset and the related collateral. The Restructuring division is responsible for non-performing loans and for providing intensive support to banks and higher volume loans with a risk amount greater than EUR 1 million in the KfW portfolio. The portfolio credit management department is responsible for supporting retail business. KfW IPEX-Bank's non-performing loans and exposures under intensive support, including KfW, DEG and KfW Capital trust activities, are managed directly by each subsidiary. Internal interface regulations are in place in the relevant business sectors to ensure control of responsibilities and allocation. Restructuring also cooperates with the front office departments and the central Legal Affairs department.

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

[3)] The assumption of responsibility for watch-list cases at KfW IPEX-Bank is decided on a case-by-case basis by Risk Management in consultation with the unit responsible for restructuring.

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

		Loans and advances to banks			Loans and advances to customers[1]		
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	Rating 1–4	109,584	0	0	34,580	0	0
	Rating 5–8	135,190	53	0	24,060	40	0
Non-investment grade	Rating 9–15	33,154	582	0	33,469	5,787	0
Watch list	Rating 16–18	16,082	887	0	7,961	6,647	0
Default	Rating 19–20	0	0	235	0	0	18,656
Total		**294,009**	**1,522**	**235**	**100,069**	**12,474**	**18,656**

		Securities and investments			Off-balance sheet transactions		
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	Rating 1–4	22,612	0	0	33,210	0	0
	Rating 5–8	12,639	0	0	34,857	353	0
Non-investment grade	Rating 9–15	473	0	0	28,952	3,205	0
Watch list	Rating 16–18	0	0	0	5,771	1,545	0
Default	Rating 19–20	0	0	65	0	0	257
Total		**35,725**	**0**	**65**	**102,790**	**5,103**	**257**

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

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

		Loans and advances to banks			Loans and advances to customers[1]		
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	Rating 1–4	167,073	0	0	34,522	0	0
	Rating 5–8	84,117	0	0	28,774	60	0
Non-investment grade	Rating 9–15	29,785	6	0	30,913	1,348	0
Watch list	Rating 16–18	454	259	0	3,546	3,300	0
Default	Rating 19–20	0	0	209	0	0	17,335
Total		**281,429**	**265**	**209**	**97,755**	**4,708**	**17,335**

		Securities and investments			Off-balance sheet transactions		
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Investment grade	Rating 1–4	24,103	0	0	31,909	0	0
	Rating 5–8	9,892	0	0	32,451	11	0
Non-investment grade	Rating 9–15	444	0	0	18,952	91	0
Watch list	Rating 16–18	0	0	0	839	564	0
Default	Rating 19–20	0	0	77	0	0	310
Total		**34,440**	**0**	**77**	**84,151**	**667**	**310**

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

Credit risks and related credit protection of financial instruments measured at amortised cost as of 31 December 2020

	Maximum risk of default[1)]	Maximum risk of default stage 3	Risk mitigation from collateral stage 3	
			tangible	personal
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Loans and advances to banks	295,460	167	0	69
Loans and advances to customers	129,375	17,402	127	16,164
Securities and investments	35,779	65	0	61
Off-balance sheet transactions	108,025	239	0	86
Total	**568,640**	**17,872**	**127**	**16,381**

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

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

	Maximum risk of default[1)]	Maximum risk of default stage 3	Risk mitigation from collateral stage 3	
			tangible	personal
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Loans and advances to banks	281,661	115	0	26
Loans and advances to customers	118,370	16,277	42	15,685
Securities and investments	34,511	77	0	77
Off-balance sheet transactions	85,055	301	0	230
Total	**519,597**	**16,770**	**42**	**16,018**

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

A large part of the personal collateral of the financial instruments classified as stage 3 comprises federal guarantees and credit insurance. These also include the federal guarantee for the fully protected mandated transaction within the framework of the support measures for Greece in the approximate amount of EUR 15 billion. Tangible collateral for financial instruments classified as stage 3 consists of aircraft and ship mortgages.

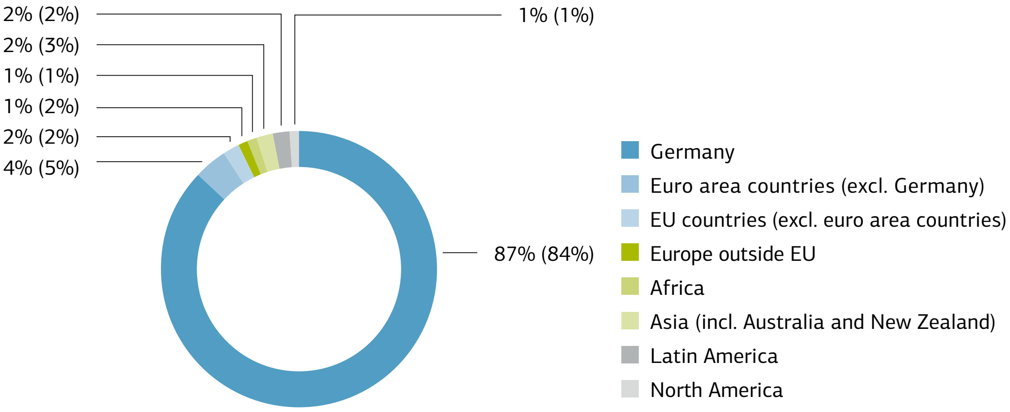
KfW Group did not take possession of any assets previously held as tangible collateral in 2020.

Portfolio structure

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

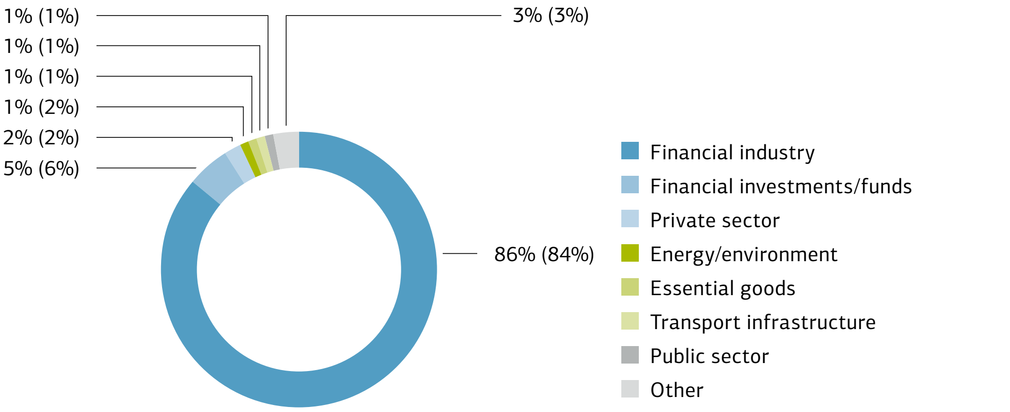
[4)] The loan portfolio includes loans as well as securities and investments in performing business. The non-performing portfolio is only included in the presentation of credit quality.

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



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

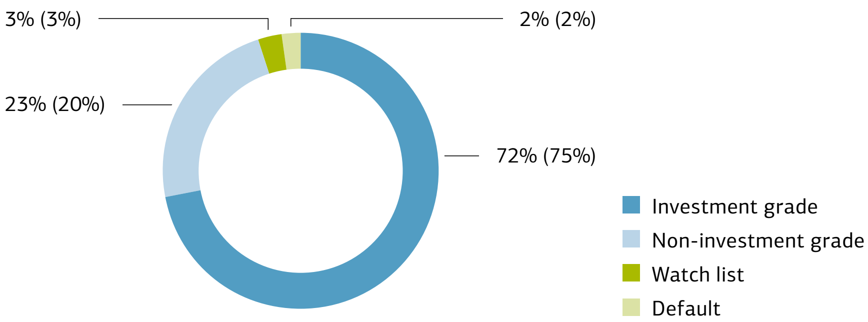
Economic capital requirement by sector
31 December 2020 (31 Dec. 2019)



Sectors
The significant share of overall capital required for credit risks attributable to the financial sector is due to KfW Group's promotional mandate. By far the greatest portion of KfW Group's domestic promotional business consists of loans on-lent through commercial banks. The financial sector's share of the economic capital requirement increased overall, due primarily to an increase in on-lending business (mainly in energy transition and housing programmes).

Credit quality by net exposure

31 December 2020 (31 Dec. 2019)



Credit quality

As credit quality is a major factor influencing economic capital requirements, analysing the credit quality structure involves examining the distribution of net exposure[5)] by credit quality category. Investment grade exposure decreased year on year, while non-investment grade exposure increased. The change in the structure of the credit quality is due to the rating downgrades in connection with the COVID-19 pandemic. The share of watch list positions of 2.9% (previous year: 2.7%) and the share of default positions of 2.2% (previous year: 1.9%) have increased slightly.

Securitisations in KfW Group's portfolio

Securitisations had a par value of around EUR 6.2 billion as of 31 December 2020. Accounting for the mark-to-market valuation of the securities reported at fair value and impairments, the portfolio had a book value (including pro rata interest) of around EUR 6.3 billion. The following tables present the composition of the securitisation portfolio by asset class, rating grade and geographical distribution.

Geographical breakdown of the underlying asset pool (based on par value)

	31 Dec. 2020	31 Dec. 2019
	%	%
Europe	99.8	99.7
World	0	0
North America	0.2	0.3
Africa	0	0
Asia	0	0

Exposure based on par values

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

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

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

Value-at-risk approach

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

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

Interest risk

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

Interest rate volatility risk

The interest rate volatility risk is based on changes in the market values of modelled interest rate options (e.g. termination rights or floors in the variable-rate lending business). The economic capital requirement for these risks is calculated in the same way as for other types of risk, using historical simulation (see Value at Risk section). Interest rate volatility risk arises as a side effect of the original business activity and is limited by means of an ECAP sub-limit. The capital requirement for interest rate volatility risk was EUR 319 million as of 31 December 2020.

Currency risk

The economic capital requirement for currency positions is calculated in the same way as for interest risk, using historical simulation. The capital requirement for currency risk increased by EUR 82 million to EUR 693 million as of 31 December 2020.

Credit spread risk

Risk measurement is carried out for the securities portfolio. The economic capital requirement for this risk type is calculated in the same way as for other risk types, using historical simulation. The economic capital requirement for credit spread risk as of 31 December 2020 was EUR 358 million. Credit spread risk increased by EUR 40 million year on year.

Stress testing

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

LIQUIDITY RISK

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

– Insolvency risk: Risk that payment obligations cannot be met, cannot be met on time or cannot be met in full.

– Market liquidity risk: Risk of (value) losses if assets cannot be traded on the market due to lack of liquidity, cannot be traded in due time, in full or in sufficient quantity or cannot be traded at prevailing market conditions.

– Funding risk: Risk of lower income due to more expensive funding (liabilities) that cannot be passed on to borrowers.

The primary objective of liquidity management is to ensure that KfW Group is capable of meeting its payment obligations at all times. KfW is available as a contractual partner for all commercial transactions of its subsidiaries, particularly for their funding. For this reason the liquidity requirements of the subsidiaries are included both in KfW Group's funding plans and in the liquidity maintenance strategy.

Liquidity risk is measured on the basis of economic scenario analyses and the utilisation threshold under Article 4 of the KfW Law. In addition, liquidity gaps are limited based on business already concluded, available liquidity potential and the maturity gap between inflows and outflows.

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

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

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

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

The indicators are calculated and reported to the Market Price Risk Committee on a monthly basis. The following table presents the risk indicators for the scenarios as of 31 December 2020:

KfW liquidity risk indicators

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

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

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

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

The programme volume of the Multi-Currency Commercial Paper programme, also known as the Euro Commercial Paper ("ECP") programme designed for global investors amounted to EUR 70 billion. The volume issued under the ECP programme was higher in 2020 than in the previous year, with an outstanding volume of EUR 33.1 billion at the end of 2020. The programme volume of the U.S. Commercial Paper ("USCP") programme was increased from USD 10 billion to USD 20 billion as of 8 April 2020. KfW Group uses this programme, which is designed specifically for the US market, to cover a large portion of its need for short-term funds in US dollars. The volume issued under the USCP programme was also significantly higher than in the previous year (USD 43 billion) at USD 59.9 billion. At the end of 2020, the outstanding volume was USD 10.1 billion. In addition, KfW participated in TLTRO III for the first time in 2020, raising EUR 13.36 billion on 18 June 2020 with a maximum maturity of three years.

OPERATIONAL RISK AND BUSINESS CONTINUITY MANAGEMENT
In accordance with Article 4 (1) No. 52 of the CRR, KfW Group defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The following types of risk/sub-types of operational risk are also defined and monitored as a rule by specialised second line of defence units: compliance risk, information security risk, payment transaction risk, legal risk, physical security risk, service provider risk (including outsourcing risk), personnel risk, model risk, operational risk from adjustment processes, conduct risk and information technology risk unrelated to information security.

KfW Group's organisational structure provides for a two-tier system comprising decentralised and centralised units liaising with the Operational Risk Committee. Management of risks is decentralised and performed within the business sectors and subsidiaries by the respective directors or managing directors, who are supported by the respective sector coordinators of Operational Risk and Business Continuity Management. Monitoring and communication of risks is performed on a cross-functional basis by Risk Controlling (central OpRisk Controlling) and Central Services (central Business Continuity Management). These staff develop the relevant methods and instruments for identifying and assessing risks and monitor their group-wide uniform application. The model for calculating the economic risk resulting from operational risks is also validated in the Risk Controlling department.

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

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

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

Where adequate monitoring of operational risks using metrics is possible, risk indicators are used. Compliance with centrally prescribed risk-mitigating requirements (e.g. training course participation, deadlines, escalation procedures) is monitored using business area-specific OpRisk information dashboards to ensure escalation across all levels up to the Executive Board in the event of non-compliance.

Losses caused by the COVID-19 pandemic that relate to operational risks are recorded bank-wide as a collective event and are included in the calculation of the economic capital requirement for OpRisk. Furthermore, the potential impact of COVID-19 was included in the risk assessment, meaning that it is also reflected in the economic capital requirement for OpRisk. The overall situation associated with the COVID-19 pandemic is fraught with uncertainty. It could escalate at any time and cannot be represented in full using the OpRisk methodology.

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

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

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

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

OTHER RISKS

Equity investment risks

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

Equity investments (operational level)

Undertaking equity investments at operational level is part of the group's promotional mandate. Accordingly, there are equity investments in connection with domestic and European investment financing and in the Promotion of developing countries and emerging economies and Export and project finance business areas. KfW group-wide basic rules for equity investments at operational level are set out in guidelines. Specific rules tailored to certain segments of equity investments are also set out in portfolio guidelines, working instructions or risk guidelines. Risk measurement is performed at an individual loan commitment level for operational level equity investments in the same way as for credit risk using models specified for this purpose. Equity investment portfolio risks are reported separately in a dedicated report as well as quarterly in the Risk Report.

Strategic equity investments

Strategic equity investments support KfW's mandate of providing an efficient and sustainable promotional offering. In addition to reinforcing and expanding core competencies, the focus of this investment type is on complementing KfW's business sectors. Strategic equity investments normally have a long-term holding period. KfW also makes strategic equity investments in accordance with Article 2 (4) of the KfW Law (mandated transactions). The Federal Government mandates such equity investments to KfW because the Federal Republic of Germany has a state interest in them.

Dedicated organisational units are responsible for strategic equity investments based on an equity investment manual that describes legal bases, strategies, principles, procedures and responsibilities of equity investment management. Acquisitions and disposals of and changes to strategic equity investments are subject to defined processes as well as authorisation by the Executive Board and – in accordance with the KfW Bylaws – authorisation by the Board of Supervisory Directors. Moreover, acquiring a strategic equity investment in excess of 25%, creating or increasing such an equity investment or fully disposing of it requires authorisation by the Federal Ministry of Finance in accordance with Section 65 (3) of the Federal Budget Code (*Bundeshaushaltsordnung – "BHO"*). Strategic equity investments and their individual risks are monitored and presented to the Executive Board as part of an annual equity investment report, as well as in ad hoc reports, if necessary. The individually defined strategies for the equity investments are updated annually. Moreover, the group is normally represented in the supervisory bodies of its strategic equity investments.

Intra-group risk

Due to the risk relevance for the group and the objective of consistent group management, the risks of KfW IPEX-Bank, DEG and KfW Capital are fully taken into account as part of group risk management. For example, the business activities of these subsidiaries are applied to the group-wide limits on a look-through basis and included in the capital allocation and risk-bearing capacity calculation of the group. In addition, representatives of the subsidiaries are members of the group's risk committees. KfW also monitors the risk situation of its subsidiaries on a stand-alone basis. The management of each subsidiary reports regularly to the responsible members of the Executive Board on risk, as well as finance and strategy.

Reputational risk

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

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

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

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

Project risk

Original project risk comprises, in particular, planning assumptions that turn out to be inaccurate. Project risk has implications for the achievement of project objectives with regard to cost, time and achievement of objectives (e.g. new technical requirements, and time constraints arising from parallel projects). Managing project risk is part of project management and takes place in both the project planning and execution stages.

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

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

Regulatory risk

Regulatory risks for KfW Group arise primarily from an increase in requirements regarding minimum capital ratios and from possible negative effects on the group's business model due to future changes in the regulatory environment. These include the costs resulting from the implementation and ongoing fulfilment of the additional requirements as well as the associated capital tie-up.

As part of the capital adequacy process, regulatory risk is to be addressed through conservative traffic light limits as a management and early warning instrument with regard to regulatory capital requirements. In addition, the capitalisation of KfW Group is reviewed as part of capital planning and in cooperation with the owners. In this context, potential negative effects arising from the finalisation of the capital adequacy requirements under Basel III are analysed and assessed, in particular.

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

Additional internal control procedures

Process-integrated internal control system (ICS)

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

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

The KfW Executive Board holds overall responsibility for the group's internal control system. At KfW IPEX-Bank, KfW Capital and DEG, the respective company management holds overall responsibility. Design and implementation at the different corporate levels are the responsibility of the relevant managers according to the organisational structure.

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

The control environment is the environment within which KfW Group introduces and applies rules. Risk assessment includes the identification, analysis and evaluation of risks that result from implementing corporate strategy. Control activities are aimed at achieving corporate objectives effectively and detecting or minimising risks. A KfW Group information and communication policy is aimed at comprehensively providing all stakeholders with the information they need in the required detail to make decisions. Appropriate monitoring and audit mechanisms are in place to determine the functionality and effectiveness of the ICS.

Procedural rules form the basis of the ICS. These constitute the framework for a proper business organisation within KfW Group, in the form of a binding policy.

Workflow organisational measures and controls are intended to ensure that monitoring is integrated into processes. Monitoring measures integrated into processes serve to avoid, reduce, detect and/or correct processing errors or financial loss. The effects of any planned changes to operational processes and structures on the procedure and intensity of monitoring are analysed in advance.

KfW Group has implemented accounting-related controls to minimise the risk of error in stand-alone and consolidated financial statements and ensure the correctness and reliability of internal and external financial reporting. The accounting-related controls are part of the ICS.

The system is supplemented by the Compliance department, which defines and monitors compliance with relevant measures, on the basis of relevant rules and norms. The Compliance function performs regular process-based and accompanying monitoring of the relevant areas of the internal control system. The results of additional second line of defence units (OpRisk in particular) are included in monitoring and the further development of the internal control system.

To ensure the adequacy and effectiveness of the ICS, KfW regularly scrutinises and continually refines its standards and conventions.

A report is rendered annually to KfW Group's supervisory bodies. The adequacy and effectiveness of the ICS is also assessed by Internal Auditing on the basis of risk-based audits carried out independently of group procedures.

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

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

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

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

KfW's business activities relating to the COVID-19 pandemic as part of the KfW Special Programme did not result in any sustained increase in the overall risk level in the relevant compliance risk types (money laundering/terrorism financing, other criminal activities). This is due to the structural use of existing implementation channels (on-lending) and products (promotional loans). To date, KfW has not been commissioned with the direct disbursement of non-repayable grants to mitigate the economic implications of the COVID-19 pandemic.

Internal Auditing
Internal Auditing is an instrument of the Executive Board. As an entity that works independently of KfW Group procedures, it audits and assesses all of KfW Group's processes and activities to identify the risks involved and reports directly to the Executive Board.

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

Moreover, Internal Auditing continued to monitor the ongoing development of risk measurement procedures in 2020 by attending meetings of decision-making bodies (as a guest).

Internal Auditing also functions as KfW Group's internal auditing department. It is involved in subsidiaries' audit planning and incorporates the audit results of the subsidiaries' internal auditing departments in group-wide internal audit reporting.

Forecast and opportunity report

The following forecast and opportunity report mainly reflects the scope and content of the group forecast and opportunity report published in the group management report. As business sector planning and earnings projections are prepared at KfW Group level, a forecast and opportunity report is not prepared at individual institution level. The following forecast figures therefore relate to KfW Group.

General economic environment and development trends

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

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

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

* Aggregation of annual GDP growth rates at each country's constant prices based on the shares of each country's GDP valued at purchasing power parity ("PPP") in the corresponding aggregate. Grouped into industrialised countries and emerging economies based on IMF classification. Average calculated as the geometric mean of annual growth rates.

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

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

KfW expects price-adjusted GDP in **Germany** to increase by 4,0% year on year in 2021. In light of the forecasts for the global economy described above and the assumptions on progress in containing the coronavirus pandemic in 2021, KfW expects that net exports will propel price-adjusted GDP growth in 2021. Among the domestic expenditure components of GDP, KfW expects gross fixed capital formation in machinery and equipment and private consumption expenditure to achieve the highest price-adjusted growth rates in 2021. The latter is based on the assumption that the proportion of the working population whose place of work is in Germany will rise in 2021. Even though the growth rate of price-adjusted GDP expected by KfW for 2021 is 2.1 percentage points above the average growth rate for the previous ten years, this growth in price-adjusted GDP expected for 2021 will not be enough to fully compensate for its decline of 5.0% in 2020. Price-adjusted GDP in 2021 is therefore expected to be lower than in 2019, the year before the outbreak of the coronavirus pandemic (see table on gross domestic product at constant prices, year-on-year change).

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

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

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

For the **euro area**, KfW expects the deposit rate of the European Central Bank ("ECB") to remain at –0.50% for the whole of 2021. The ECB has responded to the COVID-19 pandemic with several targeted measures, without lowering key interest rates any further. Its most important instruments include the pandemic emergency purchase programme ("PEPP"), pursuant to which securities purchases in an amount of EUR 1,850 billion are planned. The programme 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 enterprises will increasingly replace the primary objective of securing liquidity with the (re)initiation of investment projects. We therefore expect a shift in focus to long-term financing that targets the megatrends climate protection and digitalisation and addresses the population's growing environmental awareness and increased digital affinity. This business sector thus aims to continue to position itself as a catalyst for setting the economic course in the future.

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

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

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

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

The demand for municipal investment remains high from the perspective of the Municipal and Social Infrastructure segment given the central role of municipalities and municipal enterprises in meeting the challenges posed by climate change, the need for digitalisation and the COVID-19 pandemic. However, the strained budget and debt situation of some municipalities, combined with limited capacities in the construction industry and administration, continues to restrict their investment opportunities. The business sector expects increasing demand for promotional funds overall. Individual financing with financing partners in Germany and Europe and global funding of promotional institutions of the German federal states continue to be characterised by a sound refinancing situation at partner banks and the current low interest rates combined with the ECB's expansionary monetary policy. However, the segment expects to be able to meet substantial demand in this area too. Demand for global loans to support leasing investments will likely be higher in 2021 than in the previous year, as a stabilisation of business development is evident among leasing partners despite the ongoing pandemic. As regards funding for export loans, we assume that demand will remain stable, although it will be influenced by major projects in the German export industry and will depend on the development of the export economy during and after the COVID-19 pandemic.

The persistent low-interest environment represents a permanent challenge in maintaining the attractiveness of products with regard to global loans for Europe and global funding of promotional institutions of the German federal states, as well as for customised corporate finance.

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

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

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

International business
Despite the globally deteriorating economic outlook, there are still regions with growth potential in Europe, as well as among developing countries and emerging markets relevant for the **Export and project finance** business sector. Economic stimulus programmes can also generate stimulus for financing demand (e.g. PPPs), particularly in the area of infrastructure investments and projects relating to the transformation to a climate-neutral economy. Health risks (COVID-19) and geopolitical risks remain relevant to the business sector Export and project finance and are currently manifesting themselves primarily in lower country ratings. In the same way as protectionist efforts, these could have a noticeable adverse effect on world trade and thus on investment and financing opportunities. On the other hand, targeted regionalisation of supply chains in response to the pandemic could open up opportunities for lending. All in all, developments in the post-COVID era will still be plagued with great uncertainty, which from today's perspective leaves sufficient potential for German and European exporters and companies that invest in their competitiveness. Financing approaches can be derived from this for the business sector Export and project finance. This business sector is pursuing its growth path by further developing its business model into a structuring and placement platform. The coronavirus pandemic is leading to changes as regards financing objects. Demand for financing cruise ships and aircraft has declined sharply, and financing for new commodity projects has been delayed. On the other hand, demand for financing for infrastructure investments, particularly in digital infrastructure, has increased. Overall, business potential is still there. Due to the current situation, Export and project finance plans a commitment volume of EUR 16.2 billion for 2021, which is around 15% less than the volume projected in 2020 (actual figure for 2020: EUR 16.6 billion).

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

The **KfW Development Bank** business area is expected to experience dynamic business growth also in the next few years. KfW Development Bank will continue to support projects of the German Federal Government and international institutions for development policy and international cooperation in 2021. In view of the ongoing COVID-19 pandemic, support to partner countries through rapid and efficient implementation of the coronavirus immediate assistance programmes will play an important role in 2021. In addition to the implementation of the coronavirus special programmes, issues such as cooperation with Africa, alleviating poverty, the mitigation of crises and causes of displacement, as well as climate protection and the protection of other global goods are high on the political agenda in Germany and the EU. The German Federal Government and the European Commission assume responsibility in the area of international environmental and climate protection and are involved in a large number of climate initiatives. The Federal Ministry for Economic Cooperation and Development (*Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung – "BMZ"*) also supports the G20 Compact with Africa initiative through reform partnerships with currently six selected countries. Official Development Assistance ("ODA") budget funds for development cooperation and international climate finance from both the Federal Government's budget and the European Commission continue to increase. In connection with the refugee and crisis context, the Sustainable Development Goals ("SDGs") and the Paris Agreement on climate change, the European Commission has developed an "EU External Investment Plan". At the same time, the European Commission and the member states are developing a range of promotional instruments for

European development cooperation (the Neighbourhood, Development and International Cooperation Instrument of the Multiannual Financial Framework/MFF 2021–2027). This initiative focuses, among other things, on increased mobilisation of private capital, greater visibility for European development cooperation and closer cooperation between European promotional institutions. The quality requirements for development cooperation are also increasing, coupled with high demands for transparency and information from policymakers and the public regarding the results, effects and risks of development cooperation. Against the backdrop of planned projects of the German Federal Government and international institutions, KfW Development Bank expects a new business volume of EUR 12.6 billion for 2021.

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 .

KfW Financial statements 2020

Annual financial statements

Statement of financial position of KfW as of 31 December 2020

Assets

	see note no.	31 Dec. 2020				31 Dec. 2019
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Cash reserves						
a) Cash in hand				0		0
b) Balances with central banks				44,177		28,195
of which: with Deutsche Bundesbank		*44,177*				*(28,195)*
					44,177	**28,195**
Loans and advances to banks	(2)					
a) Due on demand				7,545		4,794
b) Other loans and receivables				315,608		304,702
					323,153	**309,496**
Loans and advances to customers	(3)				**111,362**	**101,923**
of which: secured with mortgages		*0*				*(0)*
of which: Municipal loans		*69,496*				*(61,486)*
Bonds and other fixed-income securities	(4), (9)					
a) Money market paper						
aa) Of public sector issuers			0			0
of which: eligible as collateral with Deutsche Bundesbank		*0*				*(0)*
ab) Of other issuers			2,688	2,688		1,808
of which: eligible as collateral with Deutsche Bundesbank		*0*				*(0)*
b) Bonds and notes						
ba) Of public sector issuers			4,611			4,903
of which: eligible as collateral with Deutsche Bundesbank		*4,383*				*(4,652)*
bb) Of other issuers			27,644	32,255		27,172
of which: eligible as collateral with Deutsche Bundesbank		*22,341*				*(21,882)*
c) KfW´s own bond issues				3,676		6,150
Nominal amount		4,218				*(6,759)*
					38,618	**40,033**

Assets

	see note no.	31 Dec. 2020				31 Dec. 2019
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Equity investments	(5), (7), (9)				**833**	**978**
of which: in banks		*34*				*(35)*
of which: in financial services institutions		*0*				*(0)*
Shares in affiliated companies	(6), (7), (9)				**3,653**	**3,528**
of which: in banks		*429*				*(429)*
of which: in financial services institutions		*0*				*(0)*
Assets held in trust	(8)				**17,213**	**16,611**
of which: loans held in trust		*10,799*				*(11,229)*
Intangible assets	(9)					
Concessions, industrial property rights and similiar rights				61		83
					61	**83**
Property, plant and equipment	(9)				**859**	**873**
Other assets	(10)				**692**	**2,555**
Deferred charges	(11)				**2,672**	**1,692**
Special loss account consisting of provisions under Article 17 (4) of the D-Mark Balance Sheet Act					**26**	**26**
Total assets					**543,320**	**505,991**

Liabilities and equity

	see note no.	31 Dec. 2020				31 Dec. 2019
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Liabilities to banks	(12)					
a) Due on demand				3,489		9,069
b) With agreed terms or periods of notice				20,452		7,877
					23,941	**16,946**
Liabilities to customers	(13)					
Other liabilities						
a) Due on demand			464			557
b) With agreed terms or periods of notice			46,510	46,974		9,004
					46,974	**9,561**
Certificated liabilities	(14)					
Bonds and notes				412,754		430,394
					412,754	**430,394**
Liabilities held in trust	(15)				**17,213**	**16,611**
of which: Loans held in trust		*10,799*				*(11,229)*
Other liabilities	(16)				**7,291**	**84**
Deferred income	(17)				**4,040**	**3,022**
Provisions	(18)					
a) Provisions for pensions and similar obligations				1,649		1,520
b) Other provisions				1,026		1,020
					2,675	**2,540**
Obligatory charges under the D-Mark Balance Sheet Act					**0**	**0**
Fund for general banking risks					**600**	**600**

Liabilities and equity

	see note no.	31 Dec. 2020				31 Dec. 2019
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Equity	(19)					
a) Called in capital						
Subscribed capital			3,750			3,750
less uncalled outstanding contributions			–450	3,300		–450
b) Capital reserve				8,447		8,447
c) Reserve from the ERP Special Fund				1,191		1,191
d) Retained earnings						
da) Statutory reserve under Article 10 (2) of the KfW Law			1,875			1,875
db) Special reserve under Article 10 (3) of the KfW Law			12,971			11,372
dc) Special reserve under Article 17 (4) of the D-Mark Balance Sheet Act			48	14,894		48
					27,831	**26,232**
Total liabilities and equity					**543,320**	**505,991**
Contingent liabilities	(20)					
On guarantees				667		671
					667	**671**
Other commitments	(21)					
Irrevocable loan commitments				99,729		77,337
					99,729	**77,337**

Income Statement of KfW

for the period from 1 January – 31 December 2020

	see note no.	2020				2019
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Interest income from						
a) Lending and money-market transactions	(22)	4,651				5,877
Less negative interest from lending and money-market transactions		–259	4,392			–234
b) Fixed-income securities and bonds		–9				49
Less negative interest from fixed-income securities and bonds		–25	–34			–14
				4,358		5,678
Interest expense	(22)	2,851				3,972
Less positive interest from the banking business		–409	2,442			–144
				2,442		3,828
					1,916	1,850
Current income from	(23)					
a) Shares and other non-fixed income securities				0		0
b) Equity investments				39		38
c) Shares in affiliated companies				40		41
					79	80
Income from profit pooling, profit and loss transfer and partial profit transfer agreements					**31**	19
Commissions income				**611**		563
Commissions expense				**162**		182
					449	381
Other operating income	(24)				**281**	147
General administrative expenses						
a) Personnel expense						
aa) Salaries and wages			461			452
ab) Social security contributions and expense for pension provision and other employee benefits			90	551		106
of which: for pensions			*17*			*(43)*
b) Other administrative expenses				413		412
					964	971
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(9)				**82**	77
Other operating expense	(24)				**138**	134

	see note no.	2020				2019
		EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Impairment of receivables and certain securities and additions to provisions for loan losses					**0**	9
Income from the reversals of impairment losses on receivables and certain securities and reversals of provisions for loan losses					**43**	0
Depreciation, amortisation and impairment of equity investments, shares in affiliated companies and securities held as fixed assets					**9**	0
Result from ordinary activities					**1,607**	1,287
Taxes on income					**6**	5
Other taxes					**2**	1
Profit					**1,599**	1,280
Allocation to retained earnings						
to the special reserve under Article 10 (3) of the KfW Law	(19)		–1,599			–1,280
				–1,599		–1,280
Net retained profits					**0**	0

Notes

KfW is a public law institution with registered office in Frankfurt am Main.

The financial statements of KfW have been prepared in accordance with the requirements of the German Commercial Code (*Handelsgesetzbuch – "HGB"*), the German Accounting Regulation for Banks and Financial Services Institutions (*Verordnung über die Rechnungslegung der Kreditinstitute und Finanzdienstleistungsinstitute – "RechKredV"*) and the Law Concerning KfW (KfW Law). The special provisions of the D-Mark Balance Sheet Act (*D-Mark-Bilanz-Gesetz – "DMBilG"*) have also been observed.

The KfW statement of financial position and income statement presentation of items was adjusted as follows: Equity was expanded to include the Reserve from the ERP Special Fund and the three sub-items in Retained earnings: Statutory reserve under Article 10 (2) KfW Law and Special reserve under Article 10 (3) KfW Law and Special reserve under Section 17 (4) of the D-Mark Balance Sheet Act. Disclosures on items in the statement of financial position which may be provided in either the statement of financial position or the notes are provided in the notes.

1) Accounting policies

Cash reserves, Loans and advances to banks and customers and Other assets have been shown at cost, notional amount or lower fair value. Cash reserves also include cash proceeds from assets held in trust. The resulting payment obligations are reported as liabilities to customers. Differences between notional amounts and lower paid out amounts of receivables, which are similar in nature to interest, have been included in Deferred income and recognised over the term through profit or loss in Interest income. Equity investments and Shares in affiliated companies are recognised at cost. In the case of permanent impairments, assets are written down to the lower value.

Interest rate reductions are recognised in the income statement as they arise, at their present value at the time the loan terms and conditions are determined. These transactions are measured applying the parameters of the general promotional loan market the first time they are recorded at fair value. Consequently, these transactions result in interest rates below the market rate, which has a negative impact on KfW's earnings position.

The difference that normally results upon loan commitment – the present value of the nominal scheduled interest rate reductions during the first fixed interest rate period – is recognised in profit or loss with a negative impact on interest expense and accounted for as an adjusting item in Loans and advances under the statement of financial position items Loans and advances to banks or Loans and advances to customers. The adjustment to the carrying amount is amortised in Net interest income using the effective interest rate method. In the event of unscheduled repayment in full, this is recognised in profit or loss under Interest income. Differences that relate to irrevocable loan commitments are reported in Provisions. Changes to the portfolio are offset via the adjustments to the carrying amounts of already disbursed promotional loans recognised on the assets side.

The securities held as a liquidity reserve are valued strictly at the lower of cost or market (*strenges Niederstwertprinzip*), where they are not hedged. For securities held as fixed assets, the modified lower of cost or market principle (*gemildertes Niederstwertprinzip*) has generally been applied. In some cases, hedge accounting is applied for securities and their interest hedges (primarily interest rate swaps) in accordance with Section 254 HGB. No securities have been allocated to the trading book. Reversals of impairment losses have been accounted for in accordance with the statutory requirements. Structured securities with embedded derivatives are accounted for as one unit and are valued strictly at the lower of cost or market value.

Property, plant and equipment and intangible assets are reported at cost, reduced by straight line depreciation/amortisation over their expected useful life. Impairment is recognised as required. Minor fixed-assets items are combined to form a collective item and are depreciated/amortised over a period of five years using the straight-line method. The bank opted not to recognise internally generated intangible fixed assets.

Liabilities are recognised at their settlement value; differences between agreed higher repayment amount and issue amount are recognised in the item Deferred charges. Zero-coupon bonds issued are recognised at their current redemption amount.

Provisions for pensions and similar obligations are valued in accordance with actuarial principles on the basis of Heubeck AG's 2018 G actuarial tables. The projected unit credit method with the following parameters is applied to KfW's calculations for all active staff members.

	31 Dec. 2020
Actuarial discount rate (10-year average interest rate)	2.30%
Rate of salary increases (depending on pay scale)	2.20%
Rate of pension increases (depending on pension scheme)	1.00% to 2.50%
Rate of staff turnover	2.00%

Other provisions are reported in the amount of the estimated expenditure required to settle the obligation as dictated by prudent business judgement, taking future price/cost increases into account. Provisions with a remaining life of more than one year are discounted with the market interest rate published by the Deutsche Bundesbank.

Risks, primarily for lending business as a result of the structure of KfW's business, were sufficiently addressed through valuation allowances and provisions. KfW distinguishes between significant receivables (non-retail, volume from each individual borrower of EUR 1 million or more) and non-significant receivables (retail). For significant receivables, an individual assessment of credit exposure regarding expected cashflows is undertaken when there are indications of impairment. The calculation takes into account the scope and value of the collateral as well as the political risk. For non-performing loans, interest income is generally accrued based on the probability of collection. For non-significant receivables with indications of impairment, a general risk provision (specific valuation allowance – retail) is created based on homogeneous sub-portfolios.

The automatically determined portfolio valuation allowance includes the expected basic loss resulting from the portfolio valuation model for all receivables (non-retail and retail) without indicators of impairment. These are calculated based on the changes in credit quality since initial recognition, either in the amount of the one-year expected loss or, if there has been significant deterioration in credit risk since initial recognition, in the amount of the expected loss over lifetime.

Additions and reversals are recognised net in the item Impairment of receivables and certain securities and additions to provisions for loan losses or Income from the reversals of impairment losses on receivables and certain securities and reversals of provisions for loan losses. The same applies to unrealised and realised results from equity investments, shares in affiliated companies and securities held as fixed assets. The possibility of netting in the income statement in accordance with Section 340c (2) and Section 340f (3) HGB has been utilised.

The assets and debts in foreign currencies and the spot transactions not completed on the reporting date have been converted into euros at the average spot exchange rate. The bank applies the principal of special cover in accordance with Section 340h HGB in conjunction with Section 256a HGB.

The valuation of interest-related transactions in the banking book (*Refinanzierungsverbund*) follows the management of interest rate fluctuation risk at KfW. The principle of prudence is applied by recognising a provision for anticipated losses from onerous contracts in accordance with Section 340a in conjunction with Section 249 (1) sentence 1, 2nd alternative HGB for any excess obligations resulting from the valuation of the interest-related banking book. The requirements of the statement of the Banking Committee of the German Institute of Auditors (*Institut der Wirtschaftsprüfer* – "*IDW*") on the loss-free valuation of the banking book ("*BFA 3*") are taken into account. To determine any excess obligation, KfW calculates the net value of all discounted future period results of the banking book for each period. In addition to net interest and relevant commission income, this includes the associated administrative costs and risk costs in the amount of expected losses. No provision for contingent losses was required during the reporting year.

Negative interest incurred as a result of the persisting low interest rate environment is reported in a separate column under Interest income and Interest expense.

Notes to the assets

2) Loans and advances to banks

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The item includes:		
Loans and advances		
To affiliated companies	21,972	21,327
To companies in which KfW holds a stake	0	0
Without underwriting borne by the on-lending bank	19,266	1,255
Subordinated loans	1,018	1,020
Due		
On demand	7,545	4,794
Within 3 months	16,168	19,977
Between 3 months and 1 year	30,394	33,731
Between 1 year and 5 years	157,066	138,404
In more than 5 years	109,766	109,601
Accrued interest	2,214	2,989
Total	**323,153**	**309,496**

An adjusting item in the amount of EUR 737 million (2019: EUR 914 million) is reported under Loans and advances to banks due to interest rates being below the market rate for promotional loans disbursed with additional promotional support in the form of interest rate reductions impacting KfW's earnings.

The German Federal Government commissioned KfW to implement the package of coronavirus measures in spring 2020. To this end, KfW launched the special programmes for coronavirus aid 2020 during the course of the year, which were merged in the "Bach" bank-in-bank model as government-commissioned funding. As a result, KfW reported loans and advances to banks and customers with a cash value of EUR 29.9 billion as of 31 December 2020.

3) Loans and advances to customers

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The item includes:		
Loans and advances		
To affiliated companies	298	284
To companies in which KfW holds a stake	1	0
Subordinated loans	1,392	1,584
Due		
With no fixed maturity	12,011	11,413
Within 3 months	3,707	2,893
Between 3 months and 1 year	8,617	8,753
Between 1 year and 5 years	45,761	39,634
In more than 5 years	40,732	38,533
Accrued interest	536	697
Total	**111,362**	**101,923**

An adjusting item in the amount of EUR 46 million (2019: EUR 64 million) is reported under Loans and advances to customers due to interest rates being below the market rate for promotional loans disbursed with additional promotional support in the form of interest rate reductions impacting KfW's earnings.

4) Bonds and other fixed-income securities

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Due within the following year		
Money market paper, bonds and notes	7,662	5,446
Notional amount	*7,606*	*5,414*
Own bond issues	564	2,259
Notional amount	*546*	*2,258*
Total	**8,226**	**7,705**
Notional amount	*8,152*	*7,672*
Listed securities	35,656	37,896
Unlisted securities	2,962	2,136
Marketable securities	**38,618**	**40,033**
Subordinated assets	345	474
Repurchase agreements	33	211

5) Equity investments

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Listed securities	75	73
Unlisted securities	46	48
Marketable securities	**121**	**121**

6) Shares in affiliated companies

As in 2019, this item does not contain any listed securities.

7) Disclosures on shareholdings

	Name and domicile of company	Share held in %	Equity EUR in thousands	Profit/loss for the year EUR in thousands
1	DEG Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne[1)]	100.0	2,291,037	–181,158
2	KfW Beteiligungsholding GmbH, Bonn[1)]	100.0	1,591,392	–364,120
3	Interkonnektor GmbH, Frankfurt am Main[1)]	100.0	69,265	–13,958
4	KfW Capital GmbH & Co. KG, Frankfurt am Main[1)]	100.0	343,001	0
5	tbg Technologie-Beteiligungsgesellschaft mbH, Bonn[1)]	100.0	54,160	–3,424
6	Finanzierungs- und Beratungsgesellschaft mbH, Berlin[1)]	100.0	5,043	146
7	Deutsche Energie-Agentur GmbH (dena), Berlin[2)]	26.0	5,574	395
8	Berliner Energieagentur GmbH, Berlin[2)]	25.0	7,137	622
9	eCapital Technologies Fonds II GmbH & Co. KG, Münster[2)]	24.8	13,110	79

	Name and domicile of company where KfW holds at least 5% of voting rights	Share of voting rights in%	Equity EUR in thousands	Profit/loss for the year EUR in thousands
1	Procredit Holding AG & Co KGaA, Frankfurt am Main[2)]	13.2	803,492	54,305
2	Access Microfinance Holding AG, Berlin[2)]	12.7	70,664	5,637
3	Finca Microfinance Holding Company LLC, Washington DC, USA[2)]	8.9	194,484	6,539
4	AB Microfinance Bank Nigeria Ltd., Lagos, Nigeria[2)]	5.9	9,526	1,168

[1)] Preliminary financial statements 31 Dec. 2020
[2)] Most recent available financial statements 31 Dec. 2019

The exemptions of Section 286 (3) No. 1 HGB were applied. The list of shareholdings shows significant equity investments with a capital share greater than 20%. The other equity investments are of minor importance.

8) Assets held in trust

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Loans and advances to banks	1,071	821
Loans and advances to customers	10,053	10,442
Equity investments	6,089	5,348
Total	**17,213**	**16,611**

Moreover, KfW held guarantees of EUR 30 million (31 Dec. 2019: EUR 0 million) issued under the European Fund for Sustainable Development (EFSD), in trust for the European Union.

9) Fixed assets

Statement of changes in fixed assets as of 31. Dec 2020

EUR in thousands		Equity invest-ments[1]	Shares in affiliated companies[1]	Securities held as fixed assets[1]	Intangible assets	Property, plant and equipment[4]	Total
Acquisition costs/production costs as of 1 Jan. 2020[3]					210,317	1,305,298	
Additions 2020	Changes[2]		124,850	209,844	7,985	38,212	
Disposals 2020		144,740			2,151	15,339	
Transfers 2020					0	0	
Acquisition costs/production costs as of 31 Dec. 2020					216,152	1,328,171	
Accumulated depreciation/ amortisation as of 1 Jan. 2020					127,575	432,572	
Depreciation/ amortisation 2020[5]					30,197	51,563	
Reversal of impairments 2020					0	0	
Depreciation/amortisation of additions 2020					909	14,154	
Depreciation/amortisation of disposals 2020					2,143	14,996	
Depreciation/amortisation of transfers 2020					0	0	
Accumulated depreciation/ amortisation as of 31 Dec. 2020					155,629	469,139	
Net carrying amount 31 Dec. 2020		833,362	3,652,621	32,240,498	60,523	859,032	**37,646,036**
Net carrying amount 31 Dec. 2019		978,102	3,527,771	32,030,654	82,742	872,726	**37,491,994**

[1] The bank exercised the option under Section 34 (3) RechKredV to consolidate Securities and investments
[2] Including price changes
[3] The simplification under Section 31 (3) of the Introductory Act to the German Commercial Code (Einführungsgesetz zum Handelsgesetzbuch – EGHGB) has been applied.
[4] Of which net carrying amount as of 31 December 2020:
– Total amount of land and buildings used for the bank's activities EUR 785,124 thousand
– Total amount of office furniture and equipment EUR 73,908 thousand
[5] No impairment losses were recognised in 2020.

Bonds and other fixed-income securities, as well as shares and other non-fixed income securities, intended for permanent use for business activities and therefore usually held until maturity, have been included with the securities held as fixed assets. They are presented separately from current assets and are valued according to the modified lower of cost or market value principle.

The carrying amount of the marketable securities in fixed assets not valued strictly at the lower of cost or market value was EUR 32.2 billion as of 31 December 2020. This includes securities with a carrying amount of EUR 17.4 billion, for which an impairment loss of EUR 54 million was not recognised, as they are going to be held to maturity.

10) Other assets

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Main items:		
Adjusting item from the currency translation of derivatives	0	1,887
Amount receivable from the Federal Agency for Special Tasks associated with Unification	639	626

The amount receivable from the Federal Agency for Special Tasks associated with Unification is reported due to the transfer to KfW of the insurance business of the State Insurance Company of the GDR in liquidation (*Staatliche Versicherung der DDR in Abwicklung – "SinA"*). Actuarial provisions have thus been set up in the same amount.

The adjusting item from the currency translation of derivatives was reported as a liability under Other liabilities in the statement of financial position in 2020.

11) Deferred charges

The line item Deferred charges includes the differences between the repayment amount and the lower issuing amount in the context of borrowed funds (discounts and placing commissions) in the amount of EUR 385 million (2019: EUR 522 million) and upfront payments for derivative financial instruments in the amount of EUR 2,194 million (2019: EUR 1,118 million) which are amortised pro rata temporis.

Notes to the liabilities and equity

12) Liabilities to banks

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The item includes:		
Liabilities to		
Affiliated companies	154	443
Companies in which KfW holds a stake	0	0
Due		
On demand	3,489	9,069
Within 3 months	3,941	4,525
Between 3 months and 1 year	197	62
Between 1 year and 5 years	13,730	233
In more than 5 years	1,011	1,029
Accrued interest	1,573	2,028
Total	**23,941**	**16,946**

13) Liabilities to customers

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The item includes:		
Liabilities to		
Affiliated companies	160	101
Companies in which KfW holds a stake	0	1
Due		
On demand	464	557
Within 3 months	4,609	3,710
Between 3 months and 1 year	6,070	353
Between 1 year and 5 years	27,594	809
In more than 5 years	8,177	4,063
Accrued interest	60	69
Total	**46,974**	**9,561**

KfW raised funds via the Economic Stabilisation Fund (WSF), among other sources, to fund loans under the coronavirus special programme 2020.

As of 31 December 2020, KfW had raised funds via the WSF by means of promissory note loans (*Schuldscheindarlehen*) of EUR 39 billion (including premiums).

14) Certificated liabilities

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The sub-item – Bonds and notes – includes:		
Liabilities to		
Affiliated companies	413	404
Companies in which KfW holds a stake	0	0
Due within the following year	106,150	112,215

15) Liabilities held in trust

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Liabilities to banks	0	0
Liabilities to customers	17,213	16,611
Total	**17,213**	**16,611**

Moreover, KfW held guarantees of EUR 30 million (31 Dec. 2019: EUR 0 million) issued under the European Fund for Sustainable Development (EFSD), in trust for the European Union.

16) Other liabilities

Under Other liabilities, KfW reported a currency adjustment item in the amount of EUR 7,054 million (2019: EUR 1,887 million under Other assets). This resulted from the foreign currency valuation of swap transactions concluded to hedge foreign currency risks from receivables and liabilities. The foreign currency derivatives were used in the context of management of the foreign currency exposure.

17) Deferred income

Deferred income includes in particular premiums from certificated liabilities and capital raised via the WSF totalling EUR 2,663 million (2019: EUR 1,393 million) and accrued upfront payments for derivative financial instruments of EUR 1,122 million (2019: EUR 1,147 million) deferred pro rata temporis.

18) Provisions

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Main items:		
Provisions for pensions and similar obligations	1,649	1,520
Actuarial provisions in connection with the transfer to KfW of the insurance business of SinA	639	626
Provisions for credit risks	95	43
Early retirement	60	84
Retransfer obligation with respect to land	53	53
Provisions for variable compensation components incl. social security payments	48	61
Irrevocable loan commitments below market rate	10	24

There was a difference of EUR 230 million between the discounting of provisions for pensions at the average market rate of the past ten years and the discounting of this item at the average market rate of the past seven years. This difference is excluded from distribution.

An adjusting item in the amount of EUR 10 million was reported in financial year 2020 under Other provisions due to the interest rates being below the market rate for promotional loans irrevocably committed with additional promotional support in the form of interest rate reductions with an impact on KfW's earnings position.

19) Equity

	31 Dec. 2019 EUR in millions	Profit for the year EUR in millions	Other changes EUR in millions	31.12.2020 EUR in millions
KfW's subscribed capital	3,750	0	0	3,750
Uncalled outstanding contributions	–450	0	0	–450
Capital reserve	8,447	0	0	8,447
Reserve from the ERP Special Fund	1,191	0	0	1,191
Retained earnings				
a) Statutory reserve under Article 10 (2) of the KfW Law	1,875	0	0	1,875
b) Special reserve under Article 10 (3) of the KfW Law	11,372	1,599	0	12,971
c) Special reserve under Section 17 (4) of the D-Mark Balance Sheet Act	48	0	0	48
Equity	**26,232**	**1,599**	**0**	**27,831**

The entire profit for 2020 was allocated to retained earnings. As of year-end 2020, KfW's equity amounted to EUR 27.8 billion.

Other required notes to the liabilities and equity

20) Contingent liabilities

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The item includes:		
Guarantees for export financing	271	203
Promotional loans for federal states	111	119
Municipal loans	88	90
Ship and shipyard financing	54	64
Guarantees for foreign loans	51	59
Guarantees for special loans	46	69
Guarantees for other financing	46	67
Total	**667**	**671**

The risk of guarantees is mitigated by possibilities of recourse to the principal and is largely based on that entity's credit rating and the value of any collateral. The bank regularly assesses the risk as part of credit risk monitoring. If there are reasons for a probable outflow of funds, the bank recognises individual provisions; general provisions are made for latent risks. Contingent liabilities are presented net of received cash collateral and provisions accounted for as liabilities.

21) Other commitments

Irrevocable loan commitments	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
The item includes:		
Mittelstandsbank & Private Kunden (*SME Bank & Private Clients*)	57,408	36,372
Individualfinanzierung & öffentliche Kunden (*Customised Finance & Public Clients*)	10,852	5,024
Export and project finance	12,158	16,242
Loans for the Promotion of developing countries and emerging economies	14,757	14,075
Guarantees	356	371
Forward agreements	0	1,055
Other loan commitments	4,198	4,198
Total	**99,729**	**77,337**

Irrevocable loan commitments are subject to regular credit risk monitoring. If there are indications that a loss will be incurred from an expected outflow of funds, the bank recognises an individual provision; latent risks are covered through the recognition of portfolio provisions.

Provisions recognised for the interest rate reductions in irrevocable loan commitments granted by KfW in the promotional lending business and negatively impacting its earnings position are deducted.

Notes to the income statement

22) Interest income and Interest expense

The Interest and similar income item comprises EUR 284 million (2019: EUR 248 million) in negative interest from lending and money-market transactions and from fixed-income securities as a result of the persisting low interest rate environment. Of this amount, EUR 145 million (2019: EUR 122 million) is attributable to deposits with the central bank, EUR 72 million (2019: EUR 76 million) to money-market transactions, EUR 32 million (2019: EUR 31 million) to receivables from the Federal Government resulting from the privatisation of Deutsche Telekom AG and Deutsche Post AG.

KfW reported negative interest from fixed-income securities in the amount of EUR 25 million (2019: EUR 14 million) under sub-item b) Interest income from fixed-income securities and bonds. KfW reported a negative amount of EUR 9 million for interest income from fixed-income securities and bonds. This negative amount resulted from offsetting interest income from fixed-income securities (EUR 292 million), income and expense of the intervention portfolio (EUR 161 million income), the offsetting interest payments of the hedging instruments concluded for the hedged transactions (EUR 303 million expense) and income and expense generated by premiums (EUR 159 million expense) (net reporting).

The Interest and similar expense from the banking business item comprises EUR 409 million (2019: EUR 144 million) in positive interest. This includes EUR 197 million (2019: EUR 90 million) in positive interest from certificated liabilities, EUR 108 million (2019: EUR 33 million) from money-market transactions and EUR 82 million (2019: EUR 0 million) from promissory note loans (*Schuldscheindarlehen*).

As regards the pandemic-induced special programmes, KfW funds itself 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. The lending target was considerably exceeded as early as 31 December 2020. Even taking into account disbursement and repayment schedules, estimated new business as well as historically-based non-scheduled repayment assumptions until 31 March 2021, KfW will achieve the net lending target. 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 recognised interest grants of EUR 71 million in Net interest income in 2020.

23) Current income

The distribution of KfW Beteiligungsholding GmbH for financial year 2019 in the amount of EUR 40 million was reported under sub-item c) Current income from shares in affiliated companies.

24) Other operating income and Other operating expense

In accordance with Sections 277 (5) sentence 2 and 340h HGB, expenditure on and income from currency conversion have been presented as gross figures in Other operating expense (EUR 9 million, 2019: EUR 5 million) and Other operating income (EUR 4 million, 2019: EUR 5 million). Exchange rate-related value changes of specific valuation allowances denominated in foreign currencies are also presented in Other operating expense or Other operating income. Other operating income is largely attributable to the fee paid under the agency agreement with KfW IPEX-Bank GmbH of EUR 92 million (2019: EUR 86 million) and the derecognition of a liability to the Federal Government of EUR 144 million. Other operating expense includes valuation effects generated by discounting pension provisions in the amount of EUR 111 million.

25) Auditor's fees

KfW has exercised the option under Section 285 No. 17 HGB, and refers to the breakdown of auditor fees in KfW Group's consolidated financial statements.

26) Geographical markets

As KfW does not have any foreign branch offices, the total amounts reported under certain income line items in accordance with Section 34 (2) No. 1 RechKredV were not broken down by region.

Other required notes

27) Assets and liabilities in foreign currencies

	31 Dec. 2020 EUR in millions	31 Dec. 2019 EUR in millions
Assets in foreign currencies	47,536	57,481
Liabilities in foreign currencies	184,638	223,060

28) Other financial commitments

The bank has remaining payment obligations totalling EUR 278 million in connection with equity finance operations, of which EUR 40 million is to associated companies.

Moreover, as of 31 December 2020, it also has remaining payment obligations of EUR 820 million to affiliated companies, primarily to KfW Capital GmbH & Co.KG.

In isolated cases, KfW staff or third parties appointed by KfW take on executive body functions at companies in which KfW holds equity investments or with which it has another relevant creditor relationship. The risks arising therefrom are covered by the directors and officers liability insurance policy of the respective company. Liability risks may arise for KfW in the event that no effective insurance coverage is in place.

29) Derivatives reporting

KfW uses the following forward transactions/derivative products, mainly to hedge interest and exchange rate risks, and other price and credit risks:

1. Interest rate forward transactions/derivative products
   - Interest swaps
   - Interest rate options, swaptions
   - Caps and floors

2. Currency-related forward transactions/derivative products
   - Cross-currency swaps
   - FX swaps
   - Currency forwards
   - Spot FX deals

3. Credit derivatives
   - Single name credit default swaps

The following presentation of derivatives transactions is in accordance with the requirements of Section 285 No. 19 HGB and Section 36 RechKredV. It discloses the positive and negative fair values of the derivatives positions as of 31 December 2020.

All types of contracts are marked to market. In cases where market prices were not available for derivatives instruments, fair values were established by means of market parameters based on generally accepted option price models and present value estimates.

Purchased and written options are presented as Other assets or Other liabilities at the amount paid as premiums.

Volume

	Notional amounts	Notional amounts	Positive fair values	Negative fair values
	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2020
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Contracts with interest risks				
Interest swaps	547,573	496,495	19,315	15,786
Interest options				
thereof purchases	*0*	*0*	*0*	*0*
thereof sales	*0*	*0*	*0*	*0*
Caps and floors[1]	438	452	2	2
Total	**548,011**	**496,947**	**19,317**	**15,788**
Contracts with currency risks				
Cross-currency swaps	123,656	156,057	3,109	6,933
FX swaps	39,010	50,301	148	1,189
Currency forwards	109	179	0	0
Spot FX deals	0	4	0	0
Total	**162,775**	**206,542**	**3,257**	**8,122**
Credit derivatives[2]				
thereof purchases	*0*	*0*	*0*	*0*
thereof sales	*0*	*0*	*0*	*0*
Total	**0**	**0**	**0**	**0**

[1] Only caps and floors which are traded on a stand-alone basis
[2] In this case single name credit default swaps

Remaining life

Notional amounts	**Interest risks[1]**		**Currency risks**		**Credit derivatives[2]**	
	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019
	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions	EUR in millions
Due						
Within 3 months	11,594	11,533	41,408	48,943	0	0
Between 3 months and 1 year	48,200	49,533	29,535	46,201	0	0
Between 1 year and 5 years	281,879	250,074	71,953	83,415	0	0
In more than 5 years	206,337	185,806	19,879	27,983	0	0
Total	**548,011**	**496,947**	**162,775**	**206,542**	**0**	**0**

[1] Derivatives financial instruments are shown without embedded derivatives
[2] In this case single name credit default swaps

Counterparties

	Notional amounts	Notional amounts	Positive fair values	Negative fair values
	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2020
	EUR in millions	EUR in millions	EUR in millions	EUR in millions
OECD-banks	709,770	701,045	22,570	23,878
Banks outside the OECD	165	189	4	6
Other counterparties	0	0	0	0
Public authorities	850	2,255	0	27
Total	**710,786**	**703,488**	**22,574**	**23,911**

30) Hedge accounting within the meaning of Section 254 HGB

The following section describes hedge accounting within the meaning of Sections 254 and 285 No. 23 HGB.

The table below details the volume of securities held as fixed assets and as a liquidity reserve (current assets), which are hedged against interest risks as of the reporting date.

	Carrying amounts	Notional amounts	Fair values
	EUR in millions	EUR in millions	EUR in millions
Securities held as fixed assets			
Bonds and other fixed-income securities	27,580	27,099	28,065
Securities held as liquidity reserves			
Bonds and other fixed-income securities	3,690	4,232	5,013
Total	**31,270**	**31,331**	**33,078**

KfW uses derivatives to hedge open positions only. The option to apply hedge accounting for economic hedges is exercised with KFW's own holdings of securities as designated hedged items. The net hedge presentation method is applied to the effective portion of the hedge.

A portion of the securities held as fixed assets is hedged on a micro-basis against interest risks by designating primarily interest rate swaps as hedges of fixed-income securities. Thanks to identical terms of the hedged item and hedging instrument, the offsetting effect is demonstrated both prospectively and retrospectively using the critical terms match method. Through the use of the modified lower of cost or fair value principle for the fixed assets, only permanent impairment losses are recognised in the income statement.

The fixed-income securities held as a liquidity reserve are also hedged against interest risks using micro hedges (primarily interest rate swaps). Any expense related to the ineffective portion of the hedge is recognised in the income statement. In addition, hedging relationships are designated as part of the repurchase of own issues, with matching certificated liabilities as hedging instruments. Due to the negative correlation of fair value changes and the similar risks of the hedged item and the hedging instrument, changes in fair value and in cash flows of hedged items and hedging instruments largely offset one another as of the reporting date. Considering the long-term designation of the hedging relationships, the offsetting effects in relation to the hedged risk are expected to continue almost fully until the hedging relationships mature.

In addition to hedging relationships pursuant to Section 254 HGB, derivative financial instruments used to hedge interest risks in the banking book and the interest-bearing hedged items are included in asset liability management. KfW manages the interest margin or fair value of all interest-bearing transactions in the banking book as a whole. Hedging relationships are also included in the loss-free valuation of the banking book (BFA 3).

31) Loans in the name of third parties and for third party account

Loans in the name of third parties and for third party account totalled EUR 9.6 billion as of 31 December 2020 (2019: EUR 10.7 billion).

32) Personnel

The average number of employees can be broken down as follows:

	2020	**2019**
Female employees	2,808	2,568
Male employees	3,023	2,765
Staff not covered by collective agreements	*3,765*	*3,669*
Staff covered by collective agreements	*1,743*	*1,664*
Staff in external offices	*323*	*n.a.*
Total	**5,831**	**5,333**

A total of 321 employees worked in external offices in the previous year. These are not included in the staff headcount for 2019.

33) Transactions with related parties and affiliated companies

The conditions and prices between KfW and related parties and affiliated companies reflect market conditions or are concluded in accordance with KfW's general conditions for its loan programmes open to the general public.

34) Remuneration and loans to members of the Executive Board and the Board of Supervisory Directors

Annual compensation 2020	Salary EUR in thousands	Variable compensation EUR in thousands	Other compensation[2] EUR in thousands	Total EUR in thousands
Dr Günther Bräunig (Chief Executive Officer)	785.3	0.0	28.3	813.6
Dr Ingrid Hengster	564.9	0.0	37.8	602.7
Melanie Kehr	532.2	0.0	28.6	560.8
Bernd Loewen	629.5	0.0	36.1	665.6
Prof. Dr Joachim Nagel[1]	451.8	0.0	15.5	467.3
Dr Stefan Peiß	564.9	0.0	18.2	583.1
Total	**3,528.6**	**0.0**	**164.5**	**3,693.1**

[1] until 31 October 2020
[2] Other compensation mostly comprises the use of company cars and insurance premiums and the taxes on these amounts.

Remuneration to members of the Board of Supervisory Directors totalled EUR 209 thousand (incl. travel costs). This amount breaks down as follows:

Remuneration for the members of the Board of Supervisory Directors is EUR 5 thousand p.a. and members of the Credit, Executive and Audit Committees receive EUR 0.6 thousand p.a., all paid on a pro-rata basis for memberships that commence or end during the year. Remuneration to members of the Federal Government who are members of the Board of Supervisory Directors pursuant to Section 7 (1) No. 2 KfW Law was set at EUR 0 for financial year 2020. Moreover, remuneration for the Chair of the Board of KfW Supervisory Directors and his deputies was also set at EUR 0.

Provisions in the amount of EUR 60,380 thousand were set up as of 31 December 2020 for obligations under pension agreements for former members of the Executive Board and their surviving dependents (2019: EUR 62,984 thousand). The regular remuneration totalled EUR 4,540 thousand.

There were no loans to members of the Executive Board as of 31 December 2020.

35) Responsibilities of the Executive Board members

Dr Günther Bräunig (Chief Executive Officer)
General Secretariat, Group Development and Economics, Legal, Financial Markets (until 31 October 2020), Internal Auditing, KfW Development Bank (since 1 November 2020) and Sustainability

Dr Ingrid Hengster
Domestic Marketing and Digital Channels, Individualfinanzierung & Öffentliche Kunden (*Customised Finance & Public Clients*), Mittelstandsbank & Privatkunden (*SME Bank & Private Clients*), New Business Credit Service, KfW Capital, DEG (since 1 November 2020), Export and Project Finance (since 1 November 2020) and Central Services (until 31 October 2020)

Melanie Kehr
Information Technology, Transaction Management and Central Services (since 1 November 2020)

Bernd Loewen
Accounting, Organisation and Consulting, Human Resources, Portfolio Credit Service and Financial Markets (since 1 November 2020)

Prof. Dr Joachim Nagel (until 31 October 2020)
KfW Development Bank, DEG and Export and Project Finance

Dr Stefan Peiß
Risk Controlling, Credit Risk Management and Compliance

36) Group affiliation

KfW is included in the consolidated financial statements of KfW Group, Frankfurt am Main, as of 31 December 2020. The consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) and disclosed in German in the electronic Federal Gazette (*Bundesanzeiger*).

37) Events after the end of the financial year

No events of particular significance for the assessment of net assets, financial and earnings position of KfW occurred after the end of financial year 2020.

38) Mandates held by executive directors or other employees in supervisory boards of large corporations in accordance with Section 267 (3) HGB

Mandates held by Executive Board members
Dr Günther Bräunig (Chief Executive Officer)
Deutsche Post AG, Bonn
Deutsche Telekom AG, Bonn
Deutsche Pfandbriefbank AG, Munich

Dr Ingrid Hengster
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne (since 1 November 2020)
Deutsche Bahn AG, Berlin
KfW IPEX-Bank GmbH, Frankfurt am Main
ThyssenKrupp AG, Essen

Bernd Loewen
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne

Prof. Dr Joachim Nagel (until 31 October 2020)
DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne
KfW IPEX-Bank GmbH, Frankfurt am Main
Deutsche Börse AG, Frankfurt am Main (until 30 June 2020)

Dr Stefan Peiß
KfW IPEX-Bank GmbH, Frankfurt am Main

Mandates of other employees
Dr Lutz-Christian Funke
Eurogrid GmbH, Berlin
IKB – Deutsche Industriebank AG, Düsseldorf

Christian Krämer
ProCredit Holding AG & Co. KGaA, Frankfurt am Main

39) The bank's executive bodies

Board of Supervisory Directors

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

Executive Board

Frankfurt am Main, 23 February 2021

Dr Günther Bräunig
(Chief Executive Officer)

Dr Ingrid Hengster

Melanie Kehr

Bernd Loewen

Dr Stefan Peiß

Independent auditor's report[1)]

To KfW

Report on the audit of the annual financial statements and of the management report

Opinions

We have audited the annual financial statements of KfW, Frankfurt am Main, which comprise the statement of financial position as at December 31, 2020, the income statement for the fiscal year from January 1, 2020 to December 31, 2020, and notes to the financial statements, the recognition and measurement policies presented therein. In addition, we have audited the 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 declaration of compliance. 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 management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to business corporations and give a true and fair view of the assets, liabilities and financial position of the Company as at December 31, 2020 and of its financial performance for the fiscal year from January 1, 2020 to December 31, 2020 in compliance with German legally required accounting principles, and

- the accompanying management report as a whole provides an appropriate view of the Company's position. In all material respects, this management report is consistent with the annual 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 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 annual financial statements and of the management report.

Basis for the opinions

We conducted our audit of the annual financial statements and of the 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 annual financial statements and of the management report" section of our auditor's report. We are independent of the Company 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 annual financial statements and on the management report.

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 and

[1)] Translation of the independent auditor's report issued in German language on the annual financial statements prepared in German language by the Executive Board of KfW, Frankfurt am Main. The German language statements are decisive.

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 management report and the section "Key figures of KfW" of the Financial Report 2020, which we obtained prior to the date of this auditor's report.

Our opinions on the annual financial statements and on the 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 annual financial statements, with the 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 annual financial statements and the management report

The Executive Board is responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law applicable to business corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German legally required accounting principles. In addition, the Executive Board is responsible for such internal control as they, in accordance with German legally required accounting principles, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual financial statements, the Executive Board is responsible for assessing the Company'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, provided no actual or legal circumstances conflict therewith.

Furthermore, the Executive Board is responsible for the preparation of the management report that, as a whole, provides an appropriate view of the Company's position and is, in all material respects, consistent with the annual 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 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 management report.

The Board of Supervisory Directors is responsible for overseeing the Company's financial reporting process for the preparation of the annual financial statements and of the management report.

Auditor's responsibilities for the audit of the annual financial statements and of the management report

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company's position and, in all material respects, is consistent with the annual 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 annual financial statements and on the 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 annual financial statements and this 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 annual financial statements and of the 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 annual financial statements and of arrangements and measures (systems) relevant to the audit of the 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 Company'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 annual financial statements and in the 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 Company to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German legally required accounting principles.

- Evaluate the consistency of the management report with the annual financial statements, its conformity with [German] law, and the view of the Company's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the 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 annual financial statements and the 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 annual financial statements and the management report (hereinafter the "ESEF documents") contained in the attached electronic file "KfW_JA+LB_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 annual financial statements and the management report into the ESEF format and therefore relates neither to the information contained within this reproduction nor to any other information contained in the above-mentioned electronic file.

In our opinion, the reproduction of the annual financial statements and the 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 annual financial statements and the accompanying management report for the financial year from January 1, 2020 to December 31, 2020 contained in the "Auditor's report on the annual financial statements and on the management report" above.

Basis for the reasonable assurance opinion

We conducted our assurance work on the reproduction of the annual financial statements and the 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 "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 annual financial statements and the management report in accordance with Sec. 328 (1) Sentence 4 No. 1 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 annual financial statements and audited 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.

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 annual financial statements and to the audited management report.

Eschborn/Frankfurt am Main, 2 March 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Müller-Tronnier Wirtschaftsprüfer (German Public Auditor)	Koch Wirtschaftsprüfer (German Public Auditor)

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