Volksbanken Raiffeisenbanken
cooperative financial network

# 2020
# Half-Year Financial Report

DZ BANK Group

# Contents

Uwe Fröhlich (left) and Dr. Cornelius Riese, Co-Chief Executive Officers

Dear Shareholders,

The COVID-19 pandemic is currently dominating public life and economic realities worldwide. The DZ BANK Group has so far coped well with the effects of this unique situation. Our position as a broadly diversified financial services group has once again proved to be a source of stability. We generated a profit before taxes of €557 million in the first half of 2020 (first half of 2019: €1.46 billion).

The past months have been characterized by a whole host of challenges – including some entirely new ones – both for us and our customers. Our dedicated employees and highly efficient IT infrastructure enabled us to maintain stable operations at all times. For many of our customers we served as a channel for development loans from Germany's KfW development bank and enabled them to access the development loans and subsidies available from KfW. In a short space of time, we processed around 32,000 applications with a total volume of more than €8 billion by working closely with the cooperative banks. We also received applications for loans totaling €1.8 billion in our direct business. Trust and partnership continued to grow thanks to this reliable collaboration in these unprecedented times.

The operating business of most of the entities in our banking group performed well. Within the scope of our 'Verbund First 4.0' strategic program, we are working intensively to improve our cost and earnings situation and are continuing to successfully pursue our growth strategy. The central institution and corporate bank experienced strong demand in its function as a lender to companies, an intermediary for capital market funding, and a market leader for payments processing. We are optimistic that we will be able to capture further market share in these areas once again in 2020. Union Investment recorded stable inflows thanks to sustained demand for fund investments. R+V Versicherung's customer business was brisk and it saw a rise in premiums earned in all insurance divisions.

The bouts of turmoil in the financial markets affected the DZ BANK Group as a major institutional investor negatively. This was primarily reflected in valuation effects, particularly in DZ HYP's government bond portfolio and R+V Versicherung's gains and losses on investments held by insurance companies. The capital markets' recovery in the second quarter slightly reduced these adverse effects overall. The severe global economic downturn – which especially affected the international movement of goods – led to an increase in loss allowances, most notably in the maritime portfolio of DVB Bank.

The key results in detail:

The DZ BANK Group's **net interest income** amounted to €1.51 billion, which was higher than the figure for the first half of 2019 of €1.33 billion. Net interest income increased substantially at the central institution and corporate bank and at DZ HYP on the back of growth, whereas DVB Bank's net interest income decreased sharply due to the scaling back of its portfolio. **Net fee and commission income** rose to €1.05 billion thanks to the healthy performance of the central institution and corporate bank and stable inflows at Union Investment (first half of 2019: €958 million). **Gains and losses on trading activities** improved to a net gain of €539 million (first half of 2019: net gain of €141 million). One of the contributing factors was the robust level of capital markets business in the central institution and corporate bank, which supported numerous transactions in bond issuance business. **Gains and losses on investments** amounted to a net loss of €15 million (first half of 2019: net gain of €130 million). This decline was mainly due to the inclusion in the prior-year figure of positive non-recurring items. The net loss of €247 million reported under **other gains and losses on valuation of financial instruments** (first half of 2019: net gain of €126 million) was primarily attributable to negative valuation effects at DZ HYP and DVB Bank. These effects were caused by the movements in the capital markets triggered by the COVID-19 pandemic. This also affected R+V Versicherung's gains and losses on investments held by insurance companies. **Net income from insurance business** fell from the exceptionally high level of €761 million in the first half of 2019 to €124 million in the reporting period. **Loss allowances** stood at €522 million (first half of 2019: €105 million). Apart from the increased allowances required at DVB Bank, there was also an addition of €165 million due to an IFRS 9-related update to the macroeconomic forecasts as a result of the COVID-19 pandemic. At €2.02 billion, **administrative expenses** went down slightly thanks to strict cost management (first half of 2019: €2.05 billion).

The DZ BANK Group's robust business performance reflects the high level of dedication shown by our employees. We would like to express our thanks and appreciation to them.

The capital situation of our banking group remains sound. The common equity Tier 1 capital ratio stood at 14.0 percent as at June 30, 2020 (December 31, 2019: 14.4 percent); the leverage ratio was 4.6 percent. DZ BANK also strengthened its hybrid capital base. Following the issue of AT1 bonds amounting to €1.4 billion in 2019, Tier 2 bonds with a volume of €1.2 billion were successfully placed in July 2020. Looking at our financial situation and capacity adequacy, we continue to believe that it is reasonable to pay a dividend for 2019. In accordance with the recommendation of the European Central Bank, we will make a decision in 2021 on the appropriation of profits for 2019.

The DZ BANK Group has maintained a strategic focus on its core business in recent years and successfully completed major transactions – such as the sale of the aviation finance portfolio at the end of 2019 – in line with this strategy. The Group is in very good shape to tackle the challenges that lie ahead. Moreover, we are seeing strong and sustained demand in our operating business at the start of the second half of the year. Nevertheless, 2020 as a whole will be marked by the deepest recession of the past 75 years. Although the German government quickly took appropriate countermeasures, further significant difficulties are likely to emerge. The number of company insolvencies will probably continue to rise. A renewed flare-up of market volatility would take a further toll on earnings. Against this backdrop, we anticipate a moderate increase in earnings in the second half of this year but are unlikely to achieve a profit before taxes of €1 billion in 2020 as a whole.

Looking ahead, we want to continue generating sustainable and profitable growth. The past few months have shown that we were right to formulate an agenda combining growth and efficiency – 'Verbund First 4.0' – that focuses on aspects such as digitization and close collaboration within the cooperative financial network.

Thanks to these efforts, we were able to increase our number of customers yet again and strengthen our relationships with existing customers. The lending volume in corporate banking increased by 9 percent year on year, while income from cross selling rose by 13 percent. In transaction banking, we are seeing strong growth in areas such as card processing and securities business; as one of the leading providers in the market, we are actively contributing to future-driven initiatives such as #DK and the European Payment Initiative (EPI). At the same time, we are working closely with all customer groups – cooperative banks, institutional customers, and corporate customers – to systematically refine our successful capital markets business.

Sustainability-oriented financial services are another major area of growth. Regulatory initiatives and the ever-broader public discourse on sustainability matters are strengthening this trend. We are seizing the business opportunities that are opening up as a result. In capital markets business, for example, we launched the world's first COVID-19 social bond on the market and are therefore playing our part as a bank in tackling the social and economic consequences of the crisis. We are also a signatory to the Principles for Responsible Banking and thus helping to support the sustainable development goals of the United Nations.

The cooperative organization has always regarded periods of upheaval as an opportunity to make an entrepreneurial contribution. Although the further course of the pandemic and the longer-term economic impact represent an equation with many unknowns, we possess the intrinsic resilience to overcome the challenges and emerge stronger from this crisis.

Kind regards,

Uwe Fröhlich
Co-Chief Executive Officer

Dr. Cornelius Riese
Co-Chief Executive Officer

# Interim group management report

**Note**

The figures in this report are rounded to the nearest whole number. This may give rise to small discrepancies between the totals shown in the tables and diagrams and totals calculated from the individual values shown.

# I DZ BANK Group fundamentals

## 1 Business model and strategic focus

The business model and strategic focus of the DZ BANK Group are described in detail on page 10 onward of the 2019 Annual Report. Those disclosures are also applicable to the first half of 2020.

### 1.1 Impact of the COVID-19 pandemic on the DZ BANK Group's strategic focus

The DZ BANK Group did not need to significantly adjust its strategic focus as a network-oriented central institution and financial services group as a result of the COVID-19 pandemic. Business activities continue to be centered on the local cooperative banks and their customers.

Nevertheless, the entities in the DZ BANK Group responded to the changed market conditions by taking various measures and adapting their product ranges. Nearly all sales activities were moved to digital channels owing to the social distancing requirements introduced in connection with the crisis.

Within the DZ BANK Group, precautionary measures were coordinated and implemented to ensure operational stability. The technical options for working from home were extended across the group. As a result, around 90 percent of employees were working from home at times, without any restriction on business. During the crisis, DZ BANK's committees were kept up to date on the latest situation and were able to make decisions at all times by holding virtual meetings, including extra meetings added to the usual schedule.

In April 2020, R+V Versicherung AG, Wiesbaden, (R+V Versicherung; subgroup abbreviated to R+V) participated in an initiative of the German government aimed at maintaining credit insurance and ensuring the movement of goods. The voucher portal set up by the cooperative financial network, VR-ExtraPlus Hilft, enables small and medium-sized enterprises to offer vouchers to their customers, in particular when their business has to close due to coronavirus. R+V supports the portal by providing integrated insolvency cover for the vouchers.

The options introduced before the COVID-19 pandemic designed to make it easier for customers of TeamBank AG Nürnberg, Nuremberg, (TeamBank) to repay loans were expanded in view of the pandemic. Other entities in the DZ BANK Group implemented similar measures.

Since the end of March 2020, VR Smart Finanz AG, Eschborn, (VR Smart Finanz) has been offering the 'VR Smart flexibel Förderkredit' development loan, which can be taken out through the local cooperative banks under 'Emergency program 2020 for established and young companies', a government-backed program provided by Kreditanstalt für Wiederaufbau (KfW) that offers immediate support for both established and new companies. VR Smart Finanz thus enables customers of the cooperative banks to submit an automated loan application for up to €100,000 and is supporting the growing digital sales trend, which has gathered pace during the COVID-19 pandemic.

In the first half of this year, DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK) particularly focused on development lending business in order to meet the requirements for implementation of the various government support programs. In this role, it acts as a processing point and channel between the development banks and cooperative banks. DZ BANK continued its 'Verbund First 4.0' strategic program, first established in 2018, without change. As part of the program, improvements to the market offering, control and production processes, and corporate culture were addressed and action plans were initiated as part of 28 defined implementation packages.

### 1.2 Refinement of DZ BANK's governance structure

Following its merger with the former WGZ BANK in 2016, DZ BANK refined its governance structure along the lines of a holding company model. To this end, it set up a Central Advisory Council in 2018 and separated responsibility for the holding company activities and for the central institution and corporate bank activities within DZ BANK. The examination of the legal configuration, particularly with regard to separating DZ BANK's individual functions into two legal entities, was completed in the first half of 2020. All committees decided unanimously that the legal separation would not be pursued further.

## 2 Management of the DZ BANK Group

The management of the DZ BANK Group is described in detail on page 16 onward of the 2019 Annual Report. Those disclosures are also applicable to the first half of 2020.

# II Business report

## 1 Economic conditions

The first half of 2020 was dominated by the crisis resulting from the COVID-19 pandemic and the related restrictions on economic activity. Adjusted for inflation, average overall economic output in the first half of this year slumped by 7.0 percent compared with the second half of 2019. By contrast, it had been 0.5 percent higher in the first half of 2019 than in the second half of 2018.

German economic output in the first quarter of 2020 was down by 2.0 percent compared with the preceding quarter. In the second quarter of this year, it contracted by 10.1 percent.

From mid-March 2020, many shops and factories had to shut down because of the COVID-19 pandemic, thereby restricting economic activity. This led to a reduction in consumer spending, and companies scaled back their capital expenditure. The pandemic also resulted in a fall in demand from other countries. The aforementioned restrictions began to be eased in May 2020, paving the way for a piecemeal economic recovery.

The economy of the eurozone also slumped in the first six months of 2020. Following a 0.4 percent rise in gross domestic product (GDP) in the second half of 2019 compared with the first half of 2019, the eurozone's economic output shrank by 9.4 percent in the period under review. GDP decreased by 3.6 percent in the first quarter of 2020. In the second quarter, GDP fell by 12.1 percent compared with the previous quarter.

The adverse impact of the pandemic on the US economy was similar to that on its European counterpart. During the months of spring, employment declined at an even faster rate than in the eurozone but also rose again more quickly when the lockdown was eased. The restrictions imposed to contain the COVID-19 pandemic in the United States also resulted in lower levels of consumer spending, capital spending on plant and equipment, and foreign trade.

China was affected by the pandemic earlier than Europe and the United States. The adverse impact on the Chinese economy was primarily felt in the first quarter of 2020 and it began to recover in the second quarter. The economic problems caused by the pandemic and efforts to contain it also dominated conditions in other emerging markets during the reporting period. Brazil and Russia were particularly hard hit, as was India.

## 2 The banking industry amid continued efforts to stabilize the economy of the eurozone

The main focus in the first half of 2020 was on dealing with the economic impact – and the resulting recession – of the action taken to contain the spread of the COVID-19 pandemic. In Europe, EU member states responded to the economic crash with fiscal packages at national level and negotiated a European recovery fund as a way of providing economic support. The European Central Bank (ECB) stepped up its already expansionary monetary policy by launching the pandemic emergency purchase program (PEPP).

The COVID-19 virus, which first emerged in China at the end of 2019 and developed into a worldwide pandemic from January 2020 onward, necessitated international efforts to contain the outbreak. Although these slowed the spread of the disease, they also had a significant negative impact on the global economy. Prices fell in the international equity markets and spreads widened in the bond markets. Following a decrease in the number of new cases and in conjunction with steps taken to prevent the spread of infection, individual countries began to ease some of their lockdown measures from the middle of the second quarter of 2020 in order to mitigate the economic fallout.

The policy of 'America first', which has been pursued by the US government for some years, was continued in the reporting period. This was particularly evident from relations between the United States and China. The trade dispute between the two countries faded into the background for a while, after US President Donald Trump and Chinese Vice Premier Liu He signed a trade agreement on January 15, 2020 and also due to the subsequent distraction of the challenges created by the coronavirus crisis. Since May 2020, however, the United States has introduced new measures that not only affect its trade relations with China but also are designed to make it more difficult for China to access the US capital markets. In addition, the United States has imposed further restrictions on China's access to key technologies. The reporting period saw a continuation of the trade dispute between the United States and EU concerning the potential introduction of further US tariffs on selected goods from the EU with the aim of reducing the US trade deficit.

Some EU countries still did not meet the target for reducing new and overall indebtedness in compliance with the stability criteria specified in the Fiscal Compact agreed by the EU member states at the beginning of 2012. In the Fiscal Compact, the signatory countries committed to reducing their debt (as a proportion of GDP) each year by one twentieth of the difference between the debt level and the Maastricht limit of 60 percent of GDP.

At the end of the first quarter of 2020, the total borrowing of the 19 eurozone countries equated to 86.3 percent of their GDP, a year-on-year decrease of 0.1 percentage points compared with the figure of 86.4 percent as at March 31, 2019.

Greece's public debt as a percentage of GDP was 176.7 percent in the first quarter of 2020 (first quarter of 2019: 182.0 percent). Since mid-2019, Greece has had a conservative government headed by Prime Minister Kyriakos Mitsotakis of the Nea Dimokratia (ND) party. The policies of the ND encompass reforms to stimulate growth, such as cuts in both direct and indirect taxes as well as in social security contributions. The coronavirus crisis particularly impacted on Greece's tourism industry due to the international travel restrictions. Other sectors of the economy were less affected because of the lower number of coronavirus cases in the country than in other EU member states.

Since September 2019, Italy's government has consisted of the populist Five Star Movement, the social democratic Partito Democratico, and the Movimento Associativo Italiani all'Estero under the leadership of Giuseppe Conte. The coronavirus crisis threw the spotlight on Italy's calls for greater financial solidarity in the eurozone. Italy's public debt as a percentage of GDP stood at 137.6 percent in the first quarter of 2020 (first quarter of 2019: 136.4 percent), which is the highest in the eurozone after that of Greece. In the eurozone, Italy and Spain were the worst affected by the coronavirus crisis because the lockdowns and related shutdowns of business lasted longer than in other eurozone countries.

Portugal's economy, which relies on the tourism industry, was affected by the measures taken to contain COVID-19 because of the absence of tourists at the start of the summer season. The country's consumer spending also slumped as the Portuguese government introduced restrictions on public life at a relatively early stage. Portugal's public debt as a percentage of GDP was 120.0 percent in the first quarter of 2020, compared with 123.4 percent in the first quarter of 2019.

Spain is ruled by a minority government led by Prime Minister Pedro Sánchez from the socialist workers' party. In the reporting period, Spain and Italy were the eurozone countries that were the worst affected by the coronavirus crisis. To soften the economic impact, the government signed off an economic stimulus package that equates to around 20 percent of annual economic output in total. In Spain, public debt as a percentage of GDP stood at 98.8 percent in the first quarter of 2020 (first quarter of 2019: 98.6 percent).

France's President Macron is in the third year of his five-year term. When he took office, he announced a raft of pro-business reforms, including an overhaul of pensions. Public resistance to the government's policies, however, caused the reform process to stall. France's public debt as a percentage of GDP was 101.2 percent in the first quarter of 2020 (first quarter of 2019: 99.3 percent). The French economy was also adversely affected by the measures taken to limit the spread of COVID-19 in the reporting period.

The trends in the eurozone described above show that the ECB with its policy of quantitative easing is continuing to support the markets for government bonds and creating the necessary time for the European Monetary Union (EMU) countries burdened with significant debt to reduce their budget deficits.

Nonetheless, the countries specified above have not made sufficient efforts to reduce their high levels of indebtedness, which are above the Maastricht limit of 60 percent, or to bring in the necessary structural reforms. The benefit from the current low level of interest rates is reducing the impact from the debt burden and having the effect of decreasing various EMU countries' efforts to implement austerity measures.

The ECB's present policy of zero and negative interest rates is making it harder for savers to build up capital and, therefore, to ensure they have adequate provision for old age. At its meeting on June 4, 2020, the ECB decided to leave the rate for the deposit facility at minus 0.50 percent. The main refinancing rate remained the same at 0.00 percent, while the rate for the marginal lending facility was also unchanged at 0.25 percent. The deposit facility rate, which has applied since September 12, 2019, meant that banks had to pay a higher negative interest rate on their deposits with the ECB. To mitigate the adverse impact on banks, the ECB introduced a two-tier system for remunerating excess reserve holdings, under which some of banks' excess liquidity is exempted from the negative deposit rate. The ECB Governing Council let it be known that the ECB's key interest rates would remain at their current or a lower level until the inflation outlook is clearly approaching the target level of inflation, i.e. close to, but below, 2 percent. The Council also decided that net purchases under PEPP would be increased by €600.0 billion to a total of €1,350.0 billion until at least the end of June 2021. Net purchases under the asset purchase program (APP), which have a monthly volume of €20.0 billion, and the temporary envelope of additional net asset purchases of €120.0 billion will continue until the end of 2020.

The ECB's asset purchase program has attracted controversy. At the start of May 2020, the German Federal Constitutional Court ruled that the ECB's public sector purchase program (PSPP) for buying government bonds partly violated the German Basic Law. The court said that the ECB had not sufficiently checked and demonstrated that the program was proportionate. The ECB was given a three-month deadline to prove that it was. Otherwise, Deutsche Bundesbank would no longer be allowed to participate in the program. The required evidence was then compiled and approved for submission to the German government during the non-monetary policy meeting of the ECB Governing Council on June 24, 2020.

On March 16, 2020, the US Federal Reserve (Fed) announced a rate cut of 100 basis points. At a meeting on June 10, 2020, the majority of the members of the Federal Open Market Committee (FOMC) expressed their expectation that key interest rates could remain unchanged until the end of 2022. The federal funds rate is currently in the range of 0 to 0.25 percent. In response to COVID-19, the Fed also decided to increase its bond purchases. On top of the volume of existing purchases of more than US$ 2,300.0 billion, the US central bank can buy an unlimited volume of government bonds and mortgage-backed securities every month (March 2020: US$ 517.0 billion; April 2020: US$ 1,213.0 billion; May 2020: US$ 368.0 billion, and June 2020: US$ 196.0 billion). The Fed also launched various emergency programs, known as facilities, in order to maintain the flow of credit to companies, consumers, and federal states.

## 3 Financial performance

### 3.1 Financial performance at a glance

Despite the challenging market conditions resulting from the effects of the COVID-19 pandemic and the continuation of extremely low interest rates, the DZ BANK Group was able to report a profit before taxes of €557 million in the first half of 2020.

The year-on-year changes in the key figures that make up the net profit generated by the DZ BANK Group compared with the first half of 2019 were as described below.

FIG. 1 – INCOME STATEMENT

| € million | Jan. 1–Jun. 30, 2020 | Jan. 1–Jun. 30, 2019 | Change (%) |
|---|---|---|---|
| **Net interest income** | **1,505** | 1,332 [1] | +13.0 |
| of which: net income from long-term equity investments [2] | 62 | 28 | > 100.0 |
| **Net fee and commission income** | **1,052** | 958 | +9.8 |
| **Gains and losses on trading activities** | **539** | 141 | >100.0 |
| **Gains and losses on investments** | **-15** | 130 | >100.0 |
| **Other gains and losses on valuation of financial instruments** | **-247** | 126 [1] | >100.0 |
| **Gains and losses from the derecognition of financial assets measured at amortized cost** | **7** | 15 | -53.3 |
| **Net income from insurance business** | **124** | 761 | -83.7 |
| **Loss allowances** | **-522** | -105 | >100.0 |
| **Administrative expenses** | **-2,016** | -2,046 | -1.5 |
| Staff expenses | -924 | -923 | +0.1 |
| Other administrative expenses [3] | -1,092 | -1,123 | -2.8 |
| **Other net operating income** | **130** | 152 | -14.5 |
| **Profit before taxes** | **557** | 1,464 | -62.0 |
| **Income taxes** | **-185** | -430 | -57.0 |
| **Net profit** | **372** | 1,034 | -64.0 |

1 Amount restated (see note 2 in the notes to the interim consolidated financial statements).
2 Total of current income and expense from income from other shareholdings, current income and expense from investments in subsidiaries, current income and expense from investments in associates, income/loss from using the equity method, and income from profit-pooling, profit-transfer, and partial profit-transfer agreements; see note 5 in the notes to the interim consolidated financial statements.
3 General and administrative expenses plus depreciation/amortization expense.

**Operating income** in the DZ BANK Group amounted to €3,095 million (first half of 2019: €3,615 million). This figure comprises net interest income, net fee and commission income, gains and losses on trading activities, gains and losses on investments, other gains and losses on valuation of financial instruments, gains and losses from the derecognition of financial assets measured at amortized cost, net income from insurance business, and other net operating income.

**Net interest income** (including net income from long-term equity investments) in the DZ BANK Group rose by 13.0 percent year on year to €1,505 million (first half of 2019: €1,332 million).

In the first half of 2019, net interest income at BSH had fallen as a consequence of the increase in the provisions relating to building society operations as described in the details for the BSH operating segment. In the reporting period, however, BSH's net interest income went up by €115 million. Net interest income rose by €9 million at TeamBank, by €53 million at DZ BANK – CICB, by €49 million at DZ HYP, and by €14 million at DZ PRIVATBANK. However, net interest income fell by €82 million at DVB.

Net income from long-term equity investments in the DZ BANK Group climbed by €34 million to €62 million (first half of 2019: €28 million). This was due to the higher valuation, using the equity method, of Deutsche WertpapierService Bank AG, Frankfurt am Main, compared with the first half of 2019.

**Net fee and commission income** in the DZ BANK Group increased by 9.8 percent to €1,052 million (first half of 2019: €958 million).

Net fee and commission income advanced by €10 million at BSH, by €62 million at UMH, by €32 million at DZ BANK – CICB, and by €8 million at DZ PRIVATBANK. Conversely, net fee and commission income declined by €10 million at VR Smart Finanz and by €11 million at DVB.

The DZ BANK Group's **gains and losses on trading activities** came to a net gain of €539 million, compared with a net gain of €141 million in the first half of 2019. This was largely attributable to the gains and losses on trading activities at DZ BANK – CICB, amounting to a net gain of €521 million (first half of 2019: net gain of €130 million).

**Gains and losses on investments** deteriorated by €145 million to a net loss of €15 million (first half of 2019: net gain of €130 million). This change was primarily attributable to the BSH operating segment, following the write-down on the carrying amount of the long-term equity investment in Slovakian building society PSS in the reporting period and the positive effect of the disposal of the shares in Czech building society ČMSS in the prior-year period.

**Other gains and losses on valuation of financial instruments** in the DZ BANK Group amounted to a net loss of €247 million in the first half of 2020 (first half of 2019: net gain of €126 million).

At BSH, other gains and losses on valuation of financial instruments went down by €11 million. The decrease at UMH was €101 million and resulted from higher losses related to the valuation of guarantee commitments and a negative contribution from the valuation of own-account investments at fair value. DZ BANK – CICB reported a decline of €17 million. Other gains and losses on valuation of financial instruments decreased by €196 million at DZ HYP, largely as a result of the widening of spreads on bonds issued by eurozone periphery countries. At DVB, they fell by €52 million. The specific reasons for the change in other gains and losses on valuation of financial instruments compared with the prior-year period were the factors described in the details for these operating segments.

**Gains and losses from the derecognition of financial assets measured at amortized cost** declined by €8 million to a net gain of €7 million (first half of 2019: net gain of €15 million). This was primarily attributable to the decrease of €12 million in the DZ BANK – CICB operating segment.

The DZ BANK Group's **net income from insurance** business comprises premiums earned, gains and losses on investments held by insurance companies and other insurance company gains and losses, insurance benefit payments, insurance business operating expenses, and gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business. In the first half of 2020, this figure went down by €637 million to €124 million (first half of 2019: €761 million).

This year-on-year fall was primarily attributable to the changes, described in the details for the R+V operating segment, in premiums earned, gains and losses on investments held by insurance companies and other insurance company gains and losses, and insurance benefit payments.

**Loss allowances** amounted to a net addition of €522 million (first half of 2019: net addition of €105 million). Updates to macroeconomic forecasts as a result of the COVID-19 pandemic gave rise to additions of €165 million.

Further disclosures on the nature and extent of risks arising from financial instruments and insurance contracts can be found in note 44 in the notes to the interim consolidated financial statements.

**Administrative expenses** in the DZ BANK Group decreased by €30 million to €2,016 million (first half of 2019: €2,046 million). Staff expenses amounted to €924 million (first half of 2019: €923 million). Other administrative expenses went down by €31 million to €1,092 million (first half of 2019: €1,123 million). The year-on-year change in administrative expenses can be explained by the factors described in the details for the individual operating segments.

The DZ BANK Group's **other net operating income** came to €130 million (first half of 2019: €152 million).

Other net operating income improved by €17 million at R+V, by €47 million at DVB, and by €21 million in the Other/Consolidation segment. By contrast, it fell by €21 million at BSH, by €67 million at UMH, by €4 million at DZ BANK – CICB, and by €16 million at VR Smart Finanz.

**Profit before taxes** for the first half of 2020 stood at €557 million, compared with €1,464 million in the first half of 2019.

The DZ BANK Group's **cost/income ratio** (i.e. the ratio of administrative expenses to operating income) for the reporting period came to 65.1 percent (first half of 2019: 56.6 percent).

The **regulatory return on risk-adjusted capital (RORAC)** was 5.3 percent (first half of 2019: 17.0 percent).

The DZ BANK Group's **income taxes** amounted to €185 million in the period under review (first half of 2019: €430 million).

**Net profit** for the first half of 2020 was €372 million, compared with €1,034 million in the first half of 2019.

### 3.2 Financial performance in detail

Figure 2 below shows the details of the financial performance of the DZ BANK Group's operating segments in the first half of 2020 compared with the corresponding period of 2019.

Segmentation is fundamentally based on the integrated risk and capital management system in the DZ BANK Group, the function of which is to create transparency, notably in respect of the risk structure and risk-bearing capacity of the individual management units in the group. The segment information presents separate disclosures for the management units DZ HYP AG, Hamburg/Münster, (DZ HYP), TeamBank AG Nürnberg, Nuremberg, (TeamBank), DZ PRIVATBANK, and the BSH, DVB, R+V, UMH, and VR Smart Finanz subgroups together with comparative figures for the prior-year period.

Since 2019, the previous DZ BANK management unit has been broken down into central institution and corporate bank (DZ BANK – CICB) and the group management function (DZ BANK – holding function) because of changes to the internal management structure and the associated modification of the internal reporting system. The related reorganization of the management units in the internal reporting system has been adopted for the presentation of the operating segments. The DZ BANK – CICB operating segment comprises the cooperative central institution function, which supports the operating activities of the local cooperative banks, and the corporate bank function. DZ BANK – holding function is mainly used to pool tasks carried out on behalf of the DZ BANK Group in relation to commercial law, tax, and prudential supervision. The total assets of DZ BANK – holding function include the equity, plus a number of other items such as a notional carrying amount for the long-term equity investment in DZ BANK – CICB, together with the carrying amounts of the long-term equity investments in the other management units. The notional long-term equity investment in DZ BANK – CICB is measured in an amount equating to 11 percent of the risk-weighted assets of DZ BANK – CICB. The dividend payments of the management units and the intragroup income relating to the liabilities to dormant partners, which were previously included in the DZ BANK operating segment, have been reported under Other/Consolidation since 2019. The relevant consolidation activities are still included under Other/Consolidation. DZ BANK – holding function does not constitute an operating segment within the meaning of IFRS 8.5 but is presented separately in line with the internal reporting structure. The figures for the prior-year period have been restated accordingly. All other companies in the DZ BANK Group, which are not required to provide regular quantitative reports to the chief operating decision-makers, and the consolidations are reported on an aggregated basis under Other/Consolidation.

FIG. 2 – SEGMENT INFORMATION

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2020

| € million | BSH | R+V | TeamBank | UMH |
|---|---|---|---|---|
| Net interest income | 332 | - | 248 | 7 |
| Net fee and commission income | -5 | - | -15 | 768 |
| Gains and losses on trading activities | - | - | - | - |
| Gains and losses on investments | -20 | - | - | -6 |
| Other gains and losses on valuation of financial instruments | 6 | - | -1 | -81 |
| Gains and losses from the derecognition of financial assets measured at amortized co st | 11 | - | - | - |
| Premiums earned | - | 9,221 | - | - |
| Gains and losses on investments held by insurance companies and other insurance company gains and losses | - | -622 | - | - |
| Insurance benefit payments | - | -6,883 | - | - |
| Insurance business operating expenses | - | -1,617 | - | - |
| Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business | - | -10 | - | - |
| Loss allowances | -13 | - | -71 | - |
| Administrative expenses | -253 | - | -119 | -442 |
| Other net operating income | 17 | 13 | 7 | 18 |
| **Profit/loss before taxes** | **75** | **102** | **49** | **264** |
| Cost/income ratio (%) | 74.2 | - | 49.8 | 62.6 |
| Regulatory RORAC (%) | 12.7 | 1.9 | 17.2 | >100.0 |
| Average own funds/solvency requirement | 1,184 | 10,877 | 571 | 420 |
| Total assets/total equity and liabilities as at Jun. 30, 2020 | 79,001 | 123,547 | 9,383 | 2,720 |

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2019

| € million | BSH | R+V | TeamBank | UMH |
|---|---|---|---|---|
| Net interest income [1] | 217 | - | 239 | 9 |
| Net fee and commission income | -15 | - | -11 | 706 |
| Gains and losses on trading activities | - | - | - | - |
| Gains and losses on investments | 120 | - | - | - |
| Other gains and losses on valuation of financial instruments [1] | 17 | - | - | 20 |
| Gains and losses from the derecognition of financial assets measured at amortized cost | 15 | - | - | - |
| Premiums earned | - | 8,328 | - | - |
| Gains and losses on investments held by insurance companies and other insurance company gains and losses | - | 3,551 | - | - |
| Insurance benefit payments | - | -9,634 | - | - |
| Insurance business operating expenses | - | -1,524 | - | - |
| Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business | - | -6 | - | - |
| Loss allowances | 6 | - | -54 | - |
| Administrative expenses | -249 | - | -114 | -436 |
| Other net operating income | 38 | -4 | 3 | 85 |
| **Profit/loss before taxes** | **149** | **711** | **63** | **384** |
| Cost/income ratio (%) | 63.5 | - | 49.4 | 53.2 |
| Regulatory RORAC (%) | 26.2 | 18.0 | 26.3 | >100.0 |
| Average own funds/solvency requirement | 1,139 | 7,923 | 482 | 339 |
| Total assets/total equity and liabilities as at Dec. 31, 2019 [1] | 77,469 | 121,973 | 9,455 | 3,012 |

[1] Amount restated (see note 2 in the notes to the interim consolidated financial statements).

| | DZ BANK – CICB | DZ HYP | DZ PRIVAT-BANK | VR Smart Finanz | DVB | DZ BANK – holding function | Other/ Consolidation | **Total** |
|---|---|---|---|---|---|---|---|---|
| | 414 | 358 | 44 | 72 | 20 | -23 | 33 | 1,505 |
| | 230 | 1 | 93 | -11 | 16 | - | -25 | 1,052 |
| | 521 | 5 | 9 | - | 2 | - | 2 | 539 |
| | 2 | 1 | - | - | - | - | 8 | -15 |
| | 7 | -126 | -1 | - | -68 | - | 17 | -247 |
| | 3 | - | - | - | - | - | -7 | 7 |
| | - | - | - | - | - | - | - | 9,221 |
| | - | - | - | - | - | - | -29 | -651 |
| | - | - | - | - | - | - | - | -6,883 |
| | - | - | - | - | - | - | 64 | -1,553 |
| | - | - | - | - | - | - | - | -10 |
| | -256 | -6 | -1 | -26 | -148 | - | -1 | -522 |
| | -643 | -135 | -121 | -52 | -78 | -101 | -72 | -2,016 |
| | 7 | 8 | 4 | -7 | 28 | - | 35 | 130 |
| | **285** | **106** | **27** | **-24** | **-228** | **-124** | **25** | **557** |
| | 54.3 | 54.7 | 81.2 | 96.3 | >100.0 | - | - | 65.1 |
| | 10.5 | 13.3 | 13.7 | -17.1 | >100.0 | - | - | 5.3 |
| | 5,438 | 1,597 | 400 | 276 | 166 | - | - | 20,929 |
| | 331,923 | 94,997 | 19,003 | 4,186 | 11,852 | 20,383 | -92,799 | 604,196 |

| | DZ BANK – CICB | DZ HYP | DZ PRIVAT-BANK | VR Smart Finanz | DVB | DZ BANK – holding function | Other/ Consolidation | **Total** |
|---|---|---|---|---|---|---|---|---|
| | 361 | 309 | 30 | 75 | 102 | -31 | 21 | 1,332 |
| | 198 | 1 | 85 | -1 | 27 | - | -32 | 958 |
| | 130 | 1 | 4 | - | -4 | - | 10 | 141 |
| | -2 | 10 | - | - | 2 | - | - | 130 |
| | 24 | 70 | 5 | - | -16 | - | 6 | 126 |
| | 15 | - | - | - | - | - | -15 | 15 |
| | - | - | - | - | - | - | - | 8,328 |
| | - | - | - | - | - | - | -35 | 3,516 |
| | - | - | - | - | - | - | - | -9,634 |
| | - | - | - | - | - | - | 81 | -1,443 |
| | - | - | - | - | - | - | - | -6 |
| | 1 | 4 | - | -12 | -50 | - | - | -105 |
| | -641 | -139 | -114 | -70 | -109 | -107 | -67 | -2,046 |
| | 11 | 12 | 3 | 9 | -19 | - | 14 | 152 |
| | **97** | **268** | **13** | **1** | **-67** | **-138** | **-17** | **1,464** |
| | 87.0 | 34.5 | 89.8 | 84.3 | >100.0 | - | - | 56.6 |
| | 3.9 | 35.8 | 8.4 | 0.7 | -42.7 | - | - | 17.0 |
| | 4,928 | 1,505 | 308 | 305 | 289 | - | - | 17,218 |
| | 288,841 | 92,377 | 19,464 | 4,283 | 14,239 | 20,191 | -91,832 | 559,472 |

### 3.2.1 BSH

**Net interest income** in the BSH subgroup improved by €115 million to €332 million (first half of 2019: €217 million).

In the first half of 2019, net interest income had been influenced by an additional expense of €153 million resulting from the increase in provisions relating to building society operations and thus by a rise in interest expense. This largely reflected discounted future obligations of BSH to make payments in the form of loyalty bonuses or premiums to those home savings customers who decline to take up the contractually agreed loans. In the period under review, however, there was no additional expense resulting from additions to provisions relating to building society operations.

The reason for the overall decrease in net interest income was the persistently low level of interest rates. At the end of the reporting period, the 10-year swap rate was minus 0.17 percent (June 30, 2019: 0.18 percent).

Interest income arising on investments declined by €32 million to €228 million (first half of 2019: €260 million) because capital market rates for investments remained low. Net interest income was also adversely impacted by an increase of €18 million in fees and commissions directly assignable to the acquisition of home savings contracts and loan agreements and incorporated into the effective interest method applied to home savings deposits.

In the case of loans issued under advance or interim financing arrangements and other building loans, the BSH subgroup managed to increase its income from non-collective business in the first half of the year by €2 million to €500 million (first half of 2019: €498 million) on the back of the expansion in business and despite a fall in average returns. Income from home savings loans amounted to €34 million (first half of 2019: €35 million).

The volume of home savings deposits from retail customers in the BSH subgroup grew by €0.5 billion to €64.0 billion as at June 30, 2020 (June 30, 2019: €63.5 billion). Despite this growth, the interest expense went down because the current tariffs have lower interest rates.

**Net fee and commission income** amounted to a net expense of €5 million in the reporting period (first half of 2019: net expense of €15 million).

This improvement was attributable to the fall in fees and commissions not directly attributable to the conclusion of a home savings contract, which were down because of the lower volume of new business.

In the home savings business, BSH entered into approximately 222 thousand (first half of 2019: 289 thousand) new home savings contracts with a volume of €11.9 billion (first half of 2019: €15.6 billion) in Germany.

In the home finance business, the realized volume of new business advanced by €1.5 billion to €9.4 billion (first half of 2019: €7.9 billion) in Germany. This figure includes home savings loan contracts and bridging loans from BSH and other referrals totaling €1.0 billion (first half of 2019: €1.0 billion).

**Gains and losses on investments** amounted to a net loss of €20 million (first half of 2019: net gain of €120 million). This was mainly due to the lower carrying amount of Slovakian building society PSS caused by the €30 million write-down on its carrying amount calculated using the equity method. In the prior-year period, however, this figure had been boosted, in particular, by a gain of €99 million resulting from the disposal of the shares in Czech building society ČMSS.

**Other gains and losses on valuation of financial instruments** declined by €11 million to a net gain of €6 million (first half of 2019: net gain of €17 million) in connection with fair value changes in derivatives used for hedging.

**Loss allowances** amounted to a net addition totaling €13 million (first half of 2019: net reversal of €6 million). As well as ongoing additions due to increased volumes in the lending business, this included additions of €7 million in stages 1 and 2 in connection with updates to macroeconomic forecasts as a result of the COVID-19 pandemic. The level of loss allowances in the prior-year period had been influenced by the regular validation of credit risk parameters and an adjustment of the loss allowances to reflect loan commitments.

**Administrative expenses** increased by €4 million to €253 million (first half of 2019: €249 million). At €116 million, staff expenses were €3 million higher than the level in the prior-year period of €113 million. Other administrative expenses went up by €1 million to €137 million (first half of 2019: €136 million).

**Other net operating income** reduced by €21 million to €17 million (first half of 2019: €38 million). The main influence on the figure for the prior-year period had been the reversal of provisions.

**Profit before taxes** decreased by €74 million to €75 million in the reporting period (first half of 2019: €149 million) as a consequence of the changes described above.

The **cost/income ratio** in the period under review came to 74.2 percent (first half of 2019: 63.5 percent).

**Regulatory RORAC** was 12.7 percent (first half of 2019: 26.2 percent).

### 3.2.2 R+V

**Premiums earned** went up by €893 million to €9,221 million (first half of 2019: €8,328 million), thanks to the tight integration of the R+V subgroup into the cooperative financial network.

Premium income earned in the life insurance and health insurance business grew by a total of €601 million to €4,491 million.

Premiums earned from the life insurance business rose by €580 million to €4,161 million. Occupational pensions and new guarantees were the main areas of business contributing to this increase. Credit insurance, unit-linked life insurance, and traditional product business have recently seen a decline. In the health insurance business, net premiums earned rose by €21 million to €330 million, with notably strong growth in private supplementary health insurance and full health insurance.

In the non-life insurance business, premium income earned grew by €126 million to €3,232 million, with most of this growth being generated from motor vehicle insurance and corporate customer business.

Premium income earned from the inward reinsurance business rose by €166 million to €1,498 million. Business performed particularly well in the Americas, Europe, and Asia, with Europe remaining the largest market. Growth was generated in all divisions.

**Gains and losses on investments held by insurance companies and other insurance company gains and losses** deteriorated by €4,173 million to a net loss of €622 million (first half of 2019: net gain of €3,551 million). This figure includes the fair value-based gains and losses on investments held by insurance companies in respect of insurance products constituting unit-linked life insurance for the account and at the risk of employees, employers, and holders of life insurance policies (unit-linked contracts). The gains and losses on investments held by insurance companies attributable to unit-linked contract products generally have no impact on profit/loss before taxes, because this line item is matched by an insurance liability of the same amount. The net gain on investments held by insurance companies, excluding unit-linked contracts, amounted to €458 million in the first half of 2020.

The level of long-term interest rates was lower than in the first half of 2019. However, the widening of spreads on interest-bearing securities had a negative impact on this item. Over the course of the reporting period, equity markets relevant to R+V performed worse than in the first six months of 2019.

For example, the EURO STOXX 50, a share index comprising 50 large listed companies in the single currency area, saw a fall of 511 points from the start of 2020, closing the reporting period on 3,234 points. In the first half of 2019, this index had risen by 473 points. Movements in exchange rates between the euro and various currencies were generally less favorable in the reporting period than in the first six months of 2019.

Overall, these trends in the first half of 2020 essentially resulted in a €3,774 million deterioration in unrealized gains and losses to a net loss of €1,466 million (first half of 2019: net gain of €2,308 million), a €376 million decrease in the contribution to earnings from the derecognition of investments to a loss of €271 million, and a deterioration of €207 million under foreign exchange gains and losses to a net loss of €168 million (first half of 2019: net gain of €39 million). In addition, net income under current income and expense fell by €138 million to €1,066 million (first half of 2019: €1,204 million) and the balance of depreciation, amortization, impairment losses, and reversals of impairment losses deteriorated by €42 million to a net expense of €80 million (first half of 2019: net expense of €38 million). Other insurance gains and losses and non-insurance gains and losses improved by €364 million to a net gain of €297 million (first half of 2019: net loss of €67 million).

Owing to the inclusion of provisions for premium refunds (particularly in the life insurance and health insurance business) and claims by policyholders in the fund-linked life insurance business, the change in the level of gains and losses on investments held by insurance companies also affected the ‘insurance benefit payments’ line item presented below.

**Insurance benefit payments** decreased by €2,751 million from €9,634 million in the first half of 2019 to €6,883 million in the reporting period.

The decrease in insurance benefit payments reflected both the trend in net premiums earned and the policyholder participation in gains and losses on investments held by insurance companies.

At the companies offering personal insurance, the changes in insurance benefit payments were in line with the change in premium income and in gains and losses on investments held by insurance companies and other insurance company gains and losses. There was a reversal of €89 million from the supplementary change-in-discount-rate reserve (first half of 2019: reversal of €76 million).

In the non-life insurance business, a decline in the claims rate trend was evident compared with the prior-year period. For example, the overall claims rate remained below the level in the first half of 2019. Claims expenses for natural disasters and basic claim costs both went down. However, major claim costs increased. In the context of the COVID-19 pandemic, additions were made to provisions for claims on the basis of received and expected claims. After taking into account the countervailing effects in motor vehicle insurance, the expense in connection with the COVID-19 pandemic amounted to €92 million. The losses in connection with Storm Sabine amounted to around €62 million.

In the inward reinsurance business, the net claims ratio was down by 0.3 percentage points compared with the prior-year period. The ratios for major and medium claims were above those in the first half of 2019. Notably, the COVID-19 pandemic gave rise to claims of around €140 million, with a corresponding impact on earnings.

**Insurance business operating expenses** went up by €93 million to €1,617 million (first half of 2019: €1,524 million) in the course of ordinary business activities in all divisions, with a particularly sharp rise in the non-life insurance and inward reinsurance segments.

Because of the factors described above, **profit before taxes** for the reporting period declined by €609 million to €102 million (first half of 2019: €711 million).

**Regulatory RORAC** was 1.9 percent (first half of 2019: 18.0 percent).

### 3.2.3 TeamBank

**Net interest income** at TeamBank amounted to €248 million, which was €9 million higher than the equivalent figure in the first six months of 2019 of €239 million. The main source of this increase was expansion of the volume of consumer finance. The consumer finance volume swelled by €36 million to €8,909 million (December 31, 2019: €8,873 million). The volume growth was thus below that of the first half of 2019 at €446 million. This change should be viewed in the context of the consequences of the COVID-19 pandemic and the related restrictions on public life, which curtailed consumer spending.

The increase in the consumer finance volume was attributable in large part to the collaboration with the cooperative banks. As at June 30, 2020, TeamBank was working with 753 of Germany’s 842 cooperative banks and with 144 partner banks in Austria. In addition, more than 34 thousand members of cooperative banks benefited from favorable terms and conditions in the first half of 2020, of whom around 5 thousand were new to the cooperative financial network. As at June 30, 2020, around 258 thousand customers had either signed up for easyCredit-Finanzreserve or were already using this flexible means of borrowing. As a result, some 18.6 percent of new business in the reporting period was generated through easyCredit-Finanzreserve.

The business model of a consumer finance provider constructed on the basis of the easyCredit-Liquiditätsberater advisory concept, which includes a financial compass created individually for each customer and provides both the customer and the advisor with transparency about the credit decision reached, enabled TeamBank to increase loans and advances to customers to €9,113 million as at June 30, 2020 (December 31, 2019: €9,063 million). The number of customers also rose to reach 963 thousand (December 31, 2019: 944 thousand).

**Net fee and commission income** declined by €4 million to a net expense of €15 million (first half of 2019: net expense of €11 million). This change was largely due to lower fee and commission income from credit insurance policies as a result of the reduction in new business caused by the COVID-19 pandemic.

**Loss allowances** were higher than in the prior-year period at €71 million, a year-on-year increase of €17 million (first half of 2019: €54 million). The larger addition to loss allowances was required because of changing patterns of customer behavior on the back of payment relief and updates to macroeconomic forecasts (in connection with the COVID-19 pandemic). Conversely, the lower level of new business compared with the prior-year period resulted in lower additions to loss allowances.

**Administrative expenses** increased by €5 million to €119 million (first half of 2019: €114 million). Staff expenses rose by €4 million to €49 million (first half of 2019: €45 million), mainly due to the growth of headcount. Other administrative expenses went up by €1 million to €70 million (first half of 2019: €69 million), primarily because of higher IT costs.

**Other net operating income** went up by €4 million to €7 million (first half of 2019: €3 million).

**Profit before taxes** for the period under review amounted to €49 million. The decrease of €14 million compared with the figure of €63 million reported for the first half of 2019 was a consequence of the factors described above.

TeamBank's **cost/income ratio** in the period under review was 49.8 percent (first half of 2019: 49.4 percent).

**Regulatory RORAC** was 17.2 percent (first half of 2019: 26.3 percent).

### 3.2.4 UMH

**Net fee and commission income** at UMH rose by €62 million to €768 million (first half of 2019: €706 million).

The change in net fee and commission income was predominantly due to the following factors: Because of the rise in the average assets under management of the Union Investment Group, which climbed by €19.2 billion to €358.9 billion (first half of 2019: €339.7 billion), the volume-related contribution to net fee and commission income rose by €38 million to €675 million (first half of 2019: €637 million).

The assets under management of the Union Investment Group comprise the assets and securities portfolios measured at their current market value, also referred to as free assets or asset management, for which Union Investment offers investment recommendations (advisory) or bears responsibility for portfolio management (insourcing). The assets are managed both for third parties and in the name of the group. Changes in the managed assets occur as a result of factors such as net inflows, changes in securities prices, and exchange-rate effects.

Income from performance-related management fees amounted to €21 million (first half of 2019: €2 million). Income from real estate fund transaction fees increased by €11 million to €22 million during the reporting period (first half of 2019: €11 million).

The markets for risk assets were still hitting record highs at the start of 2020, but the worldwide spread of COVID-19 and the emergency measures adopted internationally to contain the virus caused share prices to slump from mid-February onward. From mid-March, capital markets were able to recover somewhat thanks to the programs launched by many governments and central banks to soften the economic impact of the COVID-19 pandemic and the gradual easing of lockdown measures.

Against this backdrop, Union Investment managed to generate net inflows from its retail business of €3.7 billion in the first six months of 2020 (first half of 2019: €4.1 billion) in collaboration with the local cooperative banks.

The number of traditional fund-linked savings plans, which are used by retail customers as investments aimed at long-term capital accumulation, had risen to 2.9 million contracts as at June 30, 2020, with an increase in the 12-month savings volume to €5.4 billion (December 31, 2019: €4.9 billion).

The total assets in the portfolio of Riester pension products had decreased to €20.2 billion as at June 30, 2020 (December 31, 2019: €20.9 billion).

The number of fund-linked savings plans managed by Union Investment in its retail business as at June 30, 2020 totaled 5.5 million (December 31, 2019: 5.3 million). These plans included contracts under employer-funded capital formation schemes as well as the traditional savings plans and Riester pension contracts referred to above.

The open-ended real estate funds offered by the Union Investment Group, which are an intrinsic-value-based component of the investment mix, generated net new business totaling €1.3 billion in the first half of 2020 (first half of 2019: €2.1 billion).

Assets under management in the PrivatFonds family amounted to €24.4 billion as at June 30, 2020 (December 31, 2019: €25.3 billion).

The institutional business also continues to face significant challenges. Persistently low interest rates, the emergence of the COVID-19 pandemic in the reporting period, and the ensuing market turmoil necessitated effective risk management. This is reflected in the portfolios' broad diversification across asset classes and countries. In the reporting period, demand was focused primarily on low-risk asset classes, capital preservation investment strategies, and sustainable investment. The market turmoil naturally meant that institutional clients required more liquidity in the reporting period, and this could be seen from the movements in short-dated bonds (short-term liquidity investments). In its institutional business, the Union Investment Group generated net inflows amounting to €0.6 billion (first half of 2019: €4.9 billion). A total of 17 new institutional clients were gained in the reporting period (first half of 2019: 49 institutional clients).

The portfolio of sustainably managed funds had expanded to €54.8 billion at the end of the reporting period (December 31, 2019: €53.1 billion). This growth demonstrates that institutional clients are increasingly focusing on socially responsible investing.

**Other gains and losses on valuation of financial instruments** deteriorated by €101 million to a net loss of €81 million (first half of 2019: net gain of €20 million). The decline can be explained by higher losses related to the valuation of guarantee commitments compared to the prior-year period (€83 million) and a negative contribution from the valuation of own-account investments at fair value (€18 million).

The €6 million rise in **administrative expenses** to €442 million (first half of 2019: €436 million) was predominantly caused by staff expenses advancing by €10 million to €218 million (first half of 2019: €208 million), which in turn was due to average pay rises and appointments to new and vacant positions. Other administrative expenses contracted by €4 million to €224 million (first half of 2019: €228 million), mainly because of lower expenses incurred in connection with public relations and marketing.

**Other net operating income** went down by €67 million to €18 million (first half of 2019: €85 million). The main influence on the figure for the prior-year period had been the disposal of the fully consolidated subsidiary Union Investment Towarzystwo Funduszy Inwestycyjnych S.A. (TFI), Poland.

In the reporting period, **profit before taxes** was influenced by effects relating to the economic fallout from the COVID-19 pandemic. Profit before taxes fell by a total of €120 million to €264 million (first half of 2019: €384 million) due to the changes described above.

The **cost/income ratio** came to 62.6 percent in the first half of 2020 (first half of 2019: 53.2 percent).

**Regulatory RORAC** was greater than 100.0 percent (first half of 2019: greater than 100.0 percent).

### 3.2.5 DZ BANK – CICB

**Net interest income** is primarily attributable to the lending business portfolios (Corporate Banking business line and a separately managed real estate lending portfolio), the portfolios from the capital markets business, and the long-term equity investments allocated to the central institution and corporate bank. Net interest income rose by 14.7 percent to €414 million (first half of 2019: €361 million).

In the Corporate Banking business line, net interest income went up by 3.6 percent to €233 million (first half of 2019: €225 million). The net interest income in the four regional corporate customer divisions plus Central Corporate Banking rose by 1.6 percent to €129 million as a result of an increase in lending volume (first half of 2019: €127 million).

Net interest income in the Structured Finance and Investment Promotion divisions amounted to €104 million, which was up by 6.1 percent compared with the figure for the prior-year period of €98 million. The rise in the Structured Finance division was due in large part to the increase in project finance activities.

Net interest income from the separately managed real estate lending portfolio was down by 20.0 percent year on year at €16 million (first half of 2019: €20 million) due to a contraction in the portfolio.

In the Capital Markets business line, net interest income advanced by 75.9 percent to €153 million (first half of 2019: €87 million). This was primarily attributable to business with institutional customers and the treasury portfolios. The main reasons for the increase were the beneficial effect of the tiered interest rates introduced by the ECB (threshold raised by six times the minimum reserve requirement), lower interest expense on the specific funding structure, and the larger volume of money market business.

Current income and expense from long-term equity investments declined to €13 million (first half of 2019: €28 million). This decrease was essentially explained by a year-on-year fall of €11 million in income from long-term equity investments to €0 million at VR Equitypartner GmbH and a fall of €4 million in income from long-term equity investments to €0 million at KBIH (Reisebank) owing to the COVID-19 pandemic.

**Net fee and commission income** rose by 16.2 percent to €230 million (first half of 2019: €198 million).

The principal sources of income were service fees in the Corporate Banking business line (in particular from lending business including guarantees and international business), in the Capital Markets business line (mainly from securities issuance and brokerage business, agents' fees, transactions on futures and options exchanges, financial services, and the provision of information), and in the Transaction Banking business line (primarily from payments processing including credit card processing, safe custody, and gains/losses from the currency service business).

In the Corporate Banking business line, net fee and commission income was €5 million higher than in the prior-year period at €63 million (first half of 2019: €58 million). This increase was due, in particular, to a rise in processing fees and commissions.

In the Capital Markets business line, the contribution to net fee and commission income rose by 30.0 percent to €117 million (first half of 2019: €90 million). Of particular note was the growth of income from securities brokerage business on the back of an increase in transactions.

Net fee and commission income in the Transaction Banking business line was also up on the prior-year period at €65 million, an increase of €4 million or 6.6 percent (first half of 2019: €61 million). This growth was primarily accounted for by payments processing, in particular due to the growth of the contactless payments market.

As part of service procurement arrangements, DZ BANK has transferred processing services in the lending business to Schwäbisch Hall Kreditservice, in the payments processing business to equensWorldline SE, and in capital markets business/transaction banking to Deutsche WertpapierService Bank AG. The expenses arising in connection with obtaining services from the above external processing companies amounted to a total of €93 million (first half of 2019: €84 million) and are reported under net fee and commission income for the individual Corporate Banking (€4 million) and Capital Markets/Transaction Banking (€89 million) business lines.

Aside from the aforementioned business lines, net fee and commission income from other financial services amounted to a greater net expense of €15 million in the reporting period (first half of 2019: net expense of €11 million). This change was largely caused by higher commission on loans.

**Gains and losses on trading activities** rose by €391 million to a net gain of €521 million (first half of 2019: net gain of €130 million).

Gains and losses on trading activities related to the business activities of the Capital Markets business line. Gains and losses on money market business entered into for trading purposes (mainly repurchase agreements) by the Group Treasury division and all derivatives are also included in gains and losses on trading activities because they are categorized as 'financial assets and liabilities measured at fair value through profit or loss' (fair value PL).

Gains and losses on operating trading activities in the Capital Markets business line amounted to a net gain of €259 million, a year-on-year rise of 32.1 percent (first half of 2019: net gain of €196 million). One of the reasons for this was a higher level of sales with institutional and corporate customers across all asset classes and the associated boost to income. There were increases in revenue not only from the sale of agency bonds and bank bonds but also from the sale of interest-rate structures and interest-rate derivatives and from spot exchange business. The volume of bonds issued in primary market business also went up. DZ BANK won client accounts in the following customer groups: public-sector and supranational institutions, financial institutions, and corporates. Although the market turmoil created by COVID-19 in the first quarter of 2020 resulted in negative valuation effects on trading assets, these were offset in the second quarter and were more than made up for by the customer business.

Other gains and losses on trading activities resulting from non-operating, IFRS-related effects amounted to a net gain of €262 million. For the assets and liabilities recognized at fair value in the fair value PL category and in the 'financial assets and liabilities designated as at fair value through profit or loss' category, the adjustment of the valuation curves gave rise to a significant net gain in the reporting period. There had been almost no impact on profit or loss from this effect in the prior-year period.

**Gains and losses on investments** improved by €4 million to a net gain of €2 million (first half of 2019: net loss of €2 million). The net gain resulted from the combination of gains of €26 million from the disposal of securities with a nominal amount of €1,003 million and losses of €24 million arising from the termination of hedges measured at fair value through OCI as part of portfolio fair value hedge accounting. In the first half of 2019, the disposal of securities with a nominal amount of €703 million had given rise to losses of €2 million.

**Other gains and losses on valuation of financial instruments** fell by 70.8 percent to a net gain of €7 million (first half of 2019: net gain of €24 million). The decrease was attributable to the €22 million decline in financial instruments measured at fair value through profit or loss to a net loss of €4 million (first half of 2019: net gain of €18 million). The net gain from ineffectiveness in hedge accounting stood at €11 million (first half of 2019: €6 million).

**Gains and losses from the derecognition of financial assets measured at amortized cost** declined by 80.0 percent to a net gain of €3 million (first half of 2019: net gain of €15 million). Most of the net gain was attributable to repayments of capital of €2 million.

**Loss allowances** amounted to an addition of €256 million (first half of 2019: reversal of €1 million). The net additions in respect of the lending business and investments totaled €255 million (first half of 2019: net additions of €7 million). This can be broken down into additions of €114 million in stage 1 and stage 2 and of €141 million in stage 3. The net addition in respect of recoveries on loans and advances previously impaired, directly recognized impairment losses, and additions to loan provisions was €1 million (first half of 2019: net reversal of €8 million). The additions included expenses of €98 million in stages 1 and 2 in connection with updates to macroeconomic forecasts as a result of the COVID-19 pandemic. In addition to the COVID-19-related effects, loss allowances also increased because of significant impairment losses recognized on a specific exposure.

In the first half of 2019, the net additions in the lending business (€8 million) had been more than offset by recoveries on loans and advances previously impaired of €9 million.

**Administrative expenses** went up by 0.3 percent to €643 million (first half of 2019: €641 million).

The €6 million rise in staff expenses to €293 million (first half of 2019: €287 million) was largely due to higher remuneration expenses in the reporting period.

Other administrative expenses decreased by 1.1 percent to €350 million (first half of 2019: €354 million). The consultancy expenses within this figure were €98 million, which was €3 million lower than in the first six months of 2019. Taking account of income from the reversal of provisions, expenses for the bank levy decreased by €2 million to €21 million (first half of 2019: €23 million). Office expenses fell by €3 million to €12 million. By contrast, expenses for the BVR deposit guarantee fund grew by €3 million to €34 million (first half of 2019: €31 million). There was also a €3 million rise in IT expenses to €84 million.

**Other net operating income** amounted to €7 million (first half of 2019: €11 million) and, in the period under review, consisted of other operating income of €57 million (first half of 2019: €45 million) and other operating expenses of €50 million (first half of 2019: €34 million).

The income was mainly derived from the reversal of provisions and accruals in an amount of €20 million (first half of 2019: €18 million) and refunds of other taxes in an amount of €7 million (first half of 2019: €0 million). The figure reported for the first half of 2019 had included income of €8 million from the sale of GENO-Haus in Stuttgart.

The expenses predominantly consisted of transfers of losses of €13 million (first half of 2019: €4 million) and expenses of €8 million in connection with paydirekt (first half of 2019: €10 million).

Other net operating income also included interest income and interest expense relating to tax refunds and retrospective tax liabilities amounting to net income of €4 million (first half of 2019: net expense of €1 million).

**Profit before taxes** rose to €285 million in the period under review, which was €188 million higher than the figure of €97 million reported for the first half of 2019.

The **cost/income ratio** came to 54.3 percent in the first half of this year (first half of 2019: 87.0 percent).

**Regulatory RORAC** was 10.5 percent (first half of 2019: 3.9 percent).

### 3.2.6 DZ HYP

At €358 million, the **net interest income** of DZ HYP was €49 million above the level of the prior-year period (first half of 2019: €309 million).

The rise in net interest income was mainly the result of portfolio growth generated from new business. The volume of real estate loans swelled by €3,978 million to €51,305 million (June 30, 2019: €47,327 million).

The volume of new business was below the level of the prior-year period at €3,896 million (first half of €2019: €5,070 million) owing to the challenging conditions created by the COVID-19 pandemic.

In the Commercial Real Estate Investors division, the volume of new business amounted to €2,714 million (first half of 2019: €3,514 million). The volume of new lending jointly generated with the local cooperative banks in the commercial real estate finance business amounted to €2,158 million (first half of 2019: €2,277 million).

In the Housing Sector division, the volume of new commitments in the reporting period came to €208 million (first half of 2019: €340 million). A significant area of focus in this business was the provision of long-term finance for new construction and renovation investment projects.

In the Retail Customers/Private Investors division, the new commitment volume stood at €806 million (first half of 2019: €924 million). Demand for long-term fixed interest rates continued to be supported by the sustained low level of interest rates. The total amount included the new commitment volume of €750 million in the retail banking business generated through the core banking systems of the cooperative financial network and through the Genopace and Baufinex portals for the cooperative banks in the reporting period (first half of 2019: €708 million).

In the business with private investors, new business of €56 million was generated (first half of 2019: €216 million).

In the Public Sector division, the volume of new business came to €168 million (first half of 2019: €292 million). Of this amount, €127 million (first half of 2019: €231 million) was attributable to business brokered through the cooperative banks and €41 million to direct business (first half of 2019: €61 million). Some 81 percent of all deals were generated through the brokering activities of the cooperative banks.

The net gain of €1 million under **gains and losses on investments** was lower than in the prior-year period (first half of 2019: net gain of €10 million) because there were no relevant sales during the reporting period. The net gain in the first half of 2019 had been significantly influenced by the sale of Spanish government bonds.

**Other gains and losses on valuation of financial instruments** declined by €196 million to a net loss of €126 million (first half of 2019: net gain of €70 million). This was predominantly because of a widening of spreads on bonds from eurozone periphery countries (loss of €114 million; first half of 2019: gain of €67 million), particularly on Italian government bonds (loss of €45 million; first half of 2019: loss of €12 million), Spanish government bonds (loss of €43 million; first half of 2019: gain of €38 million), and Portuguese government bonds (loss of €26 million; first half of 2019: gain of €41 million). The main influence on this line item in the prior-year period had been the narrowing of credit spreads for bonds from the peripheral countries of the eurozone.

**Loss allowances** saw an addition of €6 million (first half of 2019: net reversal of €4 million). The increased loss allowance requirement was attributable, in particular, to updates to macroeconomic forecasts in connection with the COVID-19 pandemic.

**Administrative expenses** decreased by €4 million to €135 million (first half of 2019: €139 million).

**Other net operating income** went down by €4 million to €8 million (first half of 2019: €12 million). This fall was predominantly due to the reversal of provisions for administration fees and early redemption payments.

**Profit before taxes** for the period under review amounted to €106 million. The reduction of €162 million compared with the profit before taxes of €268 million reported for the first six months of 2019 was mainly a consequence of the factors described above.

The **cost/income ratio** came to 54.7 percent in the first half of this year (first half of 2019: 34.5 percent).

**Regulatory RORAC** was 13.3 percent (first half of 2019: 35.8 percent).

### 3.2.7 DZ PRIVATBANK

**Net interest income** at DZ PRIVATBANK rose by €14 million to €44 million (first half of 2019: €30 million) despite the persistently low interest rates.

While the risk-conscious investment strategy was continued, the net interest income for the reporting period was boosted by the higher thresholds for deposits at central banks (ECB and the Swiss National Bank (SNB)) and by the lower euro and US dollar money market rates.

The average volume of guaranteed LuxCredit loans issued by DZ PRIVATBANK, which acts as the competence center for foreign-currency lending and investing in the interest-earning business, amounted to €4.9 billion (first half of 2019: €4.6 billion).

**Net fee and commission income** improved by €8 million to €93 million (first half of 2019: €85 million). The increase in net fee and commission income was mainly attributable to the larger contributions to income from private banking and the fund services business.

As at the end of the period under review, the volume of assets under management relating to high-net-worth clients amounted to €18.6 billion (June 30, 2019: €18.3 billion). The assets under management comprise the volume of securities, derivatives, and deposits of customers in the private banking business.

As at June 30, 2020, the value of funds under management amounted to €122.2 billion (June 30, 2019: €111.0 billion). The number of fund-related mandates as at June 30, 2020 was 534 (June 30, 2019: 561).

**Gains and losses on trading activities** rose by €5 million to a net gain of €9 million (first half of 2019: net gain of €4 million) owing to the larger volume of customer-initiated transactions.

**Other gains and losses on valuation of financial instruments** were essentially influenced by the widening of spreads and deteriorated by €6 million to a net loss of €1 million (first half of 2019: net gain of €5 million).

**Administrative expenses** went up by €7 million to €121 million (first half of 2019: €114 million). Staff expenses rose by €4 million to €68 million (first half of 2019: €64 million), predominantly due to the statutory index-linking of salaries. Other administrative expenses are subject to stringent process and cost management but increased by €3 million to €53 million (first half of 2019: €50 million) due, in particular, to the higher bank levy.

**Other net operating income** amounted to €4 million (first half of 2019: €3 million).

**Profit before taxes** climbed by a total of €14 million to €27 million in the reporting period (first half of 2019: €13 million) as a consequence of the changes explained above.

The **cost/income ratio** for DZ PRIVATBANK in the first half of 2020 came to 81.2 percent (first half of 2019: 89.8 percent).

**Regulatory RORAC** was 13.7 percent (first half of 2019: 8.4 percent).

### 3.2.8 VR Smart Finanz

**Net interest income** at VR Smart Finanz declined by €3 million to €72 million in the reporting period (first half of 2019: €75 million).

The expansion of the core business, which involved a further rise in the volumes of the digital solutions, had a positive impact on net interest income. However, it was unable to compensate for the absence of the income from the non-core areas of business that have been scaled back or sold in line with the strategy. In 2019, the strategy had resulted in the sale of the following areas of the business: real estate leasing (VR-IMMOBILIEN-LEASING GmbH), centralized settlement, IT leasing (BFL Leasing GmbH), and the unconsolidated property companies.

The year-on-year rise of 43.9 percent (first half of 2019: 32.4 percent) in the volume of online business (leasing, hire purchase, and lending) transacted with the cooperative banks in the period under review underlined the growing importance of digitally supported financing solutions. The proportion of total new business (leasing and lending) accounted for by contracts entered into online reached 97.9 percent (first half of 2019: 89.9 percent). In light of the COVID-19 pandemic, a decision was made to quickly launch a solution eligible for support from KfW along with further support measures for small-business and self-employed customers. The strong demand for the development loan offset the effect of the temporary withdrawal of the 'VR Smart flexibel' solution and the decrease in demand for asset finance in the first half of 2020.

**Net fee and commission income** declined by €10 million to a net expense of €11 million (first half of 2019: net expense of €1 million). The main reasons for this change were the level of trailer fees to be paid to the cooperative banks, which climbed in line with the volume of business, and the absence of income resulting from the disposal of the centralized settlement business.

**Loss allowances** went up by €14 million to €26 million (first half of 2019: €12 million). This change was primarily attributable to the adjustment of the scorecards, the adjustment of risk parameters used to calculate expected credit risk, and updates to macroeconomic forecasts in connection with the COVID-19 pandemic.

**Administrative expenses** went down by €18 million to €52 million (first half of 2019: €70 million) because of the disposal of the aforementioned areas of business. The lower headcount meant that staff expenses declined by €8 million to €29 million (first half of 2019: €37 million). Other administrative expenses decreased by €10 million to €23 million (first half of 2019: €33 million) as a result of the scaling back and disposal of non-core areas of business.

**Other net operating income** amounted to a net expense of €7 million (first half of 2019: net income of €9 million). In the prior-year period, other net operating income had included the gain of €11 million on the sale of the centralized settlement business. The net expense for the reporting period was primarily attributable to further transformation costs (including for the restructuring of IT and transaction costs).

VR Smart Finanz generated a **loss before taxes** of €24 million (first half of 2019: profit before taxes of €1 million), largely as a consequence of the factors described above.

The **cost/income ratio** in the first half of 2020 came to 96.3 percent (first half of 2019: 84.3 percent).

**Regulatory RORAC** was minus 17.1 percent (first half of 2019: 0.7 percent).

### 3.2.9 DVB

The DVB subgroup's **net interest income** declined by €82 million to €20 million (first half of 2019: €102 million). The decrease was essentially due to the absence of interest income compared with the first six months of 2019 following the sale of the aviation finance and land transport finance core businesses.

The volume of customer loans in the DVB subgroup stood at €5.7 billion as at June 30, 2020 (June 30, 2019: €13.2 billion).

At €16 million, **net fee and commission income** was down by €11 million year on year (first half of 2019: €27 million).

This decrease was largely due to the absence of income following the sale of shares in LogPay Financial Services GmbH and the disposal of the land transport finance and aviation finance businesses. Moreover, activity in the shipping finance and offshore finance businesses is now limited to the extension of existing transactions.

**Gains and losses on trading activities** amounted to a net gain of €2 million (first half of 2019: net loss of €4 million) that was primarily achieved thanks to the movement of the euro/US dollar exchange rate.

**Other gains and losses on valuation of financial instruments** amounted to a net expense of €68 million (first half of 2019: net expense of €16 million). This decline is attributable to IFRS-related measurement effects, particularly from the measurement of derivatives not used as hedges and from use of the fair value option.

The addition to **loss allowances** rose by €98 million to €148 million (first half of 2019: €50 million). This year-on-year change was mainly due to the increased loss allowances required in connection with updates to macroeconomic forecasts as a result of the COVID-19 pandemic (€41 million) and in connection with the further adjustment of risk parameters used to calculate expected credit risk in stage 1 and stage 2 (€27 million). It was also due to an impairment loss of €30 million in stage 3 that was required in the shipping and offshore businesses.

**Administrative expenses** amounted to €78 million (first half of 2019: €109 million), a year-on-year fall of €31 million. Staff expenses decreased by €16 million to €34 million owing to the reduction in headcount (first half of 2019: €50 million). Other administrative expenses decreased to €44 million (first half of 2019: €59 million), primarily because of the fall in legal and consultancy costs and a €15 million lower bank levy.

**Other net operating income** amounted to €28 million (first half of 2019: net expense of €19 million). Significant factors affecting this item in the reporting period were the gains of €60 million on the disposal of a further part of the aviation finance business, which had previously constituted a disposal group not qualifying as a discontinued operation, and other effects amounting to an expense of €21 million resulting from the recognition of impairment losses on assets held for sale. The net expense in the prior-year period had been attributable to effects relating to the sale of the land transport finance core business (gain of €9 million) and LogPay Financial Services GmbH (gain of €29 million) and to the loss allowances for the aviation finance business (expense of €9 million), which had been classified as a disposal group not qualifying as a discontinued operation. In the first half of 2019, other net operating income had also included expenses of €50 million for restructuring.

In the reporting period, DVB incurred a **loss before taxes** of €228 million (first half of 2019: loss before taxes of €67 million), largely as a consequence of the factors described above.

The **cost/income ratio** in the period under review was greater than 100.0 percent (first half of 2019: greater than 100.0 percent).

**Regulatory RORAC** was greater than 100 percent (first half of 2019: minus 42.7 percent).

### 3.2.10 DZ BANK – holding function

**Net interest income** includes the interest expense on subordinated capital, together with the net interest income from the funding of the main long-term equity investment carrying amounts and the investment of capital.

Net interest income improved by 25.8 percent to a net expense of €23 million (first half of 2019: net expense of €31 million).

The interest expense on subordinated capital decreased by 21.2 percent to €26 million (first half of 2019: €33 million) as a result of volume reductions.

Net interest income from the funding of long-term equity investment carrying amounts and the investment of capital amounted to €3 million in the reporting period (first half of 2019: €2 million).

**Administrative expenses** decreased by 5.6 percent year on year to €101 million (first half of 2019: €107 million). Within this figure, expenses from the group management function went up by €2 million to €30 million (first half of 2019: €28 million). At €34 million, expenses for the bank levy and contributions (particularly to the BVR protection scheme) were at the same level as in the prior-year period (first half of 2019: €34 million). Furthermore, IT and project expenses fell from €28 million in the first six months of 2019 to €22 million in the period under review.

### 3.2.11 Other/Consolidation

The consolidation-related adjustments shown under Other/Consolidation to reconcile operating segment profit/loss before taxes to consolidated profit/loss before taxes are attributable to the elimination of intragroup transactions and to the fact that investments in joint ventures and associates were accounted for using the equity method.

The adjustments to net interest income were primarily the result of the elimination of intragroup dividend payments and profit distributions in connection with intragroup liabilities to dormant partners and were also attributable to the early redemption of issued bonds and commercial paper that had been acquired by entities in the DZ BANK Group other than the issuer.

The figure under Other/Consolidation for net fee a nd commission income largely relates to the fee and commission business of TeamBank and the BSH subgroup with the R+V subgroup.

The remaining adjustments are mostly also attributable to the consolidation of income and expenses.

## 4 Net assets

As at June 30, 2020, the DZ BANK Group's **total assets** had increased by €44.7 billion, or 8.0 percent, to €604.2 billion (December 31, 2019: €559.5 billion). This increase was largely attributable to a higher level of total assets at DZ BANK – CICB (up by €43.1 billion), BSH (up by €1.5 billion), R+V (up by €1.6 billion), and DZ HYP (up by €2.6 billion), whereas DVB recorded a decrease of €2.4 billion.

The **volume of business** amounted to €1,037,702 million (December 31, 2019: €994,235 million). This figure comprised the total assets, the assets under management at UMH as at June 30, 2020 amounting to €359,843 million (December 31, 2019: €368,208 million), the financial guarantee contracts and loan commitments amounting to €72,074 million (December 31, 2019: €65,794 million), and the volume of trust activities amounting to €1,589 million (December 31, 2019: €761 million). The growth of trust activities was attributable to KfW development loans that DZ BANK – CICB made available on behalf of the German government to support companies affected by the COVID-19 pandemic.

The DZ BANK Group's **cash and cash equivalents** went up by €23.3 billion, or 44.2 percent, to €75.8 billion (December 31, 2019: €52.5 billion) as a result of the corresponding rise in balances with central banks. The increase was predominantly attributable to DZ BANK – CICB (liquidity management function).

The DZ BANK Group's **loans and advances to banks** rose to €106.0 billion, an increase of €8.5 billion or 8.6 percent. Loans and advances to banks in Germany went up by €6.0 billion to €95.1 billion and loans and advances to foreign banks by €2.5 billion to €10.9 billion.

The DZ BANK Group's **loans and advances to customers** amounted to €190.1 billion, which was €3.9 billion, or 2.1 percent, higher than at the end of 2019. Within this figure, loans and advances to customers in Germany rose by €4.6 billion to €162.2 billion, whereas loans and advances to customers outside Germany went down by €0.7 billion to €27.9 billion.

As at June 30, 2020, **financial assets held for trading** amounted to €50.1 billion, an increase of €5.3 billion, or 11.8 percent, on the figure as at December 31, 2019. This change was largely attributable to a rise in derivatives (positive fair values) (up by €3.6 billion) and receivables (up by €2.1 billion).

FIG. 3 – TOTAL ASSETS


1 Amount restated (see note 2 in the notes to the interim consolidated financial statements).

**Investments** were up by €2.2 billion, or 3.8 percent, to €59.1 billion. The main reason for this change was the €2.3 billion increase in the portfolio of bonds and other fixed-income securities.

**Investments held by insurance companies** rose by €1.9 billion (1.7 percent) to €115.4 billion (December 31, 2019: €113.5 billion), although the volume-related increase in investments was partly offset by changes in value. This was due, above all, to a €3.0 billion increase in fixed-income securities to €58.8 billion and a €0.5 billion increase in mortgage loans to €10.2 billion, whereas variable-yield securities decreased by €0.9 billion to €10.4 billion and assets related to unit-linked contracts decreased by €1.1 billion to €13.3 billion.

The DZ BANK Group's **deposits from banks** as at June 30, 2020 amounted to €168.1 billion, which was €27.0 billion, or 19.1 percent, higher than the figure reported as at December 31, 2019. Deposits from domestic banks were up by €20.7 billion to €148.6 billion, while deposits from foreign banks increased by €6.3 billion to €19.5 billion. The growth reflects the expansion of development lending business since the outbreak of the coronavirus crisis. In June 2020, the DZ BANK Group also participated in the ECB's TLTRO III program with a total amount of €15.0 billion, leading to a corresponding increase in deposits from banks.

**Deposits from customers** grew by €11.9 billion, or 9.0 percent, to €143.4 billion (December 31, 2019: €131.5 billion). Deposits from domestic customers increased by €6.0 billion to €119.0 billion (December 31, 2019: €113.0 billion). Deposits from foreign customers rose by €5.9 billion to €24.4 billion (December 31, 2019: €18.5 billion). The rise in deposits from customers was predominantly attributable to DZ BANK – CICB, which reported a higher level of overnight money and fixed-term deposits owing to the increased volume of deposits from institutional investors.

At the end of the reporting half-year, the carrying amount of **debt certificates issued including bonds** in the DZ BANK Group was €78.8 billion (December 31, 2019: €85.1 billion). The fall of €6.3 billion was largely due to a decrease of €13.4 billion in the portfolio of other debt certificates issued to €20.2 billion although, at the same time, the portfolio of bonds issued expanded by €7.1 billion to €58.6 billion. The bulk of the decrease in debt certificates issued including bonds was at DZ BANK – CICB and can be explained by the contraction of commercial paper in connection with the reduction of short-term liquidity.

**Financial liabilities held for trading** went up by €9.8 billion, or 19.0 percent, to €61.6 billion (December 31, 2019: €51.8 billion). This change was due to a rise in derivatives (negative fair values) (up by €5.2 billion), short positions (up by €1.7 billion), and money market deposits (up by €3.6 billion). Bonds issued fell by €0.6 billion.

**Insurance liabilities** increased by €2.0 billion, or 1.9 percent, to €106.3 billion (December 31, 2019: €104.3 billion). This was largely attributable to rises of €0.9 billion in the provision for unearned premiums and €2.2 billion in the benefit reserve, although there was a decrease of €1.0 billion in the reserve for unit-linked insurance contracts.

As at June 30, 2020, the **equity** reported by the DZ BANK Group was €28.2 billion (December 31, 2019: €27.8 billion). The increase of €0.4 billion compared with the end of 2019 was largely due to rises of €0.3 billion in retained earnings and €0.1 billion in the reserve from other comprehensive income.

The **capital and solvency situation** of the DZ BANK financial conglomerate, the DZ BANK Group, and the R+V Versicherung AG insurance group is described in this group management report in chapter V (Opportunity and risk report), section 6.2 (Normative internal perspective).

## 5 Financial position

**Liquidity management** for the entities in the DZ BANK Group is carried out by the Group Treasury division at DZ BANK and on a decentralized basis by the individual subsidiaries. The individual entities are provided with funding by DZ BANK (group funding) or the entities exchange cash among themselves via DZ BANK (group clearing). Liquidity is managed within DZ BANK centrally by head office treasury in Frankfurt and by the associated treasury units in its international branches, although Frankfurt has primary responsibility.

In the context of liquidity management, the DZ BANK Group distinguishes between operational liquidity (liquidity in the maturity band of up to one year) and structural liquidity (liquidity in the maturity band of more than one year). Dedicated steering committees have been established for both types of liquidity.

The DZ BANK Group has a diversified funding base for **operational liquidity**. A considerable portion is accounted for by money market activities resulting from the cash-pooling function with the cooperative banks. This enables cooperative banks with available liquidity to invest it with DZ BANK, while cooperative banks requiring liquidity can obtain it from DZ BANK. Traditionally, this results in a liquidity surplus, which provides the main basis for short-term funding in the unsecured money markets. Corporate customers and institutional clients are another important source of funding for operational liquidity requirements.

Funding on the interbank market is not strategically important to the DZ BANK Group.

The DZ BANK Group issues money market products based on debt certificates through its main branches in Frankfurt, New York, Hong Kong, London, and Luxembourg. DZ BANK has had a standardized groupwide multi-issuer euro commercial paper program since 2010, which DZ BANK and DZ PRIVATBANK S.A. can draw on.

Money market funding also includes collateralized money market activities, which form the basis for diversified funding on money markets. To this end, key repo and securities lending activities, together with the collateral management process, are managed centrally in DZ BANK's Group Treasury division. The Group Treasury division also has at its disposal a portfolio of investment-grade liquid securities. These securities can be used as collateral in monetary policy funding transactions with central banks, in bilateral repos, or in the tri-party repo market.

**Structural liquidity** activities are used to manage and satisfy the long-term funding requirements (more than one year) of DZ BANK and, in coordination with the group entities, those of the DZ BANK Group.

For both the DZ BANK Group and each individual group entity, structural liquidity is measured daily on the basis of total cash flows.

DZ BANK secures its long-term funding for structural liquidity by using structured and non-structured capital market products that are mainly utilized for the cooperative banks' own-account and customer-account securities business and marketed to institutional clients. Long-term funding that is not covered is secured through systematic integration between the entities in the DZ BANK Group. Options for obtaining covered liquidity through Pfandbriefe or DZ BANK BRIEFE are used on a decentralized basis, in other words based on the different cover assets at DZ BANK, DZ HYP, DVB, and BSH.

In June 2020, the DZ BANK Group participated in the ECB's TLTRO III program with a total amount of €15.0 billion. Of this sum, €12.0 billion was attributable to the joint bidder group of DZ BANK and TeamBank and €3.0 billion to DZ HYP.

Long-term funding requirements in foreign currencies are covered through the basis swap market, ensuring matching maturities.

The Group Treasury division at DZ BANK draws up a groupwide **liquidity outlook** annually. This involves determining the funding requirements of the DZ BANK Group for the next financial year on the basis of the coordinated business plans of the individual companies. The liquidity outlook is updated throughout the year.

Monthly **structural analyses** of the various resources available on the liabilities side of DZ BANK's balance sheet are also conducted. The purpose of these analyses is to provide senior management with information that can then be used as the basis for actively managing the liability profile. To complement the description of the funding structure, further information on **liquidity risk** can be found in this interim group management report in chapter V (Opportunity and risk report), section 5.1 (Economic perspective). The year-on-year changes in cash flows from operating activities, investing activities, and financing activities are shown in the **statement of cash flows** in the interim consolidated financial statements.

# III Events after the balance sheet date

Details of events of particular importance after the end of the first half of 2020 can be found in note 51 of the notes to these interim consolidated financial statements.

# IV Outlook

## 1 Economic conditions

### 1.1 Global economic trends

The COVID-19 pandemic pushed the global economy into recession. The economic output data available for the first quarter of 2020 gives an impression of the severity of the crisis. The collapse of the economy in 2020 is likely to be on an unprecedented scale, especially in Europe, where significant restrictions were imposed on some areas of economic activity as early as mid-March. However, the economic impact of COVID-19 on the United States and other major economies is also huge.

Many countries outside South East Asia began easing their lockdown measures in May 2020. However, the still considerable risk of infection means that economic activity can pick up only gradually. There is deep-seated uncertainty, and fears about a second wave remain high. The fallout is expected to carry on into 2021.

In addition to the COVID-19 pandemic, the global economy continues to face other risks. These include the trade dispute between the United States and China, which has flared up again. Another risk is posed by the negotiations between the United Kingdom and the EU on the agreement about their post-Brexit relationship, which have made barely any progress despite the tight timeframe.

The forecast for global economic output in 2020 is a contraction of just over 4 percent. The recovery anticipated for 2021 will result in growth of around 5 percent. The price of crude oil remains low due to persistently weak demand. Consequently, inflation rates are likely to be extremely low this year and only slightly higher in 2021.

### 1.2 Trends in the USA

The restrictions on economic activity and public life resulting from the COVID-19 pandemic drove the US economy into recession. Economic output is likely to contract by approximately 5.5 percent this year. In the first quarter of 2020, US GDP shrank by 4.8 percent on an annualized basis. The economic collapse was even greater in the second quarter. Unemployment rose sharply. The significant decline in consumer spending is taking its toll on economic output. The government support measures cannot take effect fast enough to prevent this. At the same time, the European economy's massive slump is weighing heavily on US exports. After all, a fifth of US exports are destined for EU countries thanks to the close trade relationships.

Next year is likely to see strong economic growth of around 4 percent fueled by robust consumer spending and the recovery of exports and of corporate capital expenditure.

Inflation has fallen almost to zero owing to the weakness of the economy. Energy prices are the primary brake on inflation, but prices for other goods are also having the same effect. Although the inflation rate is unlikely to remain close to zero for long, the weak economy leaves no room for significant price increases. The average rate of inflation for 2020 in the United States is predicted to be 0.8 percent, rising to 1.8 percent in 2021.

### 1.3 Trends in the eurozone

The eurozone has also slipped into recession. In the period January to March 2020, GDP fell by 3.6 percent compared with the previous quarter. From mid-March onward, the lockdowns imposed in order to contain the COVID-19 pandemic led to the collapse of consumer spending and capital expenditure in all EMU member states. Exports and imports were also scaled back massively.

However, the degree of collapse varied among the large member states because they imposed different levels of economic and social restrictions. The contraction of GDP compared with the previous quarter was greater in France, Italy, and Spain than in Germany and the Netherlands.

Most countries did not begin to ease the lockdown until during the course of May 2020. Only since June has there been a gradual resumption of international travel. The decrease in the eurozone's economic output was therefore very pronounced in the second quarter of 2020.

Economic growth in the eurozone is expected to stage a moderate recovery in the second half of this year. Provided that there is no new spike in the number of coronavirus cases and a return to lockdown is avoided, confidence among consumers and companies should gradually return. The fiscal stimulus measures at country level and the EU's programs will also help the economy to rebound. But there will be no return to 'normality'. Economic growth in the third and fourth quarters of 2020 will be insufficient to compensate for the decline in the first half of the year. Overall, therefore, the eurozone's economic output in 2020 is likely to be down by more than 9 percent compared with 2019. In 2021, GDP is expected to return to growth of almost 6 percent.

In spring 2020, inflation in the eurozone fell sharply yet again due not only to the sharp drop in the oil price but also to the crisis created by COVID-19. The inflation rate of the Harmonised Index of Consumer Prices (HVPI) dropped close to zero in the eurozone in April and May 2020. This trend is unlikely to be reversed in the months ahead. An average inflation rate of 0.3 percent is projected for 2020. However, there are no signs of the risk of deflationary tendencies. For 2021, an inflation rate of 1.4 percent is predicted.

### 1.4 Trends in Germany

The German economy was also in recession in the middle of 2020. However, economic activity looks to have reached its nadir in April 2020 when strict restrictions were in place, and German companies are now more positive about the future again. The easing of the lockdown measures imposed to contain COVID-19 means that many companies' prospects look brighter again. It is too early to sound the all-clear, but the hard-hit service and retail sectors are offering a first glimmer of hope. Nevertheless, economic output slumped in the second quarter of 2020 following a 2.2 percent GDP decrease in the first three months of the year. Consumer spending, expenditure on capital equipment – mainly machinery, equipment, and vehicles – and the export of goods declined significantly in the first quarter. Construction investment and current spending by the government provided some stability, preventing an even stronger contraction of GDP. Overall, the expectation is that sentiment will continue to gradually improve in the coming months as the lockdown is lifted in phases and most sectors start reopening for business.

The economic stimulus package agreed upon by Germany's ruling coalition on June 3, 2020 has a substantial volume equating to almost 4 percent of GDP and should provide a significant boost to the economy. The additional impetus for GDP is estimated to be roughly three-quarters of a percentage point for 2020 and around one-quarter of a percentage point for 2021. Lower rates of excise duty will stimulate consumer spending in the second half of this year. Bigger purchases will be made, some of which will certainly be brought forward from 2021. This will have some repercussions in the first quarter of next year. However, the net effect of lowering VAT should be very positive and may increase consumer spending by around 1 percentage point.

The anticipated fall in prices will also cause the inflation rate to go down in the second half of 2020. From July onward, it is likely to hover between minus 1 and minus 2 percent, but will therefore be higher in the second half of 2021 (between 2.5 and 3.5 percent) due to the low level of prices this year. Capital expenditure by companies and the government will also be higher than previously estimated due to the tax measures and the subsidies for capital investment by local governments.

Overall, GDP is projected to contract by 5.9 percent this year before returning to growth of 5.1 percent in 2021. The average inflation rate for 2020 is expected to be around zero, rising to just under 2 percent in 2021.

### 1.5 Trends in the financial sector

The global outbreak of the COVID-19 pandemic in March 2020 is presenting the financial sector with huge challenges.

As well as sharp price falls in international financial markets, the stability of the global financial markets is being challenged by sweeping economic and social restrictions introduced to stop the spread of the pandemic. Monetary, fiscal, and economic policy measures taken by central banks and governments worldwide enabled the capital markets to recover, at least to some extent, but it is impossible to fully assess whether these measures are having their intended impact on the real economy because of the current recession affecting large parts of the global economy.

One of the objectives of the public-sector support measures is to encourage lending to businesses and to households in order to protect their liquidity and encourage capital expenditure and consumer spending. However, it is possible that potential rises in companies' and individuals' debt levels as a result of these measures could have an adverse impact on the financial sector's financial performance, even though the financial sector is considered to be far more stable than at the time of the 2008/2009 financial crisis due to the various regulatory requirements that have been introduced.

The macroeconomic situation outlined above increases the already considerable pressure in terms of both adjustment and costs caused by the need to comply with regulatory reforms and to implement structural change in response to growing competitive pressures.

The presence of competitors with approaches based on the use of data and technology are presenting the financial sector with the challenge of scrutinizing its existing business models, adapting them as required, and having to substantially improve its efficiency by digitalizing business and IT processes. The corresponding capital investment is initially likely to push up costs in the industry before the anticipated profitability gains can be realized.

As before, efforts to address the challenges described above are being made more difficult by the persistently low nominal interest rates in the eurozone, which are still accompanied by a relatively flat yield curve. This situation is likely to prevent any significant increase in margins in interest-related business and continues to weigh heavily on the business models in asset management and insurance as well.

The uncertainty surrounding political and economic developments, some of which is the result of COVID-19, could have an adverse effect on the economic position of the financial sector. Further information on overarching risk factors can be found in section 4.2 of the opportunity and risk report.

## 2 Financial performance

The forecasts below are based on the outcome of the DZ BANK Group's projection and planning process. Increased forecasting uncertainty, particularly as a result of the COVID-19 pandemic, may lead to deviations from the underlying assumptions.

In view of the economic conditions resulting from the COVID-19 pandemic, **profit before taxes** is likely to fall sharply in 2020 and be below the originally budgeted figure of around €1.5 billion. Profit before taxes of €1 billion is unlikely to be achieved in 2020 as a whole. Positive trends in the operating business, such as those emerging in the DZ BANK – CICB and UMH operating segments, will be nowhere near enough to compensate for the fallout from COVID-19.

Profit before taxes is expected to be better in 2021 than in 2020 although, from the current perspective, achieving a profit before taxes that is within the long-term target range of €1.5 billion to €2.0 billion appears improbable.

**Net interest income** including **income from long-term equity investments** is predicted to be a little higher in 2020 than in 2019.

Assuming that interest rates remain low, net interest income in 2021 is expected to be at a similarly high level to 2020.

The economic conditions, which are heavily influenced by the COVID-19 pandemic, coupled with a yield curve that remains flat and with low rates of interest, may lead to falls in income, especially in relation to the interest-rate-sensitive business models within the DZ BANK Group.

**Net fee and commission income** is projected to be slightly higher in 2020 than in 2019.

Once again, net fee and commission income will make a very hefty positive contribution to the earnings of the DZ BANK Group in 2021 thanks to growth, especially in the UMH, DZ BANK – CICB, and DZ PRIVATBANK operating segments.

Any lasting uncertainty in capital and financial markets could have a negative impact on confidence and sentiment among retail and institutional investors, thereby depressing net fee and commission income.

In all probability, net gains under **gains and losses on trading activities** will rise sharply in 2020 compared with 2019.

According to the planning for 2021, gains and losses on trading activities will deteriorate significantly compared with 2020. Positive impetus is particularly likely to come from customer-driven capital markets business in the DZ BANK – CICB operating segment.

The primary prerequisite for a steady level of net gains under gains and losses on trading activities is considered to be a stable financial and capital markets environment.

**Gains and losses on investments** will deteriorate significantly this year due to the inclusion in the prior-year figure of positive non-recurring items.

From the current perspective, gains and losses on investments will improve significantly in 2021 because no further adverse impact of write-downs on the carrying amounts of investments are expected.

**Other gains and losses on valuation of financial instruments** are expected to deteriorate sharply year on year to a net loss in 2020, mainly due to the effects of measuring securities from government issuers in European periphery countries and measuring guarantee commitments for investment products.

In 2021, however, other gains and losses on valuation of financial instruments are forecast to improve substantially to a net gain.

Volatility in capital markets and especially the widening of credit spreads on securities from the aforementioned issuers could have a negative impact on the forecast gains and losses.

**Net income from insurance business** in 2020 is expected to be well below the 2019 figure. The reason for this is the predicted sharp year-on-year decline in gains and losses on investments held by insurance companies, which will not be offset by the growth-related increase in premiums earned.

In 2021, net income from insurance business is currently expected to see a strong recovery and is therefore likely to be much higher than in 2020.

Exceptional events in financial and capital markets, changes in underwriting practices, or potential changes in the regulatory requirements faced by insurers may adversely affect the level of net income expected to be earned from insurance business.

Expenses for **loss allowances** are likely to rise considerably in 2020 compared with their level in 2019 owing to the predicted impact of COVID-19 on the real economy. At present, expenses for loss allowances in the second half of this year are anticipated to be in line with the planning.

Expenses for loss allowances are expected to remain at a high level in 2021, especially in the DZ BANK – CICB, DVB, and TeamBank operating segments.

The effects of the economic conditions shaped by the COVID-19 pandemic on the credit markets relevant to the DZ BANK Group could have a detrimental impact on loss allowances.

In 2020, **administrative expenses** are expected to hold steady year on year.

The planning for 2021 assumes a small rise in administrative expenses compared with 2020. The aim is for growth-related increases in administrative expenses in selected operating segments to be offset by savings.

**Other net operating income** is expected to be substantially lower in 2020 than in 2019 as a result of the prior-year figure having been boosted by positive non-recurring items and will probably remain at a greatly reduced level in 2021.

The **cost/income ratio** for the DZ BANK Group is likely to deteriorate sharply in 2020 as a result of the predicted year-on-year decrease in income and an unchanged level of expenses.

In 2021, the cost/income ratio should then improve noticeably in line with the anticipated increase in income.

One of the main strategic aims is to reduce the cost/income ratio over the long term by rigorously managing costs in all operating segments on the one hand and by accelerating growth in their operating business on the other.

**Regulatory RORAC**, the risk-adjusted performance measure based on regulatory risk capital, will probably fall substantially year on year in 2020 but rise substantially in 2021.

## 3 Liquidity and capital adequacy

The DZ BANK Group is assuming that it can continue to maintain an appropriate level of **liquidity adequacy** during the remainder of 2020 and in 2021. Further information on liquidity adequacy can be found in section 5 of the opportunity and risk report.

As matters currently stand, the DZ BANK Group's **capital adequacy** is assured for 2020 and 2021; that is to say, it will continue to have at its disposal the available internal capital necessary to cover the risks associated with the finance business and other risks arising from the group's business operations. Further information on capital adequacy can be found in section 6 of the opportunity and risk report.

# V Opportunity and risk report

# DZ BANK Group

## 1 Disclosure principles

In its capacity as the parent company in the DZ BANK Group, DZ BANK is publishing this opportunity and risk report in order to meet the transparency requirements for opportunities and risks applicable to the DZ BANK Group as specified in **sections 115 and 117 of the German Securities Trading Act (WpHG)** and **section 315 of the German Commercial Code (HGB)** in conjunction with **German Accounting Standard 16**.

This report also implements the applicable international risk reporting requirements on the basis of International Accounting Standard **(IAS) 34**, although the legal standards applicable to annual reporting are taken into account.

The requirements set out in **IFRS 7** are generally limited to financial instruments, shifting the focus of reporting to credit risk, equity investment risk, market risk, and liquidity risk. In contrast, the DZ BANK Group takes a holistic view of all these risks when using risk management tools and when assessing the risk position. As a consequence, the groupwide risk management system not only covers risks that arise specifically in connection with financial instruments, but also all other relevant types of risk. This integrated approach is reflected in this opportunity and risk report.

This opportunity and risk report also includes information in compliance with those recommended risk-related disclosures that have been issued by the **Financial Stability Board** (FSB), the **European Banking Authority** (EBA), and the **European Securities and Markets Authority** (ESMA) that extend beyond the statutory requirements, provided that they help to improve the usefulness of the disclosures in the decision-making process.

The quantitative disclosures in this opportunity and risk report are based on information that is presented to the Board of Managing Directors and used for internal management purposes (known as the **management approach**). This is designed to ensure the usefulness of the disclosures in the decision-making process.

## 2 Opportunity and risk management system

The DZ BANK Group's opportunity and risk management system was described in the combined opportunity and risk report ('2019 opportunity and risk report') in the 2019 group management report. Those disclosures are also applicable to the first half of this year, unless otherwise indicated in this report. The main aspects of the opportunity and risk management system are presented below.

### 2.1 Fundamental features

The DZ BANK Group defines **opportunities** as the possibility of positive changes in financial performance. **Risks** result from adverse developments affecting financial position or financial performance, and essentially comprise the risk of an unexpected future liquidity shortfall or unexpected future losses. A distinction is made between liquidity and capital. Risks that materialize can affect both of these resources.

The **management of opportunities** in the DZ BANK Group is integrated into the annual strategic planning process. Strategic planning is designed to enable the group to identify and analyze discontinuities based on different macroeconomic scenarios, trends, and changes in the markets, and forms the basis for evaluating opportunities. Opportunities that the management units identify as adding value are fed into the relevant business strategies.

**Reports** on future business development opportunities are based on the business strategies. As part of the general communication of the business strategies, employees are kept up to date about potential opportunities that have been identified.

Note:
In the event of differences between the English version of the opportunity and risk report and the original German version, the German version shall be definitive.

The risk management system is based on the risk appetite statement – the fundamental document for determining risk appetite in the DZ BANK Group – and the specific details and additions in **risk strategies**, which are consistent with the business strategies and have been approved by the Board of Managing Directors. The **risk appetite statement** contains risk policy guidelines and risk strategy requirements applicable throughout the group. It also sets out quantitative guidelines reflecting the risk appetite specified by the Board of Managing Directors.

The DZ BANK Group has a **risk management system** that is updated on an ongoing basis in line with changes to the business and regulatory environment. The organizational arrangements, methods, and IT systems that have been implemented – especially the limit system based on risk-bearing capacity, stress testing of all material risk types, and internal reporting – are designed to enable the DZ BANK Group to identify material risks at an early stage and initiate the necessary control measures. This particularly applies to **risks that could affect the group's survival as a going concern**.

The tools used for the purposes of risk management are also designed to enable the DZ BANK Group to respond appropriately to **significant market movements**. Possible changes in risk factors are reflected in adjusted risk parameters in the mark-to-model measurement of credit risk and market risk. Conservative crisis scenarios for short-term and medium-term liquidity are intended to ensure that liquidity risk management also takes adequate account of market crises.

The risk management system is more detailed than the system for the **management of opportunities** because risk management is subject to comprehensive statutory requirements and is also of critical importance to the continued existence of the DZ BANK Group as a going concern. The management of opportunities and risks is an integral part of the strategic planning process.

### 2.2 KPIs

Risks affecting liquidity and capital resources are managed on the basis of groupwide liquidity risk management and groupwide risk capital management. The purpose of **liquidity risk management** is to ensure adequate levels of liquidity reserves are in place in respect of risks arising from future payment obligations (liquidity adequacy). The aim of **risk capital management** is to ensure the availability of capital resources that are commensurate with the risks assumed (capital adequacy).

The key risk management figures used in the DZ BANK Group are the minimum liquidity surplus and the liquidity coverage ratio (LCR) in respect of **liquidity**, economic capital adequacy, the coverage ratio for the financial conglomerate, and the regulatory capital ratios in respect of **capital**, plus the leverage ratio.

### 2.3 Management units

All DZ BANK Group entities are integrated into the groupwide opportunity and risk management system. DZ BANK and material subsidiaries – also referred to as management units – form the core of the financial services group. The DZ BANK Group largely comprises the regulatory DZ BANK banking group and R+V.

The insurance business operated at R+V differs in material respects from the other businesses of the DZ BANK Group. For example, actuarial risk is subject to factors that are different from those affecting risks typically assumed in banking business. Furthermore, policyholders have a share in any gains or losses from investments in connection with life insurance, as specified in statutory requirements, and this must be appropriately taken into account in the measurement of risk. Not least, the supervisory authorities also treat banking business and insurance business differently. This is reflected in differing regulatory regimes for banks and insurance companies.

Because of these circumstances, two sectors – Bank sector and Insurance sector – have been created within the DZ BANK Group for the purposes of risk management. The management units are assigned to these sectors as follows:

**Bank sector**:
- DZ BANK
- BSH
- DZ HYP
- DVB
- DZ PRIVATBANK
- TeamBank
- UMH
- VR Smart Finanz

**Insurance sector**:
- R+V.

The management units represent the operating segments of the DZ BANK Group. From a risk perspective, the 'DZ BANK' management unit equates to the central institution and corporate bank operating segment and the holding function.

**DZ HYP** has applied the **waiver** pursuant to section 2a (1), (2), and (5) of the German Banking Act (KWG) in conjunction with article 7 (1) of the Capital Requirements Regulation (CRR), under which – provided certain conditions are met – the regulatory supervision at individual bank level may be replaced by supervision of the entire banking group.

The management units are deemed to be material in terms of their contribution to the DZ BANK Group's aggregate risk. They are directly incorporated into the group's risk management system. The other subsidiaries and investee entities of DZ BANK are included in the risk management system either indirectly as part of equity investment risk or directly as part of other types of risk. This is decided for each of them annually.

The management units' subsidiaries and investees are also included in the DZ BANK Group's risk management system – indirectly via the majority-owned entities – with due regard to the minimum standards applicable throughout the group.

Risk is managed groupwide on a consolidated basis. Risks arising in the subsidiaries therefore impact the risk-bearing capacity of DZ BANK as the group parent.

### 2.4 Material changes

The **modeling of business risk** in the Bank sector was changed at the start of this year. Until 2019, this risk had been measured on a decentralized basis in the management units. Business risk in the Bank sector is now calculated centrally by DZ BANK on the basis of a standardized method. The centralized model for business risk is used to calculate the risk capital requirement for each management unit in isolation and the risk capital requirement for the Bank sector as a whole, including the management units' risk contributions to the aggregate risk. The calculation covers a forecast period of 1 year. The centralized model takes account of diversification effects between the management units, thereby significantly reducing the capital requirement for business risk in the Bank sector. Replacing the decentralized calculation method with the centralized risk model should also help to reduce costs because of the simplification of data structures and management processes. Further details on business risk can be found in section 11.

### 2.5 Measures for dealing with the COVID-19 pandemic

To enable the banking industry to tackle the impact of the COVID-19 pandemic, the supervisory authorities introduced various relief measures concerning the **liquidity and solvency requirements** during the first half of 2020. This led to the external minimum targets for regulatory key figures being lowered until further notice. Consequently, the Board of Managing Directors of DZ BANK reduced selected **internal thresholds** for the management of capital adequacy in the DZ BANK Group's risk appetite statement. The new arrangements came into force on June 30, 2020. No material changes to the **risk strategies** were required in response to the pandemic.

In addition, changes were made to the **risk-related reporting to the Board of Managing Directors** of DZ BANK to match the management requirements at the start of the COVID-19 pandemic. This included the introduction of two new reporting instruments that can also be used to report on the risk situation to the supervisory authorities. The **financial and risk radar** was established as a regular weekly or two-weekly – depending on need – reporting format that covers economic indicators, forecasts, and the DZ BANK Group's current financial and risk position. The report is designed, in particular, to monitor the impact of the capital market turmoil brought about by the COVID-19 pandemic and any other developments that may adversely affect the business models in the DZ BANK Group. The second instrument, the **CET1 radar**, is used to report on the expected changes to the DZ BANK Group's common equity Tier 1 capital ratio. It also shows other relevant parameters that have an influence on this ratio.

Furthermore, **stress testing** now focuses on identifying and analyzing the effects of the COVID-19 pandemic. To this end, the development and simulation of specific scenarios got under way in the first half of this year. The results are made available to the Board of Managing Directors of DZ BANK as part of the report on adverse stress tests.

Further measures for dealing with the COVID-19 pandemic are described in the course of this opportunity and risk report.

## 3 Risk profile

The DZ BANK Group's **business model** and the associated business models used by the management units determine the risk profile of the group.

The values for the measurement of **liquidity and capital adequacy** presented in Fig. 4 reflect the liquidity risks and the risks backed by capital assumed by the DZ BANK Group. They illustrate the **risk profile** of the DZ BANK Group. The values for these KPIs are compared against the (internal) threshold values specified by the Board of Managing Directors of DZ BANK with due regard to the business and risk strategies – also referred to below as **risk appetite** – and against the (external) minimum targets laid down by the supervisory authorities.

FIG. 4 – LIQUIDITY AND CAPITAL ADEQUACY KPIS

| | Measured figure | | Internal minimum threshold value[1] | | | External minimum target | | |
|---|---|---|---|---|---|---|---|---|
| | Jun. 30, 2020 | Dec. 31, 2019 | 2020 (after adjustment)[2] | 2020 (before adjustment)[2] | 2019 | 2020 (after adjustment)[2] | 2020 (before adjustment)[2] | 2019 |
| **LIQUIDITY ADEQUACY** | | | | | | | | |
| **DZ BANK Group (economic perspective)** | | | | | | | | |
| Economic liquidity adequacy (€ billion)[3] | 8.1 | 12.5 | 4.0 | 4.0 | 4.0 | 0.0 | 0.0 | 0.0 |
| **DZ BANK banking group** | | | | | | | | |
| Liquidity coverage ratio (%)[4] | 140.3 | 144.6 | 110.0 | 110.0 | 110.0 | < 100.0 | 100.0 | 100.0 |
| **CAPITAL ADEQUACY** | | | | | | | | |
| **DZ BANK Group (economic perspective)** | | | | | | | | |
| Economic capital adequacy (%)[5] | 161.8 | 160.2 | 120.0 | 120.0 | 120.0 | 100.0 | 100.0 | 100.0 |
| **DZ BANK financial conglomerate (normative internal perspective)** | | | | | | | | |
| Coverage ratio according to CRR minimum capital requirement (%)[6] | 178.2 | 174.6 | 120.0 | 120.0 | 120.0 | 100.0 | 100.0 | 100.0 |
| Coverage ratio according to SREP minimum total capital requirement (%)[6] | 130.6 | 127.6 | | | | 100.0 | 100.0 | 100.0 |
| **DZ BANK banking group (normative internal perspective)** | | | | | | | | |
| Common equity Tier 1 capital ratio (%)[6 7] | 14.0 | 14.4 | 10.0 | 11.5 | 11.5 | 9.0 | 9.8 | 9.8 |
| Tier 1 capital ratio (%)[6 7] | 15.4 | 15.9 | 11.9 | 13.0 | 13.0 | 10.8 | 11.3 | 11.3 |
| Total capital ratio (%)[6 7] | 17.3 | 17.9 | 14.3 | 15.0 | 15.0 | 13.3 | 13.3 | 13.3 |
| Leverage ratio (%)[6] | 4.6 | 4.9 | 3.5 | 3.5 | 3.5 | | | |
| MREL ratio (%)[8] | 10.2 | 11.0 | 8.3 | 8.3 | 8.5 | 8.0 | 8.0 | 8.2 |

Not available

1 As specified by the Board of Managing Directors.
2 'Before adjustment': internal thresholds originally planned for 2020 and external minimum requirements originally specified by the supervisory authorities for 2020. 'After adjustment': internal thresholds and external minimum requirements after factoring in the changes triggered by the COVID-19 pandemic.
3 The measured value relates to the stress scenario with the lowest minimum liquidity surplus. The internal minimum target relates to the observation threshold.
4 In view of the COVID-19 pandemic, the supervisory authorities will tolerate a value below the external minimum target of 100 percent until further notice.
5 The internal threshold value is the amber threshold in the traffic light system for managing and monitoring economic capital adequacy. The value originally measured as at December 31, 2019 was 159.3 percent and has been adjusted due to the scheduled recalculation of the overall solvency requirement for the Insurance sector.
6 Measured values based on full application of the CRR.
7 The external minimum targets are the binding regulatory minimum capital requirements. Details on the minimum capital requirements can be found in section 6.2.2.
8 Calculated using the hybrid approach. The measured value as at June 30, 2020 is not yet available, so the measured value as at March 31, 2020 is shown instead.

In view of the fallout from the COVID-19 pandemic, the supervisory authorities tolerated values that had temporarily fallen below the external minimum targets for liquidity adequacy and capital adequacy during the reporting period. This applies analogously to the internal thresholds defined by the Board of Managing Directors.

The **solvency** of DZ BANK and its subsidiaries was never in jeopardy on any risk measurement date during the reporting period. They also complied with regulatory requirements for liquidity adequacy. By holding ample liquidity reserves, the group aims to be able to protect its liquidity against any potential crisis-related threats. In addition, the DZ BANK Group remained within its economic **risk-bearing capacity** in the first half of 2020 and also complied with regulatory requirements for capital adequacy on every reporting date.

## 4 Potential opportunities and general risk factors

### 4.1 Potential opportunities

The potential opportunities described in the 2019 opportunity and risk report – **corporate strategy** and **digitalization and new competitors** – continued to be relevant to the DZ BANK Group in the first 6 months of this year and apply equally to the second half of 2020.

The **Outlook** section of the interim group management report describes expected developments in the market and business environment together with the business strategies and the implications for the DZ BANK Group's financial performance forecast for the second half of the year. The expected developments in the market and business environment are crucial factors in the **strategic positioning** and the resulting opportunities for increasing earnings and cutting costs.

The **credit ratings** of DZ BANK and the cooperative financial network also represent significant potential opportunities for the DZ BANK Group.

In the reporting half-year, rating agency Fitch changed the outlook for the issuer rating of DZ BANK and the cooperative financial network from stable to negative. This was due to the impact of the COVID-19 pandemic on Germany's economy and the resulting additional pressure on German banks' income and risk situation. Fig. 5 provides an overview of DZ BANK's credit ratings.

On August 12, 2020, Moody's announced that it was lowering the long-term rating for non-preferred unsecured bonds of DZ BANK from A1 to A2. All other bond issue ratings of DZ BANK and the issuer rating were confirmed.

As at June 30, 2020, the long-term credit ratings for the cooperative financial network issued by Fitch and Standard & Poor's remained unchanged at AA-.

FIG. 5 – DZ BANK RATINGS

| | Standard & Poor's | | Moody's | | Fitch | |
|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Issuer rating | AA- | AA- | Aa1 | Aa1 | AA- | AA- |
| Covered bonds (DZ BANK BRIEFE) | AA+ | AA+ | Aaa | Aaa | - | - |
| Long-term rating for deposits | - | - | Aa1 | Aa1 | AA- | AA- |
| Long-term counterparty risk assessment/ derivative counterparty rating | - | - | Aa1 | Aa1 | AA- | AA- |
| Long-term rating for unsecured, 'preferred' bonds | AA- | AA- | Aa1 | Aa1 | AA- | AA- |
| Long-term rating for unsecured, 'non-preferred' bonds | A+ | A+ | A1 | A1 | AA- | AA- |
| Short-term rating | A-1+ | A-1+ | P-1 | P-1 | F1+ | F1+ |

## 4.2 General risk factors

### 4.2.1 Concept and material changes

The DZ BANK Group is subject to a range of risk factors that apply generally to the German and European banking industry as a whole. These are environmental, regulatory, and macroeconomic risk factors. The factors can fundamentally be classified under business risk but also affect other types of risk. The general risk factors are therefore examined here.

The risk factors relevant to the DZ BANK Group were essentially explained in detail in the 2019 opportunity and risk report. The risk factors listed there continued to be relevant to the DZ BANK Group in the first 6 months of this year and apply equally to the second half of 2020.

The following risk factors grew in significance in the first half of 2020, primarily due to the COVID-19 pandemic. That is why they are explained in detail.

### 4.2.2 Low interest rates

If there is a long period of low interest rates, the DZ BANK Group could face the risk of lower earnings, including lower earnings from BSH's extensive **building society operations**. When interest rates are very low, home savings loans lose their appeal for customers, while high-interest home savings deposits become more attractive. Consequently, interest income on home savings loans would fall and the interest expense for home savings deposits would rise. Furthermore, available liquidity could only be invested at low rates of return, an additional factor depressing earnings.

Because of the long period of low interest rates, the challenge faced by the DZ BANK Group's **asset management activities**, brought together under UMH, is to ensure that the guarantee commitments given to customers in respect of individual products can actually be met from the investment instruments in those products. This particularly affects the pension products and the guarantee fund product group. The pension products mainly consist of UniProfiRente, a retirement pension solution certified and subsidized by the German government. The amounts paid in during the contributory phase and the contributions received from the government are guaranteed to be available to the investor at the pension start date. The pension is then paid out under a payment plan with a subsequent life annuity. Guarantee funds are products for which UMH guarantees that a minimum percentage of capital is preserved, depending on the precise product specification. If UMH is unable to draw some of the management fees, or has to inject fresh capital, so that it can meet its guarantee commitments, this could have a substantial detrimental impact on the financial performance of the DZ BANK Group.

The entire insurance industry is affected by the low interest rates in the capital markets. These low interest rates are having a particular effect on the **business model of the personal insurance companies** at R+V. For example, products that guarantee minimum returns pose the risk that the guaranteed minimum interest rates agreed when the contract is signed are higher than the current interest rates in the capital markets and therefore cannot be achieved over the long term. This risk is further exacerbated by the fall in interest rates in the context of the COVID-19 pandemic.

A long period of low interest rates and the growing importance of central banks' bond-buying programs also increase the risk of **incorrect valuations** in the financial and real estate markets in which the entities in the DZ BANK Group operate.

The developments described above affect market risk in the Bank sector, business risk in the Bank sector, and market risk in the Insurance sector.

### 4.2.3 Global recession

The **COVID-19 pandemic** and the containment measures imposed to tackle it pushed the global economy into a deep recession in the spring. Most countries have now managed to reduce the number of cases and the restrictions have begun to be lifted, enabling an economic recovery to get under way. However, there is a risk that a potential second wave of the virus in individual countries – or even worldwide – could bring about a relapse into a renewed recessionary phase.

Moreover, if the United States were to further ramp up its protectionist action and Europe and China were to respond with retaliatory measures, the consequence could be an escalation of the **trade disputes** that would have a huge negative impact on global trade, which has already been weakened by the fallout from the COVID-19 pandemic. This would adversely affect the global economy and put further strain on the heavily export-dependent German economy.

DZ BANK and DZ HYP grant a substantial number and volume of loans to German businesses. The global recession creates the risk of a deterioration in the credit quality of German businesses, which would lead to greater credit risk and, if individual businesses default, higher impairment losses in the Bank sector. Default risk may also increase in the retail banking business if there is a rise in unemployment and in the number of personal insolvencies.

Other potential consequences of the crisis include a widening of credit spreads and a fall in the market liquidity of government and corporate bonds, which could cause a rise in market risk in both the Bank sector and the Insurance sector. This mainly affects DZ BANK, DZ HYP, and BSH in the Bank sector and R+V in the Insurance sector because these entities hold considerable portfolios of securities from German and European issuers.

There is also a risk that fair value losses on government and corporate bonds could have a temporary or permanent adverse impact on capital.

#### 4.2.4 Economic divergence in the eurozone

In **Italy**, the current COVID-19 pandemic is expected to result in a sharp fall in GDP, a high and rising level of unemployment, and a marked increase in the already high level of government debt. This is the likely outcome of the fiscal spending in connection with the government's support measures to reduce the adverse effects of the pandemic. At the same time, the Italian administration continues to show no signs of willingness to implement far-reaching reforms. If there are no lasting solutions to these problems, there could be perpetual concerns about whether the government debt can be sustained and/or refinanced and about whether long-term growth can be initiated. This could prejudice the ability of the country to obtain funding in international capital markets.

As a result of the economic developments in Italy, **Italian banks** are finding it increasingly difficult to secure funding via the capital markets. Moreover, the financial performance of Italian banks is suffering as they continue to make large additions to loan provisions and incur losses relating to the elimination of non-performing loans.

The COVID-19 pandemic is substantially exacerbating the existing difficulties in **Spain**. Its already high level of government debt is coming under even more pressure due to high government spending as part of its fiscal support measures. Moreover, the macroeconomic outlook has turned decidedly gloomy in view of the forecast recession and predicted further increase in the already high unemployment rate. The direction of the fiscal policy of the Spanish government, which has been in place since January 2020, is also subject to significant uncertainty. The tensions in Catalonia could give rise to further risks for the Spanish economy. This could prejudice the ability of the country and its banks to obtain funding in international capital markets.

**Portugal's** financial strength is weakened by a significant level of government debt that is likely to rise even higher owing to the COVID-19 pandemic and the increase in fiscal spending aimed at supporting the economy. The crisis will probably mean a sharp fall in GDP too. The banking sector harbors further risks to financial stability. Even after capitalization, the banks are still carrying substantial portfolios of non-performing loans, although these are declining. To add to this, the earnings prospects for the sector are weak because of the current low level of interest rates. The Portuguese financial market is highly susceptible to volatility in investor confidence. At the same time, the country's ability to respond to negative shocks with fiscal policy measures is limited because of the high level of public debt.

In the last few years, the **ECB's expansionary monetary policy**, and particularly its bond-buying program, largely prevented the structural problems in some EMU member countries from being reflected in the capital markets. Because the COVID-19 pandemic hit Italy and Spain particularly hard, the economic fallout in these countries is especially severe and their need to obtain funding in the capital markets has risen sharply. Expansion of the ECB's asset purchase program has so far limited the widening of credit spreads. But there is a risk that this situation could change if the asset purchase program were to end. Highly indebted countries could find it considerably more difficult to arrange funding through capital markets.

DZ BANK, DZ HYP, and R+V hold significant investments in Italian and Spanish bonds. In addition, DZ BANK and DZ HYP have substantial investments in Portuguese bonds. DZ BANK has only entered into a small volume of derivatives and money market business with Italian and Spanish counterparties. Furthermore, DZ BANK operates a very small volume of trading and lending business with short- and medium-term maturities involving counterparties in Italy, Spain, and Portugal; this business consists of trade finance and letters of credit.

The developments described above could cause a deterioration in the credit standing of the countries concerned and of the businesses based in those countries, which would lead to heightened credit risk in the Bank sector. Other potential consequences of the sovereign debt crisis include a widening of credit spreads and a fall in the market liquidity of government and corporate bonds, which could cause a rise in market risk in both the Bank sector and the Insurance sector. There is also a risk that fair value losses on government and corporate bonds could have a temporary or permanent adverse impact on capital. If individual counterparties – for example, southern eurozone periphery countries – were to become insolvent, this would give rise to a requirement for the recognition of significant additional impairment losses in the entities of the DZ BANK Group in respect of the financial instruments purchased from these countries.

Details of the lending exposure in Portugal, Italy, and Spain of the entities in the Bank sector and of R+V can be found in section 7.3.1 and section 15.2 respectively.

#### 4.2.5 Challenging shipping and offshore markets

In the **shipping finance business**, an oversupply of tonnage is having a detrimental impact on asset values and customer credit quality. This situation has been made worse by the COVID-19 pandemic and the resulting collapse of global trade. The global bulk freighter and container ship sectors are particularly affected, whereas existing tanker tonnage is being used as floating storage due to the dramatic drop in the oil price.

To add to the problems, the low price of oil is adversely affecting global **offshore oil production**, leading to lower demand for supply ships and other floating offshore equipment. The dramatic fall in the oil price caused the already difficult situation in the offshore sector to deteriorate still further in the first half of this year. Market volatility means that the market values of the financed assets are subject to significant fluctuation.

These trends could lead to increased credit risk and to a higher level of impairment losses in the shipping finance business at DVB and DZ BANK and in the offshore finance business at DVB. The lending volume in shipping and offshore finance is presented in section 7.3.2.

## 5 Liquidity adequacy

### 5.1 Economic perspective

#### 5.1.1 Quantitative variables

The available liquid securities and the availability and composition of the sources of funding have a significant influence on the minimum liquidity surplus of the DZ BANK Group. These factors are presented below.

##### Liquid securities

Liquid securities form part of the available liquidity reserves, which are referred to as **counterbalancing capacity**. Liquid securities are largely held in the portfolios of DZ BANK's Capital Markets Trading division or of the treasury units at the subsidiaries of DZ BANK. Only bearer bonds are counted as liquid securities.

Liquid securities comprise highly liquid securities that are suitable for collateralizing funding in private markets, securities eligible as collateral for central bank loans, and other securities that can be liquidated in the 1-year forecast period that is relevant for liquidity risk.

Securities are only eligible provided they are not pledged as collateral, e.g. for secured funding. Securities that have been borrowed or taken as collateral for derivatives business or in connection with secured funding only become eligible when they are freely transferable. Eligibility is recognized on a daily basis and also takes into account factors such as restrictions on the period in which the securities are freely available.

Fig. 6 shows the liquidity value of the liquid securities that would result from secured funding or if the securities were sold. The total liquidity value as at June 30, 2020 amounted to €35.6 billion (December 31, 2019: €49.6 billion). The decrease in the volume of liquid securities was attributable to the use of securities that are eligible as central bank collateral at the ECB for the purpose of borrowing under the targeted longer-term refinancing operations of the Eurosystem.

Consequently, liquid securities represent the largest proportion of the counterbalancing capacity and make a major contribution to maintaining solvency in the stress scenarios with defined limits at all times during the relevant forecast period. In the first month, which is a particularly critical period in a crisis, liquid securities are almost exclusively responsible for maintaining solvency in the stress scenarios with defined limits.

FIG. 6 – LIQUID SECURITIES

| € billion | 2020 | 2019 |
|---|---|---|
| **Liquid securities eligible for GC Pooling (ECB Basket)[1]** | **23.2** | 26.3 |
| Securities in own portfolio | 30.5 | 27.6 |
| Securities received as collateral | 11.8 | 9.4 |
| Securities provided as collateral | -19.1 | -10.7 |
| **Liquid securities eligible as collateral for central bank loans** | **6.6** | 16.8 |
| Securities in own portfolio | 17.7 | 17.7 |
| Securities received as collateral | 7.4 | 6.0 |
| Securities provided as collateral | -18.5 | -6.9 |
| **Other liquid securities** | **5.9** | 6.5 |
| Securities in own portfolio | 5.2 | 5.5 |
| Securities received as collateral | 0.7 | 1.2 |
| Securities provided as collateral | -0.1 | -0.2 |
| **Total** | **35.6** | 49.6 |
| Securities in own portfolio | 53.5 | 50.8 |
| Securities received as collateral | 19.9 | 16.6 |
| Securities provided as collateral | -37.7 | -17.7 |

1 GC = general collateral, ECB Basket = eligible collateral for ECB funding.

### Funding

The short-term and medium-term funding structure is a determining factor in the level of liquidity risk in the DZ BANK Group and at DZ BANK. The main sources of funding on the unsecured money markets are shown in Fig. 7.

FIG. 7 – UNSECURED FUNDING

| % | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Local cooperative banks | 44 | 43 |
| Other banks, central banks | 17 | 11 |
| Corporate customers, institutional customers | 21 | 12 |
| Commercial paper (institutional investors) | 18 | 34 |

Changes in the composition of the main sources of funding were attributable to a change in the behavior of customers and investors resulting from money market policy implemented by the ECB.

Further information on funding can be found in section II.5 (Financial position) of the business report in the interim group management report.

### 5.1.2 Risk position

Economic liquidity adequacy is assured if none of the four stress scenarios with defined limits exhibit a negative value for the internal key risk indicator 'minimum liquidity surplus'. Fig. 8 shows the results of measuring liquidity risk. The results are based on a daily calculation and comparison of forward cash exposure and counterbalancing capacity. The values reported are the values that occur on the day on which the liquidity surplus calculated over the forecast period of 1 year is at its lowest point.

The liquidity risk value measured as at June 30, 2020 for the stress scenario with defined limits with the lowest minimum liquidity surplus (squeeze scenario) was €8.1 billion (December 31, 2019: €12.5 billion). The decrease in the minimum liquidity surplus was largely due to an increase in the collateral provided by DZ BANK in view of the market movements triggered by the COVID-19 pandemic.

The risk value as at June 30, 2020 was above the internal threshold value (€4.0 billion) and above the limit (€1.0 billion). It was also above the external minimum target (€0 billion). The observation threshold, limit, and external minimum target remained unchanged compared with the first half of 2019.

The minimum liquidity surplus as at June 30, 2020 was positive in the stress scenarios with defined limits that were determined on the basis of risk appetite. This is due to the fact that the counterbalancing capacity was above the cumulative cash outflows on each day of the defined forecast period in every scenario, which indicates that the cash outflows assumed to take place in a crisis could be comfortably covered.

FIG. 8 – LIQUIDITY UP TO 1 YEAR IN THE STRESS SCENARIOS WITH DEFINED LIMITS: MINIMUM LIQUIDITY SURPLUSES

| | Forward cash exposure | | Counterbalancing capacity | | Minimum liquidity surplus | |
|---|---|---|---|---|---|---|
| € billion | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Downgrading | -99.1 | -76.1 | 120.9 | 105.7 | 21.9 | 29.6 |
| Corporate crisis | -98.9 | -74.5 | 107.0 | 88.0 | 8.1 | 13.5 |
| Market crisis | -101.2 | -80.7 | 115.1 | 97.2 | 13.9 | 16.4 |
| Combination crisis | -101.0 | -80.2 | 111.2 | 92.7 | 10.2 | 12.5 |

### 5.2 Normative internal perspective

The **LCR** for the DZ BANK banking group calculated in accordance with Commission Delegated Regulation (EU) No. 2015/61 as at June 30, 2020 is shown in Fig. 9.

FIG. 9 – LIQUIDITY COVERAGE RATIO AND ITS COMPONENTS

| | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Total liquidity buffer (€ billion) | 101.0 | 84.1 |
| Total net liquidity outflows (€ billion) | 72.0 | 58.2 |
| LCR (%) | 140.3 | 144.6 |

The decrease in the LCR from 144.6 percent as at December 31, 2019 to 140.3 percent as at June 30, 2020, with slightly higher excess cover, was attributable to the ratio's increased sensitivity to net liquidity outflows. Excess cover is the difference between the liquidity buffer and the net liquidity outflows.

In the reporting period, both the internal threshold value of 110.0 percent (unchanged year on year) and the regulatory minimum requirement of 100.0 percent (also unchanged year on year) were exceeded at every measurement date and at every reporting date. In view of the COVID-19 pandemic, the supervisory authorities will tolerate a value below the external minimum target of 100 percent until further notice.

## 6 Capital adequacy

### 6.1 Economic perspective

It was necessary to **recalculate the overall solvency requirement** as at December 31, 2019 owing to scheduled changes to the parameters for the risk measurement procedures and the updating of actuarial assumptions carried out in the second quarter of 2020 for the Insurance sector on the basis of R+V's 2019 consolidated financial statements. The recalculation reflects updated measurements of insurance liabilities based on annual actuarial analyses and updates to parameters in the risk capital calculation. Because of the complexity and the amount of time involved, the parameters are not completely updated in the in-year calculation and an appropriate projection is made.

The recalculation led to changes in the available internal capital, key risk indicators, and economic capital adequacy. The figures as at December 31, 2019 given in this opportunity and risk report have been restated accordingly and are not directly comparable with the figures in the 2019 opportunity and risk report. As the limits are not adjusted retrospectively in connection with the recalculation, the overall solvency requirement may exceed the original limit. Because it is looking at past data, however, a limit overrun of this type is not relevant for management purposes.

The DZ BANK Group's **available internal capital** as at June 30, 2020 stood at €29,549 million. The comparable figure as at December 31, 2019 was €27,328 million. The figure originally measured as at December 31, 2019 and disclosed in the 2019 opportunity and risk report came to €26,968 million. The increase in available internal capital compared with December 31, 2019 was largely due to first-time use of the transitional measure on technical provisions and the volatility adjustment in the Insurance sector (for details, see section 6.2.3). This outweighed the adverse effects of capital market movements.

The limit derived from the available internal capital was set at €23,730 million as at June 30, 2020 (December 31, 2019: €21,723 million). It was raised because of the planned expansion of business and in response to the fallout from the COVID-19 pandemic. The limit for the Insurance sector was increased by €2,268 million, whereas the limit for the Bank sector was reduced by €366 million. The limit for the centralized capital buffer requirement was raised by €105 million.

As at June 30, 2020, **aggregate risk** was calculated at €18,262 million. The comparable figure as at December 31, 2019 was €17,056 million. The figure originally measured as at December 31, 2019 and disclosed in the 2019 opportunity and risk report came to €16,932 million. This increase was driven by higher numbers in both the Bank sector and the Insurance sector that were primarily attributable to the market turmoil triggered by the COVID-19 pandemic.

As at June 30, 2020, the **economic capital adequacy ratio** for the DZ BANK Group was calculated at 161.8 percent. The comparable figure as at December 31, 2019 was 160.2 percent. The figure originally measured as at December 31, 2019 and disclosed in the 2019 opportunity and risk report was 159.3 percent. During the first half of 2020, the economic capital adequacy ratio was higher than the internal threshold value of 120.0 percent and the external minimum target of 100.0 percent at every measurement date. The internal threshold value and the external minimum target for 2020 are unchanged compared with those for 2019. The increase in the economic capital adequacy ratio compared with the end of 2019 was due to the larger rise in available internal capital relative to the rise in aggregate risk.

Fig. 10 provides an overview of the components of economic capital adequacy.

FIG. 10 – COMPONENTS OF ECONOMIC CAPITAL ADEQUACY OF THE DZ BANK GROUP


The limits and risk capital requirements including the capital buffer requirements for the Bank sector, broken down by risk type, are shown in Fig. 11.

FIG. 11 – LIMITS AND RISK CAPITAL REQUIREMENTS INCLUDING CAPITAL BUFFER REQUIREMENTS IN THE BANK SECTOR

| | Limit | | Risk capital requirement[3] | |
|---|---|---|---|---|
| € million | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Credit risk | 6,978 | 7,189 | 5,530 | 5,484 |
| Equity investment risk | 1,090 | 1,063 | 894 | 850 |
| Market risk | 5,725 | 5,646 | 4,413 | 3,860 |
| Technical risk of a home savings and loan company[1] | 550 | 706 | 433 | 397 |
| Business risk[2] | 550 | 1,016 | 416 | 837 |
| Operational risk | 1,020 | 926 | 872 | 859 |
| Total (after diversification) | 14,835 | 15,201 | 11,711 | 11,289 |

1 Market risk contains spread risk and migration risk.
2 Including business risk and reputational risk of BSH.
3 Apart from that of BSH, reputational risk is contained in the risk capital requirement for business risk.
4 Including decentralized capital buffer requirement.

Fig. 12 sets out the limits and overall solvency requirements for the **Insurance sector**, broken down by risk type, and includes policyholder participation.

FIG. 12 – LIMITS AND OVERALL SOLVENCY REQUIREMENTS IN THE INSURANCE SECTOR

| | Limit | | Overall solvency requirement | |
|---|---|---|---|---|
| € million | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Life actuarial risk | 1,400 | 1,200 | 1,198 | 1,049 |
| Health actuarial risk | 700 | 410 | 419 | 245 |
| Non-life actuarial risk | 4,500 | 3,960 | 3,962 | 3,724 |
| Market risk | 6,250 | 3,850 | 4,765 | 3,789 |
| Counterparty default risk | 200 | 100 | 105 | 88 |
| Operational risk | 800 | 680 | 694 | 637 |
| Risks from entities in other financial sectors | 140 | 112 | 119 | 119 |
| Total (after diversification) | 8,170 | 5,902 | 5,908 | 5,240 |

In addition to the amounts shown in Fig. 11 and Fig. 12, there was a **centralized capital buffer requirement across all types of risk** of €643 million as at June 30, 2020 (December 31, 2019: €526 million). The corresponding limit was €725 million as at the reporting date (December 31, 2019: €620 million). The increase was primarily due to the inclusion of DVB's business risk, which is not included in the centralized risk model.

## 6.2 Normative internal perspective

### 6.2.1 DZ BANK financial conglomerate

The DZ BANK financial conglomerate comprises the DZ BANK banking group and the R+V Versicherung AG insurance group.

Until the end of the second quarter of 2020, the coverage ratio for the financial conglomerate was calculated on the basis of the minimum capital requirement according to the CRR. From the start of the third quarter, the coverage ratio has to be calculated using the minimum total capital requirement applicable to the DZ BANK banking group according to the Supervisory Review and Evaluation Process (SREP).

For reasons of transparency and comparability, the coverage ratio and its components as at June 30, 2020 are shown in Fig. 13 both in accordance with the CRR minimum capital requirement of 8 percent and in accordance with the SREP minimum total capital requirement of 13.26 percent. From July 1, 2020, only the coverage ratio calculated using the SREP minimum total capital requirement will be used.

FIG. 13 – COMPONENTS OF REGULATORY CAPITAL ADEQUACY OF THE DZ BANK FINANCIAL CONGLOMERATE

| | According to SREP minimum total capital requirement | | According to CRR minimum capital requirement | |
|---|---|---|---|---|
| | **Jun. 30, 2020** | Dec. 31, 2019 | **Jun. 30, 2020** | Dec. 31, 2019[1] |
| Own funds (€ million) | **32,532** | 30,039 | **32,532** | 30,039 |
| Solvency requirements (€ million) | **24,912** | 23,552 | **18,256** | 17,205 |
| **Coverage ratio (%)** | **130.6** | 127.6 | **178.2** | 174.6 |

1 Final figures, which deviate from the preliminary figures given in the 2019 opportunity and risk report.

The rise in own funds and in the solvency requirements calculated for the DZ BANK financial conglomerate as at June 30, 2020 compared with December 31, 2019 was attributable to the change in own funds and in the capital requirements and solvency requirements at the level of the DZ BANK banking group and the R+V Versicherung AG insurance group (for details, see section 6.2.2 and section 6.2.3).

The coverage ratios for the financial conglomerate as at June 30, 2020, calculated using the two methods, were higher than both the external minimum target (100.0 percent) and the internal threshold value (120.0 percent). According to current projections, this is also expected to be assured in the second half of the year for the coverage ratio calculated on the basis of the SREP minimum total capital requirement.

### 6.2.2 DZ BANK banking group

Regulatory minimum capital requirements according to SREP

The mandatory minimum capital requirements and their components applicable to 2020 and 2019 at the level of the DZ BANK banking group are shown in Fig. 14.

FIG. 14 – REGULATORY MINIMUM CAPITAL REQUIREMENTS OF THE DZ BANK BANKING GROUP

| % | **2020 (after adjust-ment)[3]** | **2020 (before adjust-ment)[3]** | **2019** |
|---|---|---|---|
| Minimum requirement for common equity Tier 1 capital | 4.50 | 4.50 | 4.50 |
| Additional Pillar 2 capital requirement | 0.98 | 1.75 | 1.75 |
| Capital conservation buffer | 2.50 | 2.50 | 2.50 |
| Countercyclical capital buffer | 0.01 | 0.01 | 0.04 |
| O-SII capital buffer | 1.00 | 1.00 | 1.00 |
| **Mandatory minimum requirement for common equity Tier 1 capital** | **9.00** | **9.76** | **9.79** |
| Minimum requirement for additional Tier 1 capital[1] | 1.50 | 1.50 | 1.50 |
| Additional Pillar 2 capital requirement | 0.33 | | |
| **Mandatory minimum requirement for Tier 1 capital** | **10.82** | **11.26** | **11.29** |
| Minimum requirement for Tier 2 capital[2] | 2.00 | 2.00 | 2.00 |
| Additional Pillar 2 capital requirement | 0.44 | | |
| **Mandatory minimum requirement for total capital** | **13.26** | **13.26** | **13.29** |

Not available

1 The value for the countercyclical capital buffer is recalculated at each reporting date. Unlike the other reported values, which apply to the entire financial year, the countercyclical capital buffers shown for 2020 and 2019 relate solely to the reporting dates of June 30, 2020 and December 31, 2019 respectively.
2 The minimum requirement can also be satisfied with common equity Tier 1 capital.
3 'Before adjustment': minimum requirements originally planned for 2020. 'After adjustment': minimum requirements after factoring in the relief measures introduced by the supervisory authorities due to the COVID-19 pandemic.

Because of the COVID-19 pandemic, the supervisory authorities introduced various relief measures for banks, including in relation to the binding minimum capital requirements. For example, a bank can temporarily use up its capital conservation buffer and

O-SII capital buffer without incurring sanctions. In such an eventuality, it must submit a capital conservation plan to the supervisory authorities. If, as a result, the combined capital buffer requirement and thus the threshold for the maximum distributable amount are no longer met, the rules regarding the limits for distributions continue to apply. These relief measures are therefore not taken into account in Fig. 14.

However, Fig. 14 does take account of the relief measures resulting from early application of the changes to the composition of the additional capital requirements under Pillar 2. Until December 31, 2019, the additional Pillar 2 capital requirement had to be met entirely with common equity Tier 1 capital. In view of the COVID-19 pandemic, the use of additional Tier 1 instruments and of Tier 2 instruments is now partially permitted along with common equity Tier 1 capital. This rule had originally been planned for early 2021, but the supervisory authorities decided on April 8, 2020 to bring its implementation forward. This change applies retrospectively from March 12, 2020.

The supervisory authorities in some countries reduced the capital buffer rates used to calculate the countercyclical capital buffer, in some cases lowering them right down to 0 percent. In a general administrative act dated March 31, 2020, the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) [German Federal Financial Supervisory Authority] lowered the domestic countercyclical capital buffer rate for Germany to 0 percent (it was originally supposed to be raised to 0.25 percent with effect from July 1, 2020).

Banks are also temporarily not required to comply with the Pillar 2 capital recommendation. Applying the CRR in full, the mandatory minimum capital requirements stipulated by the supervisory authorities and the recommended minimum capital requirements were complied with on every reporting date in the first half of 2020.

Furthermore, the internal threshold values at the level of the DZ BANK banking group for the common equity Tier 1 capital ratio, the Tier 1 capital ratio, and the total capital ratio were satisfied on every reporting date during the reporting period, both before and after application of the relief measures introduced in connection with COVID-19. According to current projections, the requirements will also be satisfied throughout the rest of 2020. The internal minimum targets are shown in Fig. 4.

### Regulatory capital ratios

Fig. 15 shows the DZ BANK banking group's regulatory capital ratios determined in accordance with full application of the CRR.

**FIG. 15 – REGULATORY CAPITAL RATIOS OF THE DZ BANK BANKING GROUP WITH FULL APPLICATION OF THE CRR[1]**

| | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **Capital** | | |
| Common equity Tier 1 capital (€ million) | 21,030 | 20,705 |
| Additional Tier 1 capital (€ million) | 2,110 | 2,109 |
| **Tier 1 capital** | **23,140** | **22,814** |
| Total Tier 2 capital (€ million) | 2,847 | 2,875 |
| **Own funds** | **25,987** | **25,690** |
| **Risk-weighted assets** | | |
| Credit risk including long-term equity investments (€ million) | 127,180 | 124,734 |
| Market risk (€ million) | 11,993 | 8,350 |
| Operational risk (€ million) | 10,608 | 10,716 |
| **Total** | **149,781** | **143,800** |
| **Capital ratios** | | |
| Common equity Tier 1 capital ratio (%) | 14.0 | 14.4 |
| Tier 1 capital ratio (%) | 15.4 | 15.9 |
| Total capital ratio (%) | 17.3 | 17.9 |

1 Full application means that the current rules are applied, disregarding the transitional guidance in Regulation (EU) No. 575/2013.

The main reason for the €325 million increase in **common equity Tier 1 capital** was the level of net profits eligible for retention. However, this positive impact on capital was outweighed by the effects in the financial markets caused by COVID-19. The interim profit calculated as at June 30, 2020 was included in common equity Tier 1 capital in accordance with article 26 (2) CRR.

The €28 million decrease in **Tier 2 capital** was mainly attributable to the reduced level of eligibility under CRR rules for own funds instruments in this capital category in the last 5 years before their maturity date.

Regulatory **risk-weighted assets** went up from €143,800 million as at December 31, 2019 to €149,781 million as at June 30, 2020. This rise of €5,981 million was primarily due to a higher level of credit risk, application of the new securitization framework to the entire portfolio of the DZ BANK banking group, and market turmoil triggered by COVID-19, which led to an increase in market risk.

#### Leverage ratio

The leverage ratio determined for the DZ BANK banking group with full application of the CRR is shown in Fig. 16.

FIG. 16 – LEVERAGE RATIO OF THE DZ BANK BANKING GROUP WITH FULL APPLICATION OF THE CRR


The leverage ratio went down by 0.3 percentage points during the reporting period. This decrease was primarily due to the growth of the total exposure by €36.9 billion, which was mainly attributable to the expansion of on-balance-sheet business at DZ BANK. By contrast, Tier 1 capital increased by €0.3 billion.

The internal minimum target for the leverage ratio of 3.5 percent was met on every reporting date in the first six months of 2020. The banking regulator does not currently specify an (external) minimum target for the leverage ratio.

As a result of the changed calculation that will have to be used from June 2021 onward, the leverage ratio is expected to rise by approximately 1 percentage point, in particular because loans and advances within the cooperative network and pass-through development loans will no longer have to be included.

#### Minimum requirement for own funds and eligible liabilities (MREL)

The MREL ratio, which was calculated using the **hybrid approach**, relates to the total liabilities and own funds of the DZ BANK banking group. The MREL volume includes the own funds of the DZ BANK banking group and the liabilities of DZ BANK that are eligible for the MREL. By contrast, liabilities of the DZ BANK banking group (including DZ BANK) were also eligible according to the calculation method used as at December 31, 2019. All other things remaining the same, the changed calculation results in a lower MREL ratio being measured. The supervisory authorities also take this into account when setting the external minimum target.

DZ BANK's Board of Managing Directors set the **internal threshold value** for the DZ BANK banking group's MREL ratio for 2020 at 8.3 percent (2019: 8.5 percent). In April 2020, BaFin notified DZ BANK that the Single Resolution Board had set an MREL ratio (**external minimum target**) of 8.0 percent for the DZ BANK banking group (2019: 8.2 percent). The internal threshold value and the external minimum target were not adjusted in light of the COVID-19 pandemic. They therefore apply for the entire financial year.

The **MREL ratio measured** for the DZ BANK banking group was 10.2 percent as at March 31, 2020 (December 31, 2019: 11.0 percent). The fall in the ratio compared with the figure as at the prior-year reporting date was attributable to the non-eligibility of existing non-preferred and non-subordinated issues because of their remaining term to maturity and to a significant increase in total assets.

The measured MREL ratio was therefore above the internal threshold value and the external minimum target. These requirements were met at every reporting date during the first half of 2020. According to current projections, the requirements will also be satisfied in the second half of the year.

The latest MREL ratio relates to March 31, 2020 because the figure as at June 30, 2020 was not yet available at the deadline date for the publication of this opportunity and risk report.

### 6.2.3 R+V Versicherung AG insurance group

The regulatory R+V Versicherung AG insurance group met the solvency requirements under Solvency II in the reporting period.

In the first half of this year, an application was made to use the volatility adjustment and the transitional measure on technical provisions for individual personal insurance companies of R+V. The application was approved by BaFin. The two measures help companies to meet the regulatory solvency requirements. The volatility adjustment, which can be used indefinitely, prevents a brief phase of heightened market volatility from affecting the valuation of long-term insurance guarantees. The transitional measure on technical provisions is a time-limited measure designed to make it easier for insurance companies to transition from Solvency I to the current regulatory regime, Solvency II.

The projections applied in the internal planning show that the R+V Versicherung AG insurance group's solvency ratio will continue to exceed the solvency requirement as at December 31, 2020.

# Bank sector

## 7 Credit risk

### 7.1 Impact of the COVID-19 pandemic

The COVID-19 pandemic had a noticeable impact on credit risk in the Bank sector during the first half of 2020. A significant volume of **requests for liquidity support** were received from existing customers in March, April, and May. To process them, DZ BANK made use of the support programs of the Federal Republic of Germany provided through KfW and the development banks of the individual federal states.

Borrowers also applied to **defer repayments**. As well as using private moratoria in the building society operations of BSH, customers applied to use selective legislative moratoria. This affected the building society operations of BSH, the lending business of DZ HYP, and the consumer finance business of TeamBank. In addition, DZ BANK, DVB, DZ HYP, and TeamBank reached contract-specific agreements to soften the impact of the COVID-19 pandemic on borrowers.

The temporary, government-imposed shutdown of public life and economic activity (lockdown) and the resulting recession in the economy as a whole led to a significant rise in **loss allowances**. In addition to the COVID-19-related effects, loss allowances also increased because of significant impairment losses recognized on a specific exposure.

The entities in the Bank sector adapted their **process management** in the lending business to reflect the relief measures brought in by the supervisory authorities in light of COVID-19. Special provisions were temporarily introduced in this context.

In response to the fallout from the COVID-19 pandemic, the credit portfolio of the Bank sector is being **monitored** closely both at individual borrower level and at sector and country level. The content of the credit risk report was expanded. In addition, credit-risk-related effects of the pandemic were reported on at weekly or two-weekly intervals as part of the financial and risk radar.

Ad hoc **re-ratings** led to an increase in credit rating downgrades in some sectors. Export-dependent industries such as automotive, logistics, and steel as well as other industries such as services and publishing were particularly affected. Owing to the quality of the portfolio during the COVID-19 pandemic, re-ratings did not automatically result in the credit exposures in these industries being classified as credit portfolios with increased risk content.

However, the already ailing **shipping sector** was hit very hard by the COVID-19 pandemic, leading to a further deterioration in credit ratings. The macroeconomic background to this risk factor is explained in section 4.2.5. The shipping finance lending volume is presented in section 7.3.2.

A distinction must be made between shipping finance and **cruise ship finance**. Although borrowers in the latter sector have also been downgraded because of the pandemic, their credit quality remains acceptable on average.

The COVID-19 pandemic creates the risk that the European sovereign debt crisis will worsen. Given the significant credit exposure of the entities in the Bank sector, this continues to represent a major risk factor for credit risk in the Bank sector. The macroeconomic background to this risk factor is explained in section 4.2.4. Disclosures on loans and advances to borrowers in eurozone periphery countries are provided in section 7.3.1.

It is already foreseeable that the adverse effects of the pandemic on credit risk in the Bank sector will continue in the second half of this year. Depending on the duration and intensity of the pandemic, there may also be **subsequent effects** on the credit portfolio in 2021. In particular, there is expected to be a sharp rise in company insolvencies that have yet not had to be registered because of the statutory changes to the obligation to apply for insolvency. Personal insolvencies due to unemployment are also likely to increase.

## 7.2 Lending volume

### 7.2.1 Change in lending volume

The **total lending volume** increased by 5 percent overall in the first half of the year, from €398.3 billion as at December 31, 2019 to €418.6 billion as at June 30, 2020. This was mainly because of a rise of 5 percent in the lending volume in the **traditional lending business**, from €299.6 billion as at December 31, 2019 to €315.8 billion as at June 30, 2020. This rise primarily related not only to the volume of lending disbursed by DZ BANK to local cooperative banks but also to business with corporates. The lending volume in the **derivatives and money market business** also went up, swelling by 22 percent to €19.5 billion as at June 30, 2020 (December 31, 2019: €16.0 billion). This increase was largely attributable to DZ BANK. There was a 1 percent increase in the volume in the **securities business**, which advanced from €82.7 billion as at December 31, 2019 to €83.4 billion as at June 30, 2020. Again, this increase was primarily attributable to DZ BANK.

### 7.2.2 Sector structure of the credit portfolio

Fig. 17 shows the breakdown of the credit portfolio by sector, in which the lending volume is classified according to the industry codes used by Deutsche Bundesbank. This also applies to the other sector breakdowns related to credit risk in this opportunity and risk report.

As at June 30, 2020, a significant proportion (38 percent) of the lending volume was concentrated in the financial sector (December 31, 2019: 36 percent). In addition to the local cooperative banks, the borrowers in this customer segment comprised banks from other parts of the banking industry and other financial institutions.

In its role as central institution for the Volksbanken Raiffeisenbanken cooperative financial network, DZ BANK provides funding for the entities in the Bank sector and for the cooperative banks. For this reason, the cooperative banks account for one of the largest receivables items in the DZ BANK Group's credit portfolio. DZ BANK also supports the cooperative banks in the provision of larger-scale funding to corporate customers. The resulting syndicated business, the direct business of DZ BANK, the real-estate lending business of DZ HYP and BSH, and DZ HYP's local authority lending business determine the industry breakdown for the remainder of the portfolio.

### 7.2.3 Geographical structure of the credit portfolio

Fig. 18 shows the geographical distribution of the credit portfolio by country group. The lending volume is assigned to the individual country groups using the International Monetary Fund's breakdown, which is updated annually.

As at June 30, 2020, 97 percent of the total lending volume was concentrated in Germany and other industrialized countries. This was the same as the figure at the end of 2019.

### 7.2.4 Residual maturity structure of the credit portfolio

The breakdown of the credit portfolio by residual maturity as at June 30, 2020 presented in Fig. 19 shows that the lending volume had increased by €12.0 billion in the short-term maturity band compared with December 31, 2019. This was attributable to DZ BANK. By contrast, there was a decrease of €1.0 billion in the medium-term maturity band that was attributable to DVB. DZ BANK was primarily responsible for the rise of €9.3 billion in the lending volume in the long-term maturity band.

FIG. 17 – BANK SECTOR: LENDING VOLUME, BY SECTOR

| | Traditional lending business | | Securities business | | Derivatives and money market business | | Total | |
|---|---|---|---|---|---|---|---|---|
| € billion | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Financial sector | 112.6 | 100.6 | 32.2 | 32.0 | 12.8 | 10.2 | 157.5 | 142.8 |
| Public sector | 10.4 | 10.7 | 38.8 | 38.1 | 0.8 | 0.7 | 50.0 | 49.5 |
| Corporates | 108.9 | 107.3 | 8.7 | 8.5 | 5.3 | 4.6 | 122.9 | 120.4 |
| Retail | 72.7 | 69.8 | 1.3 | 1.5 | - | - | 74.0 | 71.4 |
| Industry conglomerates | 10.6 | 10.5 | 2.4 | 2.7 | 0.6 | 0.5 | 13.6 | 13.6 |
| Other | 0.5 | 0.6 | - | - | - | - | 0.5 | 0.6 |
| **Total** | **315.8** | **299.6** | **83.4** | **82.7** | **19.5** | **16.0** | **418.6** | **398.3** |

FIG. 18 – BANK SECTOR: LENDING VOLUME, BY COUNTRY GROUP

| | Traditional lending business | | Securities business | | Derivatives and money market business | | Total | |
|---|---|---|---|---|---|---|---|---|
| € billion | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Germany | 285.3 | 269.4 | 47.3 | 47.7 | 13.0 | 10.7 | 345.5 | 327.8 |
| Other industrialized countries | 20.9 | 20.9 | 31.8 | 31.0 | 5.8 | 4.8 | 58.4 | 56.7 |
| Advanced economies | 1.7 | 1.9 | 0.8 | 0.8 | 0.1 | 0.1 | 2.6 | 2.8 |
| Emerging markets | 7.9 | 7.3 | 0.9 | 0.9 | 0.2 | 0.2 | 9.0 | 8.5 |
| Supranational institutions | - | - | 2.6 | 2.3 | 0.4 | 0.3 | 3.1 | 2.6 |
| Total | 315.8 | 299.6 | 83.4 | 82.7 | 19.5 | 16.0 | 418.6 | 398.3 |

FIG. 19 – BANK SECTOR: LENDING VOLUME, BY RESIDUAL MATURITY

| | Traditional lending business | | Securities business | | Derivatives and money market business | | Total | |
|---|---|---|---|---|---|---|---|---|
| € billion | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| ≤ 1 year | 79.8 | 69.3 | 15.1 | 15.3 | 9.6 | 7.8 | 104.4 | 92.4 |
| > 1 year to ≤ 5 years | 72.8 | 73.9 | 26.8 | 26.9 | 3.5 | 3.2 | 103.0 | 104.0 |
| > 5 years | 163.2 | 156.4 | 41.5 | 40.5 | 6.4 | 5.0 | 211.1 | 201.9 |
| Total | 315.8 | 299.6 | 83.4 | 82.7 | 19.5 | 16.0 | 418.6 | 398.3 |

### 7.2.5 Rating structure of the credit portfolio

Fig. 20 shows the consolidated lending volume by rating class according to the VR credit rating master scale.

The proportion of the total lending volume accounted for by rating classes 1A to 3A (investment grade) was 79 percent as at June 30, 2020 (December 31, 2019: 78 percent). Rating classes 3B to 4E (non-investment grade) represented 19 percent of the total lending volume as at the reporting date (December 31, 2019: 20 percent). Defaults, represented by rating classes 5A to 5E, accounted for 1 percent of the total lending volume as at June 30, 2020, which was unchanged compared with the end of 2019.

As at June 30, 2020, the **10 counterparties associated with the largest lending volumes** accounted for 6 percent of total lending (unchanged on the value as at December 31, 2019). These counterparties largely comprised financial-sector and public-sector borrowers domiciled in Germany with an investment-grade rating.

FIG. 20 – BANK SECTOR: LENDING VOLUME, BY RATING CLASS

| | | Traditional lending business | | Securities business | | Derivatives and money market business | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| € billion | | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Investment grade | 1A | 4.7 | 5.0 | 35.2 | 32.6 | 1.2 | 1.0 | 41.1 | 38.6 |
| | 1B | 2.1 | 1.8 | 2.6 | 2.9 | 0.2 | 0.9 | 4.8 | 5.6 |
| | 1C | 109.0 | 97.4 | 11.4 | 10.7 | 4.9 | 4.0 | 125.3 | 112.1 |
| | 1D | 8.6 | 7.4 | 1.7 | 2.4 | 2.5 | 0.4 | 12.8 | 10.2 |
| | 1E | 10.9 | 11.7 | 4.1 | 3.2 | 1.5 | 1.5 | 16.5 | 16.5 |
| | 2A | 10.4 | 10.8 | 4.3 | 5.0 | 1.3 | 1.0 | 16.0 | 16.8 |
| | 2B | 14.9 | 10.6 | 7.4 | 8.4 | 1.6 | 1.8 | 23.9 | 20.9 |
| | 2C | 13.4 | 15.6 | 2.4 | 2.4 | 1.5 | 1.1 | 17.3 | 19.1 |
| | 2D | 15.9 | 17.4 | 4.0 | 4.2 | 0.4 | 0.9 | 20.3 | 22.6 |
| | 2E | 21.0 | 18.7 | 3.3 | 3.7 | 1.4 | 1.4 | 25.7 | 23.8 |
| | 3A | 21.3 | 20.2 | 4.3 | 4.5 | 1.4 | 0.6 | 27.0 | 25.4 |
| Non-investment grade | 3B | 24.0 | 25.1 | 0.7 | 0.6 | 0.4 | 0.5 | 25.1 | 26.3 |
| | 3C | 21.1 | 21.4 | 0.6 | 0.5 | 0.2 | 0.1 | 21.8 | 22.0 |
| | 3D | 13.5 | 13.5 | 0.2 | 0.2 | 0.4 | 0.1 | 14.1 | 13.8 |
| | 3E | 6.9 | 5.9 | 0.3 | 0.2 | - | - | 7.2 | 6.2 |
| | 4A | 4.2 | 3.4 | - | - | - | - | 4.2 | 3.5 |
| | 4B | 3.3 | 3.3 | - | - | - | - | 3.3 | 3.3 |
| | 4C | 1.5 | 1.7 | - | - | - | - | 1.5 | 1.8 |
| | 4D | 0.7 | 0.5 | - | - | - | - | 0.7 | 0.5 |
| | 4E | 2.0 | 1.7 | - | - | - | - | 2.1 | 1.8 |
| Default | | 4.7 | 4.3 | 0.1 | 0.1 | - | - | 4.9 | 4.5 |
| Not rated | | 1.6 | 1.9 | 0.8 | 0.8 | 0.5 | 0.5 | 3.0 | 3.2 |
| **Total** | | **315.8** | **299.6** | **83.4** | **82.7** | **19.5** | **16.0** | **418.6** | **398.3** |

### 7.2.6 Collateralized lending volume

Fig. 21 shows the breakdown of the collateralized lending volume at overall portfolio level by type of collateral and class of risk-bearing instrument.

In the case of **traditional lending business**, lending volume is generally reported as a gross figure before the application of any offsetting agreements, whereas the gross lending volume in the **derivatives and money market business** is shown on a netted basis. In the derivatives and money market business, collateral values are relatively low and are in the form of personal and financial collateral. In the **securities business**, there is generally no further collateralization to supplement the collateral already taken into account. For this reason, securities business is not included in the presentation of the collateralized lending volume.

The total collateral value had risen to €125.7 billion as at June 30, 2020, compared with €124.3 billion as at December 31, 2019. The collateralization rate was 37.5 percent at the reporting date (December 31, 2019: 39.4 percent).

In the **traditional lending business**, most of the collateralized lending volume – 87 percent as at June 30, 2020, which was unchanged compared with the end of 2019 – was accounted for by lending secured by charges over physical assets such as land charges, mortgages, and registered ship and aircraft mortgages. These types of collateral are particularly important for BSH, DZ HYP, and DVB. In contrast, charges over physical assets are of lesser importance at DZ BANK because DZ BANK bases its lending decisions primarily on borrower credit quality. In **securities transactions**, there is generally no further collateralization to supplement the collateral already taken into account. Equally, in the **derivatives and money market business**, collateral received under collateral agreements is already factored into the calculation of gross lending volume with the result that only a comparatively low level of collateral (personal and financial collateral) is then additionally reported.

FIG. 21 – BANK SECTOR: COLLATERAL VALUE, BY TYPE OF COLLATERAL

| | Traditional lending business | | Derivatives and money market business | | Total | |
|---|---|---|---|---|---|---|
| € billion | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Guarantees, indemnities, risk subparticipation | 6.8 | 6.5 | 0.5 | 0.4 | 7.4 | 7.0 |
| Credit insurance | 4.5 | 4.0 | - | - | 4.5 | 4.0 |
| Land charges, mortgages, registered ship and aircraft mortgages | 108.7 | 107.4 | - | - | 108.8 | 107.4 |
| Pledged loans and advances, assignments, other pledged assets | 3.2 | 3.5 | - | - | 3.2 | 3.5 |
| Financial collateral | 1.2 | 2.2 | 0.5 | 0.1 | 1.8 | 2.3 |
| Other collateral | 0.1 | 0.1 | - | - | 0.1 | 0.1 |
| **Total collateral** | **124.6** | **123.7** | **1.1** | **0.6** | **125.7** | **124.3** |
| Lending volume | 315.8 | 299.6 | 19.5 | 16.0 | 335.2 | 315.6 |
| **Uncollateralized lending volume** | **191.2** | **175.9** | **18.3** | **15.4** | **209.5** | **191.3** |
| **Collateralization rate (%)** | **39.5** | **41.3** | **5.9** | **3.7** | **37.5** | **39.4** |

#### 7.2.7 Securitizations

The Bank sector's securitization portfolio is predominantly held by DZ BANK and DZ HYP. This portfolio had a nominal amount of €2,422 million as at the reporting date (December 31, 2019: €2,797 million). The sharp fall in the nominal amount can essentially be explained by the contraction of the trading portfolio in connection with the advancing COVID-19 pandemic. The pandemic resulted in limited liquidity in the capital markets, which in turn led to a significant reduction in trading activity. This was also reflected in the distribution of credit ratings. The highest rating class, 1A, accounted for 53 percent of the nominal amount as at June 30, 2020 (December 31, 2019: 57 percent).

The above figures included the **wind-down portfolio** dating back to the period before the financial crisis in 2007, which had a nominal amount of €1,074 million (December 31, 2019: €1,178 million). The volume of the wind-down portfolio contracted during the first half of this year, primarily because of regular redemptions.

In addition, DZ BANK acts as a **sponsor** in ABCP programs that are funded by issuing money market-linked asset-backed commercial paper (ABCP) or liquidity lines. The ABCP programs are made available for DZ BANK customers who then securitize their own assets via these companies. As at June 30, 2020, drawdowns of the securitization exposures arising from DZ BANK's activities in which it acts as a sponsor amounted to €1,331 million (December 31, 2019: €1,442 million). The increase in the securitization exposures was due to new business and to fluctuations in the drawdown of liquidity lines.

### 7.3 Credit portfolios with increased risk content

The credit portfolios with increased risk content are analyzed separately because of their significance for the risk position. The figures presented here are included in the above analyses of the total lending volume.

Although, as explained in section 7.1, the COVID-19 pandemic resulted in a rise in credit rating downgrades, no new credit portfolios with increased risk content had been identified as at the reporting date.

#### 7.3.1 Loans and advances to borrowers in eurozone periphery countries

As at June 30, 2020, loans and advances to borrowers in the countries directly affected by the **economic divergence in the eurozone** amounted to €7,439 million (December 31, 2019: €7,505 million). The decrease was mainly due to lower fair values and, to a lesser extent, to disposals and maturities at DZ HYP.

Fig. 22 shows the borrower structures of the entities in the Bank sector for the eurozone periphery countries by credit-risk-bearing instrument.

FIG. 22 – BANK SECTOR: LOANS AND ADVANCES TO BORROWERS IN EUROZONE PERIPHERY COUNTRIES

| | Traditional lending business[1] | | Securities business | | Derivatives and money market business | | Total | |
|---|---|---|---|---|---|---|---|---|
| € million | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Portugal | 34 | 41 | 1,100 | 1,104 | - | - | 1,133 | 1,146 |
| of which: public sector | - | - | 1,032 | 1,030 | - | - | 1,032 | 1,030 |
| of which: non-public sector | 34 | 41 | 68 | 74 | - | - | 102 | 116 |
| of which: financial sector | 3 | - | - | - | - | - | 3 | - |
| Italy | 71 | 92 | 3,058 | 3,094 | 76 | 70 | 3,204 | 3,256 |
| of which: public sector | - | - | 2,793 | 2,856 | - | - | 2,793 | 2,856 |
| of which: non-public sector | 71 | 92 | 265 | 238 | 76 | 70 | 411 | 400 |
| of which: financial sector | 35 | 34 | 39 | 68 | 76 | 70 | 150 | 172 |
| Spain | 164 | 169 | 2,830 | 2,830 | 107 | 104 | 3,102 | 3,104 |
| of which: public sector | - | 6 | 2,003 | 2,006 | - | - | 2,003 | 2,012 |
| of which: non-public sector | 164 | 163 | 827 | 824 | 107 | 104 | 1,099 | 1,091 |
| of which: financial sector | 36 | 31 | 271 | 263 | 99 | 99 | 406 | 393 |
| Total | 269 | 302 | 6,988 | 7,029 | 183 | 174 | 7,439 | 7,505 |
| of which: public sector | - | 6 | 5,828 | 5,892 | - | - | 5,828 | 5,898 |
| of which: non-public sector | 269 | 296 | 1,160 | 1,137 | 183 | 174 | 1,612 | 1,607 |
| of which: financial sector | 74 | 66 | 310 | 331 | 174 | 169 | 559 | 566 |

1 Unlike the other presentations of lending volume, traditional lending business in this case includes long-term equity investments.

## 7.3.2 Shipping finance and offshore finance

### Business background

Within the DZ BANK Group's Bank sector, the **shipping finance business** is mainly operated by DVB and, to a lesser degree, by DZ BANK. At DVB and DZ BANK, the lending volume associated with shipping finance comprises loans and advances to customers, guarantees and indemnities, irrevocable loan commitments, and derivatives.

The non-core asset (NCA) strategy initiated by **DVB** at the start of 2018 to wind down the **shipping finance** business, which was no longer a strategic priority, in a way that preserved value was replaced by a run-off strategy in January 2020. The aim of the run-off strategy is to scale back the entire shipping finance portfolio in an orderly way that preserves value as the individual exposures mature. Key components of this strategy are the discontinuation of new business and a run-off plan designed to preserve value. Separately from the above, DVB will participate in necessary restructuring measures to improve the collection of outstanding loans and receivables.

In addition to shipping finance, **DVB** has **offshore finance** business in its credit portfolio. This business consists of various financing arrangements with broad links to the shipping sector. The portfolio includes finance for drilling platforms, drill ships, offshore construction ships, and supply ships for oil platforms. No further new business has been taken on in the business since 2017.

**DZ BANK** offers **shipping finance** as part of its joint credit business with the local cooperative banks. Shipping finance in the narrow sense refers to capital investment in mobile assets involving projects that are separately defined, both legally and in substance, in which the borrower is typically a special-purpose entity whose sole business purpose is the construction and operation of ships. In such arrangements, the debt is serviced from the cash flows generated by the ship. The assessment of the credit risk is therefore based not only on the recoverability of the asset, but also in particular on the capability of the ship to generate earnings.

To reduce risk, finance provided by DZ BANK must normally be secured by a first mortgage on the vessel and the assignment of insurance claims and proceeds. A distinction is made between shipping finance in the narrow sense and finance provided for shipyards and shipping companies. The following disclosures for DZ BANK relate solely to shipping finance in the narrow sense.

### Shipping finance lending volume in the Bank sector

As at June 30, 2020, the **Bank sector's** shipping finance portfolio had a total volume of €5,305 million (December 31, 2019: €6,334 million). The breakdown of the lending volume between the two management units as at June 30, 2020 was as follows (corresponding figures as at December 31, 2019 in parentheses):

- DVB: €4,578 million (€5,648 million), of which €3,953 million (€5,060 million) is lending volume without increased risk content
- DZ BANK: €727 million (€686 million).

Shipping finance lending volume at DVB

The run-off strategy that has been in place since the start of this year has resulted in changes to the way in which the portfolio is defined. Consequently, the shipping finance lending volume shown for DVB as at June 30, 2020 is not directly comparable with the figures as at December 31, 2019.

DVB's shipping finance lending volume with increased risk content, which consists solely of traditional lending business, stood at €625 million as at June 30, 2020 (December 31, 2019: €558 million). The sharp rise was due to the deterioration in customers' financial circumstances and a decrease in collateral values owing to the effects of the COVID-19 pandemic.

The breakdown by country group of DVB's shipping finance portfolio with increased risk content as at June 30, 2020 was as follows (corresponding figures as at December 31, 2019 in parentheses):

- Germany: €76 million (€96 million)
- Other industrialized countries: €377 million (€348 million)
- Advanced economies: €149 million (€60 million)
- Emerging markets: €22 million (€84 million).

As at June 30, 2020, DVB's shipping finance portfolio with increased risk content included 71 financed vessels (December 31, 2019: 70 vessels). The average exposure as at the reporting date was €17 million (December 31, 2019: €15 million) and the largest single exposure was €91 million (December 31, 2019: €115 million).
The largest proportion (52 percent) of this portfolio was attributable to the financing of bulk carriers (December 31, 2019: 51 percent). The portfolio was almost fully collateralized in compliance with DVB's strategy.

Shipping finance lending volume at DZ BANK

At DZ BANK, the entire shipping finance portfolio is exposed to increased risk. The lending volume stood at €727 million as at June 30, 2020 (December 31, 2019: €686 million). These financing transactions consist almost entirely of traditional lending business, most of which is operated jointly with the local cooperative banks. As in 2019, DZ BANK's shipping finance portfolio in the first half of 2020 was mainly concentrated in Germany but broadly diversified by type of vessel, borrower, charterer, and shipping activity.

Offshore finance lending volume

As at June 30, 2020, the Bank sector's lending volume in the offshore finance business, which is attributable exclusively to **DVB** and is classified as traditional lending business, amounted to €780 million (December 31, 2019: €921 million).

### 7.4 Volume of non-performing loans

In the Bank sector, loans are categorized as non-performing if they have been rated between 5A and 5E on the VR credit rating master scale. These non-performing loans (NPLs) are exposures that are at acute risk of default.

The volume of non-performing loans in the entire credit portfolio of the Bank sector had risen from €4.5 billion as at December 31, 2019 to €4.9 billion as at June 30, 2020. As a result of this increase, the NPL ratio went up from 1.1 percent to 1.2 percent.

Fig. 23 shows key figures relating to the volume of non-performing loans.

FIG. 23 – BANK SECTOR: KEY FIGURES FOR THE VOLUME OF NON-PERFORMING LOANS

| | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Total lending volume (€ billion) | 418.6 | 398.3 |
| Volume of non-performing loans (€ billion)[1] | 4.9 | 4.5 |
| Balance of loss allowances (€ billion) | 2.3 | 2.7 |
| Coverage ratio (%)[2] | 83 | 59 |
| NPL ratio (%)[3] | 1.2 | 1.1 |

1 Volume of non-performing loans excluding collateral.
2 Specific loan loss allowances plus collateral as a proportion of the volume of non-performing loans.
3 Volume of non-performing loans as a proportion of total lending volume.

An adjustment was made to the internal reporting relating to the calculation of the coverage ratio. Only the loss allowances directly assignable to the NPLs are now taken into account, instead of the total loss allowances. Collateral is also taken into account. As a result of these changes, the coverage ratio as at June 30, 2020 is not directly comparable with the corresponding figure as at December 31, 2019. The figure as at December 31, 2019 calculated under the new method is 82 percent.

## 7.5 Risk position

### 7.5.1 Risks in the entire credit portfolio

The risk capital requirement (including capital buffer requirement) for credit risk is based on a number of factors, including the size of single-borrower exposures, individual ratings, and the industry sector of each exposure.

As at June 30, 2020, the risk capital requirement including capital buffer requirement amounted to €5,530 million (December 31, 2019: €5,484 million) with a limit of €6,978 million (December 31, 2019: €7,189 million) that was not exceeded on any measurement date during the first 6 months of this year.

Fig. 24 shows the credit value-at-risk together with the average probability of default and expected loss. Because of the breakdown by credit-risk-bearing instrument, the risk capital requirement is presented without the capital buffer requirement.

FIG. 24 – BANK SECTOR: FACTORS DETERMINING THE CREDIT VALUE-AT-RISK

| | Average probability of default (%) | | Expected loss (€ million) | | Credit value-at-risk[1] (€ million) | |
|---|---|---|---|---|---|---|
| | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Traditional lending business | 0.6 | 0.5 | 491 | 418 | 2,617 | 2,493 |
| Securities business | 0.1 | 0.1 | 46 | 48 | 1,669 | 1,733 |
| Derivatives and money market business | 0.2 | 0.1 | 13 | 11 | 308 | 226 |
| Total | | | 550 | 477 | 4,594 | 4,452 |
| Average | 0.4 | 0.4 | | | | |

Not relevant

1 Excluding capital buffer requirement.

### 7.5.2 Risks in the credit portfolios with increased risk content

The risk capital requirement for credit portfolios exposed to increased credit risk is shown in Fig. 25, again without the capital buffer requirement.

FIG. 25 – BANK SECTOR: CREDIT VALUE-AT-RISK[1] FOR CREDIT PORTFOLIOS WITH INCREASED RISK CONTENT

| | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Eurozone periphery countries portfolio | 1,184 | 1,288 |
| Shipping finance portfolio[2] | 78 | 57 |
| Offshore finance portfolio | 38 | 73 |

1 Excluding capital buffer requirement.
2 DVB: portfolio with increased risk content; DZ BANK: overall shipping finance portfolio.

Compared with December 31, 2019, the credit value-at-risk for the Bank sector entities' exposure in the **peripheral countries of the eurozone** had fallen as at June 30, 2020. The decrease correlated with the change in the lending volume in respect of the eurozone periphery countries, which was mainly due to reductions in fair value and, to a lesser extent, to disposals and maturities at DZ HYP.

The credit value-at-risk for the overall **shipping finance portfolio** in the Bank sector, which amounted to €326 million as at June 30, 2020 (December 31, 2019: €132 million), was largely attributable to DVB. The rise was due to the reduction in the useful life of ships and a decrease in collateral values owing to updates to forecasts to reflect the impact of the COVID-19 pandemic.

The credit value-at-risk for **offshore finance** went down because of the continued scaling back of this business operated by DVB in line with the strategy.

## 8 Equity investment risk

The **carrying amounts of long-term equity investments** relevant for the measurement of equity investment risk amounted to €2,974 million as at June 30, 2020 (December 31, 2019: €2,392 million).

The **risk capital requirement (including capital buffer requirement)** for equity investment risk was measured at €894 million on the reporting date (December 31, 2019: €850 million). The **limit** was €1,090 million (December 31, 2019: €1,063 million) and was not exceeded at any time during the first 6 months of the year.

## 9 Market risk

The increase in market risk described below is primarily the result of the rise in general market volatility in connection with the COVID-19 pandemic.

Fig. 26 shows the average, maximum, and minimum **values-at-risk** measured over the reporting period, including a further breakdown by type of market risk. In addition, Fig. 27 shows the changes in market risk by trading day in the first half of 2020.

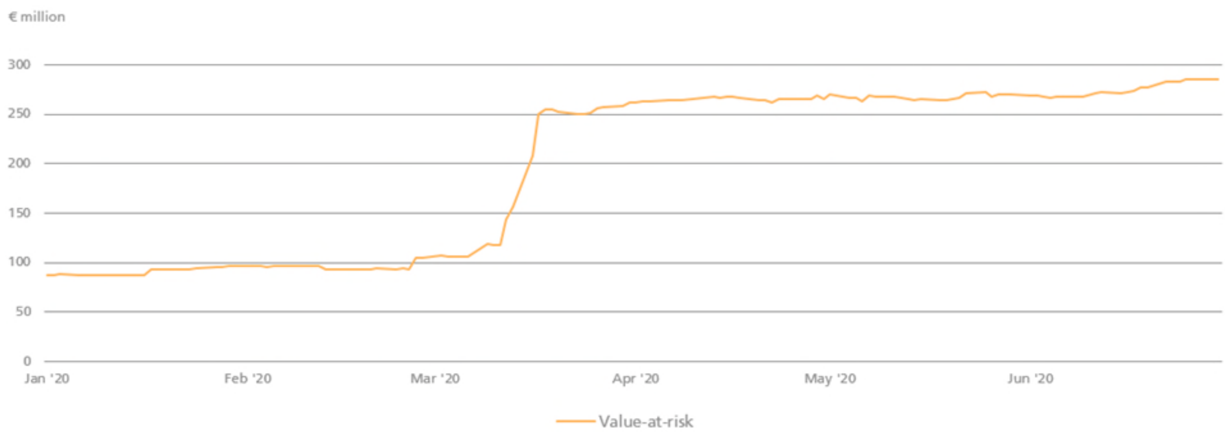
The value-at-risk for the **interest-rate risk in the banking book for regulatory purposes** amounted to €30 million as at June 30, 2020 (December 31, 2019: €11 million).

FIG. 26 – BANK SECTOR: CHANGE IN MARKET RISK BY TYPE OF RISK[1 2]

| € million | Interest-rate risk | Spread risk | Equity risk[3] | Currency risk | Commodity risk | Diversification effect[4] | Total |
|---|---|---|---|---|---|---|---|
| Jun. 30, 2020 | 30 | 281 | 26 | 4 | 1 | -56 | 286 |
| Average | 17 | 197 | 14 | 4 | - | -37 | 195 |
| Maximum | 30 | 283 | 26 | 5 | 2 | -60 | 286 |
| Minimum | 10 | 88 | 6 | 3 | - | -19 | 87 |
| Dec. 31, 2019 | 11 | 88 | 6 | 4 | - | -21 | 88 |

1 Value-at-risk with 99.00% confidence level, 1-day holding period, 1-year observation period, based on a central market risk model for the Bank sector. Concentrations and effects of diversification were taken fully into account when calculating the risks.
2 The minimum and maximum amounts for the different subcategories of market risk may stem from different points in time during the reporting period. Consequently, they cannot be aggregated to produce the minimum or maximum aggregate risk due to the diversification effect.
3 Including funds, if not broken down into constituent parts.
4 Total effects of diversification between the types of market risk for all consolidated management units.

FIG. 27 – BANK SECTOR: CHANGE IN MARKET RISK BY TRADING DAY




1 Value-at-risk with 99.00% confidence level, 1-day holding period, 1-year observation period, based on a central market risk model for the Bank sector. Concentrations and effects of diversification were taken fully into account when calculating the risks.

As at June 30, 2020, the **risk capital requirement (including capital buffer requirement)** for market risk amounted to €4,413 million (December 31, 2019: €3,860 million) with a **limit** of €5,725 million

(December 31, 2019: €5,646 million). The risk capital requirement including capital buffer requirement was below the limit on every measurement date during the first half of 2020.

## 10 Technical risk of a home savings and loan company

As at June 30, 2020, the **capital requirement** for the technical risk of a home savings and loan company amounted to €433 million (December 31, 2019: €397 million) with a **limit** of €550 million (December 31, 2019: €706 million). The increase in risk is due to updated business planning being taken into account.

## 11 Business risk and reputational risk

As at June 30, 2020, the **risk capital requirement (including capital buffer requirement)** for business risk (including reputational risk) amounted to €416 million (December 31, 2019: €837 million). The **limit** was €550 million as at the reporting date (December 31, 2019: €1,016 million). The decrease in the risk and the limit was due to the introduction of a centralized model for business risk (see also section 2.4). The limit was not exceeded on any measurement date during the first 6 months of the year.

## 12 Operational risk

### 12.1 Loss events

Losses from operational risk do not follow a consistent pattern. Instead, the overall risk profile can be seen from the total losses incurred over the long term and is shaped by a small number of large losses. Consequently, comparisons between net losses in a reporting period and those in a prior-year period are not meaningful. Figures for the end of the prior year are therefore not disclosed.

Over the course of time, there are regular fluctuations in the pattern of losses as the frequency of relatively large losses in each individual case is very low. Presenting the change in losses meaningfully therefore requires a sufficiently long and unchanging time horizon for reporting purposes. The data is therefore selected from the loss history for the past 4 quarters and on the basis of the date on which the expense results in a cash outflow.

Fig. 28 shows the losses reported in the past 4 quarters, classified by loss event category.

FIG. 28 – BANK SECTOR: NET LOSSES BY EVENT CATEGORY[1]


1 In accordance with the CRR, losses caused by operational risks that are associated with risks such as credit risk are also shown.

The ‘Execution, delivery, and process management’ event category accounted for the majority (64 percent) of total net losses. The net loss in this event category was largely attributable to 18 loss events, of which 15 loss events resulted from failures in process implementation or in process design and 3 were due to disagreements with business partners or service providers.

Losses did not reach a critical level relative to the expected loss from operational risk at any point during the first half of 2020.

At the end of June, DZ BANK became aware of a substantial loss event in the ‘External fraud’ event category (lending fraud). The loss event is not yet included in the figures used for Fig. 28 because it was not processed and reported on internally until July.

### 12.2 Risk position

Using the internal portfolio model, the **risk capital requirement (including capital buffer requirement)** for operational risk as at June 30, 2020 was calculated at €872 million (December 31, 2019: €859 million) with a **limit** of €1,020 million (December 31, 2019: €926 million). The limit was not exceeded at any time during the first 6 months of the year.

# Insurance sector

## 13 Impact of the COVID-19 pandemic and the volatility adjustment

During the first half of 2020, R+V tightened its underwriting guidelines for various products in order to limit the adverse effects of the COVID-19 pandemic on the insurance business.

The COVID-19 pandemic creates the risk that the European sovereign debt crisis will worsen. Given the significant credit exposure of R+V, this continues to represent a major risk factor for market risk in the Insurance sector. The macroeconomic background to this risk factor is explained in section 4.2.4. Disclosures on R+V's exposure in eurozone periphery countries are provided in section 15.2.

The increases in risk presented in the sections below on the risk position in the Insurance sector were primarily driven by the market turmoil triggered by the COVID-19 pandemic. Where there were other material reasons, this is explained with regard to the affected risk type. In the first half of this year, the overall limit for the Insurance sector was raised in response to the market turmoil triggered by the pandemic (see also section 6.1). On this basis, the limits were raised for life, health, and non-life actuarial risk, market risk, and counterparty default risk.

The increase in risk was partly offset by the first-time use of the volatility adjustment (see also section 6.2.3).

## 14 Actuarial risk

### 14.1 Claims rate trend

Individual products in the **direct non-life insurance business** were affected by the fallout from the COVID-19 pandemic. An increase in claims is likely in guarantee insurance, particularly travel insolvency insurance, trade credit insurance, unemployment insurance, event cancellation insurance, and travel cancellation insurance. In its business closure insurance, R+V voluntarily covers up to 15 percent of the loss. There may be countervailing effects in motor vehicle insurance. For 2020 as a whole, the net claims rate is expected to stand at 75.9 percent, a year-on-year increase of less than a percentage point.

In **inward reinsurance**, only a few claims were received from ceding insurers in connection with the COVID-19 pandemic in the first 6 months of this year. Claims tend to be made later due to the business model. Commercial and industrial risks are particularly affected due to business interruption and business closure agreements as well as due to credit insurance and guarantee insurance. The net claims rate for 2020 is expected to be on a par with 2019 at 79.1 percent.

The claims forecasts are subject to considerable uncertainty in view of the COVID-19 pandemic.

### 14.2 Risk position

As at June 30, 2020, the **overall solvency requirement** for **life actuarial risk** amounted to €1,198 million (December 31, 2019: €1,049 million) with a **limit** of €1,400 million (December 31, 2019: €1,200 million).

As at June 30, 2020, the **overall solvency requirement for health actuarial risk** was measured at €419 million (December 31, 2019: €245 million). The **limit** was set at €700 million (December 31, 2019: €410 million).

As at June 30, 2020, the **overall solvency requirement** for **non-life actuarial risk** amounted to €3,962 million (December 31, 2019: €3,724 million) with a **limit** of €4,500 million (December 31, 2019: €3,960 million). The increase in risk was due not only to the market turmoil triggered by the COVID-19 pandemic but also to the expansion of business.

## 15 Market risk

### 15.1 Change in lending volume

In accordance with the breakdown specified in Solvency II, the bulk of credit risk within market risk is assigned to spread risk. The capital requirements for spread risk are calculated using a factor approach based on the relevant lending volume.

As at June 30, 2020, the **total lending volume** of R+V had advanced by 3 percent to €100.9 billion (December 31, 2019: €98.0 billion). The increase was primarily the result of the movement of interest rates and spreads in the first half of 2020.

The volume of lending in the **home finance** business totaled €11.5 billion as at June 30, 2020 (December 31, 2019: €10.8 billion). Of this amount, 87 percent was accounted for by loans for less than 60 percent of the value of the property (December 31, 2019: 89 percent). The volume of home finance was broken down by finance type as at the reporting date as follows (figures as at December 31, 2019 shown in parentheses):

- Consumer home finance: €10.5 billion (€9.9 billion)
- Commercial home finance: €0.1 billion (€0.1 billion)
- Commercial finance: €0.8 billion (€0.7 billion).

In the home finance business, the entire volume disbursed is usually backed by traditional **loan collateral**.

The financial sector and the public sector, which are the dominant **sectors**, together accounted for 69 percent of the total lending volume as at June 30, 2020 (December 31, 2019: 71 percent). This lending mainly comprised loans and advances in the form of German and European Pfandbriefe backed by collateral in accordance with statutory requirements. Loans and advances to the public sector and consumer home finance (retail) highlight the safety of this investment. Fig. 29 shows the sectoral breakdown of the lending volume in the Insurance sector.

FIG. 29 – INSURANCE SECTOR: LENDING VOLUME, BY SECTOR

| € billion | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Financial sector | 47.0 | 47.2 |
| Public sector | 23.0 | 22.5 |
| Corporates | 19.2 | 17.3 |
| Retail | 10.5 | 9.9 |
| Industry conglomerates | 1.2 | 1.0 |
| Other | - | - |
| **Total** | **100.9** | **98.0** |

An analysis of the **geographical breakdown** of lending in Fig. 30 reveals that, at 91 percent, Germany and other industrialized countries accounted for the lion's share of the lending volume as at the reporting date (December 31, 2019: 90 percent). European countries dominated within the broadly diversified exposure in industrialized countries.

FIG. 30 – INSURANCE SECTOR: LENDING VOLUME, BY COUNTRY GROUP

| € billion | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Germany | 37.5 | 35.7 |
| Other industrialized countries | 54.1 | 52.9 |
| Advanced economies | 1.3 | 1.2 |
| Emerging markets | 5.0 | 5.1 |
| Supranational institutions | 3.0 | 3.1 |
| **Total** | **100.9** | **98.0** |

Obligations in connection with the life insurance business require investments with longer maturities. This is also reflected in the breakdown of **residual maturities** shown in Fig. 31.

FIG. 31 – INSURANCE SECTOR: LENDING VOLUME, BY RESIDUAL MATURITY

| € billion | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| ≤ 1 year | 2.7 | 2.6 |
| > 1 year to ≤ 5 years | 13.8 | 13.7 |
| > 5 years | 84.4 | 81.7 |
| **Total** | **100.9** | **98.0** |

As at June 30, 2020, 84 percent (December 31, 2019: 83 percent) of the total lending volume had a residual maturity of more than 5 years. By contrast, just 3 percent of the total lending volume was due to mature within 1 year as at the reporting date (unchanged on the value as at December 31, 2019).

The **rating structure** of the lending volume in the Insurance sector is shown in Fig 32. Of the total lending volume as at June 30, 2020, 81 percent was attributable to investment-grade borrowers (December 31, 2019: 79 percent). The lending volume that is not rated, which remained unchanged compared with the end of 2019 at 18 percent of the total lending volume, essentially comprised low-risk consumer home finance for which external ratings were not available.

FIG 32 – INSURANCE SECTOR: LENDING VOLUME, BY RATING CLASS

| € billion | | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|---|
| Investment grade | 1A | 27.1 | 26.2 |
| | 1B | 14.7 | 14.3 |
| | 1C | - | - |
| | 1D | 10.4 | 9.0 |
| | 1E | - | - |
| | 2A | 8.4 | 8.2 |
| | 2B | 7.5 | 6.9 |
| | 2C | 6.7 | 6.2 |
| | 2D | 2.8 | 2.8 |
| | 2E | - | - |
| | 3A | 3.5 | 4.0 |
| Non-investment grade | 3B | 0.4 | 1.0 |
| | 3C | 0.6 | 0.7 |
| | 3D | - | - |
| | 3E | 0.4 | 0.4 |
| | 4A | 0.1 | 0.2 |
| | 4B | 0.3 | 0.2 |
| | 4C | 0.1 | 0.1 |
| | 4D | - | - |
| | 4E | - | - |
| Default | | - | - |
| Not rated | | 17.8 | 17.8 |
| Total | | 100.9 | 98.0 |

To rate the creditworthiness of the lending volume, R+V uses external ratings that have received general approval. It also applies its own expert ratings in accordance with the provisions of Credit Rating Agency Regulation III to validate the external credit ratings. R+V has defined the external credit rating as the maximum, even in cases where its own rating is better. The ratings calculated in this way are matched to the DZ BANK credit rating master scale using the methodology shown in figure 23 of the 2019 opportunity and risk report.

As at the reporting date, the **10 counterparties associated with the largest lending volumes** continued to account for 18 percent of R+V's total lending volume.

### 15.2 Credit portfolios with increased risk content

R+V's exposure in credit portfolios with increased risk content is analyzed separately because of its significance for the risk position in the Insurance sector. The figures presented here are included in the above analyses of the total lending volume.

Investments in **eurozone periphery countries** totaled €6,188 million as at June 30, 2020 (December 31, 2019: €6,812 million), which constituted a decrease of 9 percent. Fig. 33 shows the country breakdown of the exposure.

FIG. 33 – INSURANCE SECTOR: EXPOSURE IN EUROZONE PERIPHERY COUNTRIES

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **Italy** | 3,139 | 3,897 |
| of which: public sector | 2,088 | 2,814 |
| of which: non-public sector | 1,051 | 1,083 |
| of which: financial sector | 804 | 782 |
| **Spain** | 3,049 | 2,915 |
| of which: public sector | 1,555 | 1,524 |
| of which: non-public sector | 1,494 | 1,391 |
| of which: financial sector | 1,275 | 1,128 |
| **Total** | 6,188 | 6,812 |
| of which: public sector | 3,643 | 4,338 |
| of which: non-public sector | 2,545 | 2,474 |
| of which: financial sector | 2,080 | 1,910 |

### 15.3 Risk position

As at June 30, 2020, the **overall solvency requirement** for market risk amounted to €4,765 million (December 31, 2019: €3,789 million) with a **limit** of €6,250 million (December 31, 2019: €3,850 million).

Fig. 34 shows the overall solvency requirement for the various types of market risk.

FIG. 34 – INSURANCE SECTOR: OVERALL SOLVENCY REQUIREMENT FOR MARKET RISK

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Interest-rate risk | 1,341 | 1,223 |
| Spread risk | 2,476 | 1,473 |
| Equity risk | 2,442 | 2,025 |
| Currency risk | 276 | 207 |
| Real-estate risk | 467 | 397 |
| Total (after diversification) | 4,765 | 3,789 |

The overall solvency requirement for market risk includes a **capital buffer requirement**. This capital buffer requirement covers the spread and migration risk arising from sub-portfolios of Italian government bonds, while also taking account of the increase in market risk that could arise from refinement of the method for measuring interest-rate risk. Working with DZ BANK, R+V is currently examining what further changes need to be made as a result of the review process conducted by the European Insurance and

Occupational Pensions Authority (EIOPA) under Delegated Regulation (EU) No. 2015/35 (Solvency II Regulation). The capital buffer relating to the refinement of the measurement of interest-rate risk will be removed again once the new methodology has been implemented.

As at June 30, 2020, the capital buffer requirement for market risk totaled €256 million (December 31, 2019: €393 million).

## 16 Counterparty default risk

As at June 30, 2020, the **overall solvency requirement** for counterparty default risk was €105 million (December 31, 2019: €88 million) with a **limit** of €200 million (December 31, 2019: €100 million).

## 17 Operational risk

As at June 30, 2020, the **overall solvency requirement** for operational risk amounted to €694 million (December 31, 2019: €637 million) with a **limit** of €800 million (December 31, 2019: €680 million). The increase in risk was due to the expansion of business.

## 18 Risks from entities in other financial sectors

As at June 30, 2020, the **overall solvency requirement** for risks in connection with non-controlling interests in insurance companies and entities in other financial sectors was unchanged compared with the end of 2019 at €119 million. The **limit** was €140 million (December 31, 2019: €112 million).

# Interim consolidated financial statements

# Income statement for the period January 1 to June 30, 2020

| € million | (Note) | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|---|
| Net interest income | (5) | 1,505 | 1,332 |
| Interest income | | 2,911 | 3,074 |
| Interest income calculated using the effective interest method | | 2,581 | 2,852[1] |
| Interest income not calculated using the effective interest method | | 330 | 222 |
| Current income and expense | | 64 | 40 |
| Interest expense | | -1,470 | -1,782[1] |
| Net fee and commission income | (6) | 1,052 | 958 |
| Gains and losses on trading activities | (7) | 539 | 141 |
| Gains and losses on investments | (8) | -15 | 130 |
| Other gains and losses on valuation of financial instruments | (9) | -247 | 126[1] |
| Gains and losses from the derecognition of financial assets measured at amortized cost | | 7 | 15 |
| Premiums earned | (10) | 9,221 | 8,328 |
| Gains and losses on investments held by insurance companies and other insurance company gains and losses | (11) | -651 | 3,516 |
| of which: interest income calculated using the effective interest method | | 749 | 787[1] |
| Insurance benefit payments | (12) | -6,883 | -9,634 |
| Insurance business operating expenses | (13) | -1,553 | -1,443 |
| Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business | | -10 | -6 |
| Loss allowances | (14) | -522 | -105 |
| Administrative expenses | (15) | -2,016 | -2,046 |
| Other net operating income | (16) | 130 | 152 |
| Profit before taxes | | 557 | 1,464 |
| Income taxes | (17) | -185 | -430 |
| **Net profit** | | **372** | **1,034** |
| Attributable to: | | | |
| Shareholders of DZ BANK | | 331 | 919 |
| Non-controlling interests | | 41 | 115 |

1 Amount restated (see note 2).

# Statement of comprehensive income for the period January 1 to June 30, 2020

| € million | (Note) | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|---|
| Net profit | | 372 | 1,034 |
| Other comprehensive income/loss | | 51 | 1,292 |
| **Items that may be reclassified to the income statement** | | **40** | **1,322** |
| Gains and losses on debt instruments measured at fair value through other comprehensive income | (18) | 275 | 1,830 |
| Exchange differences on currency translation of foreign operations | (18) | -9 | 1 |
| Gains and losses on hedges of net investments in foreign operations | (18) | 2 | 2 |
| Income taxes | (19) | -228 | -511 |
| **Items that will not be reclassified to the income statement** | | **11** | **-30** |
| Gains and losses on equity instruments for which the fair value OCI option has been exercised | | -227 | 258 |
| Gains and losses in relation to financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk | | 318 | -135 |
| Gains and losses arising from remeasurement of defined benefit plans | | 5 | -230 |
| Income taxes | (19) | -85 | 77 |
| **Total comprehensive income/loss** | | **423** | **2,326** |
| | | | |
| Attributable to: | | | |
| Shareholders of DZ BANK | | 408 | 2,072 |
| Non-controlling interests | | 15 | 254 |

# Balance sheet as at June 30, 2020

## ASSETS

| € million | (Note) | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|---|
| Cash and cash equivalents | (20) | 75,764 | 52,545 |
| Loans and advances to banks | (21) | 105,968 | 97,544 |
| Loans and advances to customers | (22) | 190,097 | 186,224 |
| Hedging instruments (positive fair values) | (23) | 225 | 201 |
| Financial assets held for trading | (24) | 50,063 | 44,781 |
| Investments | (25) | 59,096 | 56,927 |
| Investments held by insurance companies | (26) | 115,430 | 113,549 |
| Property, plant and equipment, investment property, and right-of-use assets | (27) | 1,545 | 1,632 |
| Income tax assets | | 935 | 1,018 |
| Other assets | (28) | 5,483 | 5,444 |
| Loss allowances | (29) | -2,628 | -2,277 |
| Non-current assets and disposal groups classified as held for sale | (30) | 237 | 516 |
| Fair value changes of the hedged items in portfolio hedges of interest-rate risk | | 1,981 | 1,368[1] |
| **Total assets** | | **604,196** | **559,472** |

1 Amount restated (see note 2).

## EQUITY AND LIABILITIES

| € million | (Note) | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|---|
| Deposits from banks | (31) | 168,130 | 141,121 |
| Deposits from customers | (32) | 143,403 | 131,516 |
| Debt certificates issued including bonds | (33) | 78,773 | 85,123 |
| Hedging instruments (negative fair values) | (34) | 1,672 | 1,306 |
| Financial liabilities held for trading | (35) | 61,605 | 51,762 |
| Provisions | (36) | 3,658 | 3,835 |
| Insurance liabilities | (37) | 106,296 | 104,346 |
| Income tax liabilities | | 1,325 | 1,069 |
| Other liabilities | (38) | 8,777 | 9,173 |
| Subordinated capital | (39) | 2,081 | 2,187 |
| Liabilities included in disposal groups classified as held for sale | (30) | 1 | 1 |
| Fair value changes of the hedged items in portfolio hedges of interest-rate risk | | 300 | 237[1] |
| Equity | (40) | 28,175 | 27,796 |
| Shareholders' equity | | 25,195 | 24,787 |
| Subscribed capital | | 4,926 | 4,926 |
| Capital reserve | | 5,551 | 5,551 |
| Retained earnings | | 10,372 | 10,047 |
| Reserve from other comprehensive income | | 1,770 | 1,694 |
| Additional equity components | | 2,245 | 2,245 |
| Unappropriated earnings | | 331 | 324 |
| Non-controlling interests | | 2,980 | 3,009 |
| **Total equity and liabilities** | | **604,196** | **559,472** |

1 Amount restated (see note 2).

# Statement of changes in equity

| € million | Subscribed capital | Capital reserve | Equity earned by the group | Reserve from other comprehensive income | Additional equity components | **Shareholders' equity** | Non-controlling interests | **Total equity** |
|---|---|---|---|---|---|---|---|---|
| Equity as at Jan. 1, 2019 | 4,926 | 5,551 | 8,854 | 599 | 845 | 20,775 | 2,737 | 23,512 |
| Net profit | - | - | 919 | - | - | 919 | 115 | 1,034 |
| Other comprehensive income/loss | - | - | -149 | 1,302 | - | 1,153 | 139 | 1,292 |
| **Total comprehensive income** | **-** | **-** | **770** | **1,302** | **-** | **2,072** | **254** | **2,326** |
| Capital increase/capital repaid | - | - | - | - | - | - | 1 | 1 |
| Changes in scope of consolidation | - | - | - | -6 | - | -6 | - | -6 |
| Acquisition/disposal of non-controlling interests | - | - | -3 | - | - | -3 | -1 | -4 |
| Reclassifications within equity | - | - | 4 | -4 | - | - | - | - |
| Dividends paid | - | - | -322 | - | - | -322 | -36 | -358 |
| **Equity as at Jun. 30, 2019** | **4,926** | **5,551** | **9,303** | **1,891** | **845** | **22,516** | **2,955** | **25,471** |
| Equity as at Jan. 1, 2020 | 4,926 | 5,551 | 10,371 | 1,694 | 2,245 | 24,787 | 3,009 | 27,796 |
| Net profit | - | - | 331 | - | - | 331 | 41 | 372 |
| Other comprehensive income/loss | - | - | 3 | 74 | - | 77 | -26 | 51 |
| **Total comprehensive income** | **-** | **-** | **334** | **74** | **-** | **408** | **15** | **423** |
| Capital increase/capital repaid | - | - | - | - | - | - | -10 | -10 |
| Changes in scope of consolidation | - | - | - | - | - | - | - | - |
| Acquisition/disposal of non-controlling interests | - | - | - | - | - | - | -2 | -2 |
| Reclassifications within equity | - | - | -2 | 2 | - | - | - | - |
| Dividends paid | - | - | - | - | - | - | -32 | -32 |
| **Equity as at Jun. 30, 2020** | **4,926** | **5,551** | **10,703** | **1,770** | **2,245** | **25,195** | **2,980** | **28,175** |

The Board of Managing Directors did not propose a dividend for 2019 to the Annual General Meeting of DZ BANK AG on May 27, 2020. The Board of Managing Directors is thereby following the recommendation of the European Central Bank (ECB) that no dividends be distributed in 2020 in view of the COVID-19 pandemic. In the first half of 2020, therefore, no dividend was paid for the 2019 financial year (first half of 2019: €0.18 per share). A decision on the appropriation of profits for 2019 is to be made in 2021, taking account of economic conditions at the time in connection with the pandemic.

The composition of equity is explained in note 40.

# Statement of cash flows

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Net profit** | **372** | **1,034** |
| Non-cash items included in net profit | 732 | 2,844 |
| Subtotal | 1,104 | 3,878 |
| **Cash changes in assets and liabilities arising from operating activities** | | |
| Loans and advances to banks and customers | -12,214 | -6,680[1] |
| Other assets and liabilities from operating activities | 3,087 | 3,230 |
| Hedging instruments (positive and negative fair values) | -1,453 | -3,198 |
| Financial assets and financial liabilities held for trading | 4,993 | 6,716[1] |
| Deposits from banks and customers | 39,005 | 8,385[1] |
| Debt certificates issued including bonds | -6,358 | 8,022[1] |
| Interest payments, dividends, and operating lease payments received (net cash flow) | 1,878 | 1,514[1] |
| Income taxes paid | -203 | -199 |
| **Cash flows from operating activities** | **29,839** | **21,668** |
| **Cash flows from investing activities** | **-6,378** | **-6,426**[1] |
| **Cash flows from financing activities** | **-242** | **-817**[1] |

1 Amount restated (see note 2).

| € million | 2020 | 2019 |
|---|---|---|
| Cash and cash equivalents as at January 1 | 52,545 | 51,845 |
| Cash flows from operating activities | 29,839 | 21,668[1] |
| Cash flows from investing activities | -6,378 | -6,426[1] |
| Cash flows from financing activities | -242 | -817[1] |
| **Cash and cash equivalents as at June 30** | **75,764** | **66,270** |

1 Amount restated (see note 2).

The statement of cash flows shows the changes in cash and cash equivalents during the reporting period. Cash and cash equivalents consist of cash on hand and balances with central banks. The cash and cash equivalents do not include any financial investments with maturities of more than 3 months at the date of acquisition. Changes in cash and cash equivalents are broken down into operating, investing, and financing activities.

Cash payments from lessees in repayment of lease liabilities, which are included in cash flows from financing activities, amounted to €41 million in the first half of 2020 (first half of 2019: €79 million (amount restated, see note 2)).

As had also been the case in the first half of 2019, there was no impact on cash and cash equivalents from the first-time consolidation or deconsolidation of subsidiaries.

# Notes

## A General disclosures

### >> 01 Basis of preparation

Pursuant to section 115 of the German Securities Trading Act (WpHG) in conjunction with section 117 no. 2 WpHG, the interim consolidated financial statements of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK) for the first half of the 2020 financial year have been prepared in accordance with the provisions of the International Financial Reporting Standards (IFRS), as adopted by the European Union (EU). In particular, the requirements of IAS 34 *Interim Financial Reporting* have been taken into account.

All figures are rounded to the nearest whole number. This may result in very small discrepancies in the calculation of totals and percentages.

### >> 02 Accounting policies and estimates

#### Changes in accounting policies

The financial statements of the entities consolidated in the DZ BANK Group have been prepared using uniform accounting policies. The accounting policies used to prepare these financial statements were the same as those applied in the consolidated financial statements for the 2019 financial year, unless these policies are subject to the amendments described below.

**First-time application in 2020 of changes in IFRS**
The following amendments to IFRSs are applied for the first time in DZ BANK's interim consolidated financial statements for the first half of the 2020 financial year:

– *Amendments to References to the Conceptual Framework in IFRS Standards*,
– *Definition of a Business* (Amendments to IFRS 3),
– *Definition of Material* (Amendments to IAS 1 and IAS 8),
– *Interest Rate Benchmark Reform* (Amendments to IFRS 9, IAS 39 and IFRS 7).

The changes contained in *Amendments to References to the Conceptual Framework in IFRS Standards* became necessary because the Conceptual Framework had been revised, which meant that quotations from, and references to, the Conceptual Framework included in numerous standards and other pronouncements issued by the IASB had to be updated. Besides these changes, some of which are simply editorial, the amendments also include, in particular, clarification as to which version of the Conceptual Framework needs to be applied in individual cases. Depending on the matter concerned, users must comply with the 2001, 2010, or 2018 version of the Conceptual Framework. Where necessary, the amendments include an initial application date, which has been set in all cases as annual periods beginning on or after January 1, 2020. The implementation of the amendments had no material impact on the consolidated financial statements.

The aim of *Definition of a Business* (Amendments to IFRS 3) is to establish a better distinction between the acquisition of a business and the acquisition of a group of assets. To satisfy the new definition of the term 'business', an acquisition must include inputs and a substantive process that together significantly contribute to the ability to create outputs. The amended definition must be applied to all acquisitions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020. There was no material impact on the consolidated financial statements.

The objective of *Definition of Material* (Amendments to IAS 1 and IAS 8) is to tighten up the definition of the term 'material' without fundamentally altering the application of the principle of materiality. In particular, the amendments introduce the new notion of 'obscuring information' and place 'obscuring' on a par with omitting or misstating information. The amendments are to be applied prospectively to financial years beginning on or after January 1, 2020. There was no impact on the consolidated financial statements.

*Interest-Rate Benchmark Reform* (Amendments to IFRS 9, IAS 39 and IFRS 7) provides for temporary exceptions in relation to the accounting treatment of hedges in the period before the initiated reform of key interest-rate benchmarks, such as Euribor, Libor, and EONIA (interbank offered rate (IBOR) reform). The scope of the exceptions covers those hedges directly affected by the IBOR reform. A hedge is only directly affected if the reform leads to uncertainties in relation to the interest rate designated as the hedged risk or in relation to the timing or amount of the cash flows from the hedged item or hedging instrument based on interest-rate benchmarks.

When, in accordance with IFRS 9 or IAS 39, an entity determines whether the cash flows arising from a forecast transaction in a cash flow hedge are highly probable, the exceptions specify that the entity must assume that the interest-rate benchmark on which the hedged cash flows are based is not altered as a result of the reform. Correspondingly, when assessing the need to reclassify the cash flow hedge reserve to profit or loss, an entity must assume that the hedged cash flows will still materialize at the end of the hedging relationship. If an entity hedges a component of interest-rate risk, the risk component concerned must be separately identifiable. The entity only needs to ensure that this requirement is satisfied once when the component is first designated as a hedged item. When assessing the economic relationship between the hedged item and the hedging instrument in accordance with IFRS 9 provisions, an entity must also assume that the interest-rate benchmark on which the designated cash flows and/or the hedged risk in the hedged item are based, or the interest-rate benchmark on which the cash flows from the hedging instrument are based, is not altered as a result of the interest-rate benchmark reform.

Prospective assessments of hedge effectiveness in accordance with IAS 39 requirements must be based on an unchanged interest-rate benchmark. If the retrospective assessment of a hedge in accordance with IAS 39 determines ineffectiveness outside the range of 80 percent to 125 percent, hedge accounting is not discontinued.

The amendments require disclosures containing information on the extent to which the reform of interest-rate benchmarks have an impact on existing hedges. The application of the exceptions is mandatory until the uncertainty arising from the switch in interest-rate benchmarks is eliminated or, if earlier, the hedge is terminated. In addition, the exception regarding the reclassification of the cash flow hedge reserve no longer needs to be applied if the reserve has been reclassified in full to profit or loss. The rules are required to be applied for the first time to financial years beginning on or after January 1, 2020.

The DZ BANK Group only accounts for hedges of interest-rate risk (fair value hedges). In this accounting treatment, it applies the rules of IAS 39 to hedges using a portfolio approach. The hedging instruments reference interest rates of the Euribor and Libor group. Euribor is expected to be retained in its current form as an interest-rate benchmark for the foreseeable future. The continued existence of Libor interest-rate benchmarks is subject to some uncertainty.

## Changes in presentation

Upfront payments related to financial instruments initially recognized with a positive or negative fair value are now reported under net interest income instead of under other gains and losses on valuation of financial instruments, and the sub-item 'of which: interest income calculated using the effective interest method' has been included as an additional line item in the income statement below gains and losses on investments held by insurance companies and other insurance company gains and losses. These changes were presented in note 2 (Accounting policies and estimates) of the consolidated financial statements as at December 31, 2019. The related comparative figures in the income statement and the affected disclosures in the notes to the interim consolidated financial statements as at June 30, 2020 have been restated. The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

In accordance with the provisions of IAS 8.41 et seq., amounts relating to the recognition of portfolio hedges, which were previously netted in the income statement and on the balance sheet, are presented without being netted from the 2020 financial year onward. The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

INCOME STATEMENT FOR THE PERIOD JANUARY 1 TO JUNE 30, 2019

| € million | Jan. 1 – Jun. 30, 2019 before restatement | Amount of restatement | **Jan. 1 – Jun. 30, 2019 after restatement** |
|---|---|---|---|
| (...) | | | |
| Interest income | 3,019 | 1 | 3,020 |
| Interest income calculated using the effective interest method | 2,797 | 1 | 2,798 |
| (...) | | | |
| Interest expense | -1,780 | -1 | -1,781 |
| (...) | | | |
| Profit before taxes | 1,464 | - | 1,464 |
| Income taxes | -430 | - | -430 |
| **Net profit** | **1,034** | - | **1,034** |

BALANCE SHEET AS AT DECEMBER 31, 2019

ASSETS

| € million | Dec. 31, 2019 before restatement | Amount of restatement | **Dec. 31, 2019 after restatement** |
|---|---|---|---|
| (...) | | | |
| Fair value changes of the hedged items in portfolio hedges of interest-rate risk | 1,275 | 93 | 1,368 |
| (...) | | | |
| **Total assets** | **559,379** | **93** | **559,472** |

EQUITY AND LIABILITIES

| € million | Dec. 31, 2019 before restatement | Amount of restatement | **Dec. 31, 2019 after restatement** |
|---|---|---|---|
| (...) | | | |
| Fair value changes of the hedged items in portfolio hedges of interest-rate risk | 144 | 93 | 237 |
| (...) | | | |
| **Total equity and liabilities** | **559,379** | **93** | **559,472** |

The amounts did not need to be restated as at January 1, 2019 because the accounting rule did not apply.

There are other minor presentation changes in the statement of cash flows. The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

## Sources of estimation uncertainty

It is necessary to make assumptions and estimates in accordance with the relevant financial reporting standards in order to determine the carrying amounts of assets, liabilities, income, and expenses recognized in the consolidated financial statements. These assumptions and estimates are based on historical experience, planning, and expectations or forecasts regarding future events.

Assumptions and estimates are used primarily in determining the fair value of financial assets and financial liabilities and in identifying any impairment of financial assets. Estimates also have a material impact on determining the impairment of goodwill or intangible assets acquired as part of business combinations. Furthermore, assumptions and estimates affect the measurement of insurance liabilities, provisions for employee benefits, provisions for share-based payment transactions, provisions relating to building society operations, and other provisions as well as the recognition and measurement of income tax assets and income tax liabilities.

The COVID-19 pandemic has not given rise to any further sources of estimation uncertainty with regard to the calculation of the carrying amounts of assets, liabilities, income, and expenses. The pandemic particularly affects the familiar assumptions and estimates used to calculate the fair values of loans and advances to banks, loans and advances to customers, investments, investments held by insurance companies, and financial liabilities held for trading. COVID-19 also impacts on the calculation of loss allowances and on the assumptions and estimates used in this calculation, which are described in note 44.

## >> 03 Scope of consolidation

The scope of consolidation had changed only immaterially as at June 30, 2020 compared with the scope of consolidation as at December 31, 2019.

# B Disclosures relating to the income statement and the statement of comprehensive income

## >> 04 Segment information

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2020

| € million | BSH | R+V | TeamBank | UMH |
|---|---|---|---|---|
| Net interest income | 332 | - | 248 | 7 |
| Net fee and commission income | -5 | - | -15 | 768 |
| Gains and losses on trading activities | - | - | - | - |
| Gains and losses on investments | -20 | - | - | -6 |
| Other gains and losses on valuation of financial instruments | 6 | - | -1 | -81 |
| Gains and losses from the derecognition of financial assets measured at amortized cost | 11 | - | - | - |
| Premiums earned | - | 9,221 | - | - |
| Gains and losses on investments held by insurance companies and other insurance company gains and losses | - | -622 | - | - |
| Insurance benefit payments | - | -6,883 | - | - |
| Insurance business operating expenses | - | -1,617 | - | - |
| Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business | - | -10 | - | - |
| Loss allowances | -13 | - | -71 | - |
| Administrative expenses | -253 | - | -119 | -442 |
| Other net operating income | 17 | 13 | 7 | 18 |
| **Profit/loss before taxes** | **75** | **102** | **49** | **264** |
| Cost/income ratio (%) | 74.2 | - | 49.8 | 62.6 |
| Regulatory RORAC (%) | 12.7 | 1.9 | 17.2 | >100.0 |
| Average own funds/solvency requirement | 1,184 | 10,877 | 571 | 420 |
| Total assets/total equity and liabilities as at Jun. 30, 2020 | 79,001 | 123,547 | 9,383 | 2,720 |

| | DZ BANK – CICB | DZ HYP | DZ PRIVAT-BANK | VR Smart Finanz | DVB | DZ BANK – holding function | Other/ Consolidation | **Total** |
|---|---|---|---|---|---|---|---|---|
| | 414 | 358 | 44 | 72 | 20 | -23 | 33 | 1,505 |
| | 230 | 1 | 93 | -11 | 16 | - | -25 | 1,052 |
| | 521 | 5 | 9 | - | 2 | - | 2 | 539 |
| | 2 | 1 | - | - | - | - | 8 | -15 |
| | 7 | -126 | -1 | - | -68 | - | 17 | -247 |
| | 3 | - | - | - | - | - | -7 | 7 |
| | - | - | - | - | - | - | - | 9,221 |
| | - | - | - | - | - | - | -29 | -651 |
| | - | - | - | - | - | - | - | -6,883 |
| | - | - | - | - | - | - | 64 | -1,553 |
| | - | - | - | - | - | - | - | -10 |
| | -256 | -6 | -1 | -26 | -148 | - | -1 | -522 |
| | -643 | -135 | -121 | -52 | -78 | -101 | -72 | -2,016 |
| | 7 | 8 | 4 | -7 | 28 | - | 35 | 130 |
| | **285** | **106** | **27** | **-24** | **-228** | **-124** | **25** | **557** |
| | 54.3 | 54.7 | 81.2 | 96.3 | >100.0 | - | - | 65.1 |
| | 10.5 | 13.3 | 13.7 | -17.1 | >100.0 | - | - | 5.3 |
| | 5,438 | 1,597 | 400 | 276 | 166 | - | - | 20,929 |
| | 331,923 | 94,997 | 19,003 | 4,186 | 11,852 | 20,383 | -92,799 | 604,196 |

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2019

| € million | BSH | R+V | TeamBank | UMH |
|---|---|---|---|---|
| Net interest income [1] | 217 | - | 239 | 9 |
| Net fee and commission income | -15 | - | -11 | 706 |
| Gains and losses on trading activities | - | - | - | - |
| Gains and losses on investments | 120 | - | - | - |
| Other gains and losses on valuation of financial instruments [1] | 17 | - | - | 20 |
| Gains and losses from the derecognition of financial assets measured at amortized cost | 15 | - | - | - |
| Premiums earned | - | 8,328 | - | - |
| Gains and losses on investments held by insurance companies and other insurance company gains and losses | - | 3,551 | - | - |
| Insurance benefit payments | - | -9,634 | - | - |
| Insurance business operating expenses | - | -1,524 | - | - |
| Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business | - | -6 | - | - |
| Loss allowances | 6 | - | -54 | - |
| Administrative expenses | -249 | - | -114 | -436 |
| Other net operating income | 38 | -4 | 3 | 85 |
| **Profit/loss before taxes** | **149** | **711** | **63** | **384** |
| Cost/income ratio (%) | 63.5 | - | 49.4 | 53.2 |
| Regulatory RORAC (%) | 26.2 | 18.0 | 26.3 | >100.0 |
| Average own funds/solvency requirement | 1,139 | 7,923 | 482 | 339 |
| Total assets/total equity and liabilities as at Dec. 31, 2019 [1] | 77,469 | 121,973 | 9,455 | 3,012 |

1 Amount restated (see note 2).

| | DZ BANK – CICB | DZ HYP | DZ PRIVAT-BANK | VR Smart Finanz | DVB | DZ BANK – holding function | Other/ Consolidation | **Total** |
|---|---|---|---|---|---|---|---|---|
| | 361 | 309 | 30 | 75 | 102 | -31 | 21 | 1,332 |
| | 198 | 1 | 85 | -1 | 27 | - | -32 | 958 |
| | 130 | 1 | 4 | - | -4 | - | 10 | 141 |
| | -2 | 10 | - | - | 2 | - | - | 130 |
| | 24 | 70 | 5 | - | -16 | - | 6 | 126 |
| | 15 | - | - | - | - | - | -15 | 15 |
| | - | - | - | - | - | - | - | 8,328 |
| | - | - | - | - | - | - | -35 | 3,516 |
| | - | - | - | - | - | - | - | -9,634 |
| | - | - | - | - | - | - | 81 | -1,443 |
| | - | - | - | - | - | - | - | -6 |
| | 1 | 4 | - | -12 | -50 | - | - | -105 |
| | -641 | -139 | -114 | -70 | -109 | -107 | -67 | -2,046 |
| | 11 | 12 | 3 | 9 | -19 | - | 14 | 152 |
| | **97** | **268** | **13** | **1** | **-67** | **-138** | **-17** | **1,464** |
| | 87.0 | 34.5 | 89.8 | 84.3 | >100.0 | - | - | 56.6 |
| | 3.9 | 35.8 | 8.4 | 0.7 | -42.7 | - | - | 17.0 |
| | 4,928 | 1,505 | 308 | 305 | 289 | - | - | 17,218 |
| | 288,841 | 92,377 | 19,464 | 4,283 | 14,239 | 20,191 | -91,832 | 559,472 |

### General information on operating segments

The information on operating segments has been prepared using the management approach in accordance with IFRS 8. Under this standard, external reporting must include segment information that is used internally for the management of the entity and for the purposes of quantitative reporting to the chief operating decision-makers. The DZ BANK Group's information on operating segments has therefore been prepared on the basis of the internal management reporting system.

### Definition of operating segments

Segmentation is fundamentally based on the integrated risk and capital management system in the DZ BANK Group, the function of which is to create transparency, notably in respect of the risk structure and risk-bearing capacity of the individual management units in the group. The segment information presents separate disclosures for the management units DZ HYP AG, Hamburg/Münster, (DZ HYP), TeamBank AG Nürnberg, Nuremberg, (TeamBank), DZ PRIVATBANK, and the BSH, DVB, R+V, UMH, and VR Smart Finanz subgroups. Since December 31, 2019, the previous DZ BANK management unit has been broken down into central institution and corporate bank (DZ BANK – CICB) and the group management function (DZ BANK – holding function) because of changes to the internal business management structure and the associated modification of the internal financial reporting system. The related reorganization of the management units in the internal financial reporting system has been adopted for the presentation of the operating segments. The DZ BANK – CICB operating segment comprises the cooperative central institution function, which supports the operating activities of the local cooperative banks, and the corporate bank function. DZ BANK – holding function is mainly used to pool tasks carried out on behalf of the DZ BANK Group in relation to commercial law, tax, and prudential supervision. The total assets of DZ BANK – holding function include the equity, plus a number of other items such as a notional carrying amount for the long-term equity investment in DZ BANK – CICB, together with the carrying amounts of the long-term equity investments in the other management units. The notional long-term equity investment in DZ BANK – CICB is measured in an amount equating to 11 percent of the risk-weighted assets of DZ BANK – CICB. The dividend payments of the management units and the intragroup income relating to the liabilities to dormant partners, which were previously included in the DZ BANK operating segment, are reported under Other/Consolidation from the financial year. The relevant consolidation activities are still included under Other/Consolidation. DZ BANK – holding function does not constitute an operating segment within the meaning of IFRS 8.5 but is presented separately in line with the internal reporting structure. The figures for the prior-year period have been restated accordingly. All other companies in the DZ BANK Group, which are not required to provide regular quantitative reports to the chief operating decision-makers, and the consolidations are reported on an aggregated basis under Other/Consolidation.

### Presentation of operating segments

Interest income and associated interest expenses generated by the operating segments are offset and reported as net interest income in the information on operating segments because, from a group perspective, the operating segments are managed solely on the basis of the net figure.

### Measurement

Internal reporting to the chief operating decision-makers in the DZ BANK Group is primarily based on the generally accepted accounting and measurement principles applicable to the DZ BANK Group.

Intragroup transactions between operating segments are carried out on an arm's-length basis. These transactions are reported internally using the financial reporting standards applied to external financial reporting.

The key indicators for assessing the performance of the operating segments are profit/loss before taxes, the cost/income ratio, and the return on risk-adjusted capital (regulatory RORAC).

The cost/income ratio shows the ratio of administrative expenses to operating income and reflects the economic efficiency of the operating segment concerned.

Operating income comprises net interest income, net fee and commission income, gains and losses on trading activities, gains and losses on investments, other gains and losses on valuation of financial instruments, gains and losses from the derecognition of financial assets measured at amortized cost, net income from insurance business, and other net operating income.

Regulatory RORAC is a risk-adjusted performance measure. In the reporting period, it reflected the relationship between profit before taxes and the average own funds for the year (calculated as an average of the figure for the four quarters) in accordance with the own funds/solvency requirements for the financial conglomerate. It therefore shows the return on the regulatory risk capital employed.

### Other/Consolidation

The consolidation-related adjustments shown under Other/Consolidation to reconcile operating segment profit/loss before taxes to consolidated profit/loss before taxes are attributable to the elimination of intragroup transactions and to the fact that investments in joint ventures and associates were accounted for using the equity method.

The adjustments to net interest income were primarily the result of the elimination of intragroup dividend payments and profit distributions in connection with intragroup liabilities to dormant partners and were also attributable to the early redemption of issued bonds and commercial paper that had been acquired by entities in the DZ BANK Group other than the issuer.

The figure under Other/Consolidation for net fee and commission income largely relates to the fee and commission business of TeamBank and the BSH subgroup with the R+V subgroup.

The remaining adjustments are mostly also attributable to the consolidation of income and expenses.

## >> 05 Net interest income

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **INTEREST INCOME AND CURRENT INCOME AND EXPENSE** | **2,975** | **3,114** |
| **Interest income from** | **2,911** | **3,074** |
| Lending and money market business | 2,730 | 3,041[1] |
| Bonds and other fixed-income securities | 321 | 285[1] |
| Portfolio hedges of interest-rate risk | -65 | -117[1] |
| Financial assets with a negative effective interest rate | -71 | -135 |
| Other assets | -4 | - |
| **Current income and expense from** | **64** | **40** |
| Shares and other variable-yield securities | 13 | 9 |
| of which: income from other shareholdings | 12 | 8 |
| Investments in subsidiaries | 2 | 2 |
| Operating leases | 1 | 11 |
| Entities accounted for using the equity method | 47 | 17 |
| of which relating to: investments in joint ventures | 39 | 12 |
| investments in associates | 8 | 5 |
| Income from profit-pooling, profit-transfer and partial profit-transfer agreements | 1 | 1 |
| **INTEREST EXPENSE ON** | **-1,470** | **-1,782** |
| Deposits from banks and customers | -1,281 | -1,650[1] |
| Debt certificates issued including bonds | -328 | -275[1] |
| Subordinated capital | -24 | -39 |
| Portfolio hedges of interest-rate risk | 20 | 68[1] |
| Financial liabilities with a positive effective interest rate | 146 | 118 |
| Provisions and other liabilities | -3 | -4 |
| **Total** | **1,505** | **1,332** |

1 Amount restated (see note 2).

The interest income from other assets included losses of €4 million from non-credit-risk-related modifications resulting from financial assets (first half of 2019: no losses). The interest expense on provisions and other liabilities included interest expense on lease liabilities of €2 million (first half of 2019: €2 million).

## >> 06 Net fee and commission income

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Fee and commission income** | **2,136** | **1,985** |
| Securities business | 1,667 | 1,497 |
| Asset management | 126 | 112 |
| Payments processing including card processing | 153 | 146 |
| Lending business and trust activities | 54 | 70 |
| Financial guarantee contracts and loan commitments | 32 | 29 |
| International business | 6 | 5 |
| Building society operations | 19 | 17 |
| Other | 79 | 109 |
| **Fee and commission expenses** | **-1,084** | **-1,027** |
| Securities business | -748 | -673 |
| Asset management | -81 | -74 |
| Payments processing including card processing | -69 | -77 |
| Lending business | -47 | -42 |
| Financial guarantee contracts and loan commitments | -5 | -5 |
| Building society operations | -35 | -44 |
| Other | -99 | -112 |
| **Total** | **1,052** | **958** |

In the reporting period, fee and commission income included revenue from contracts with customers pursuant to IFRS 15 in an amount of €2,131 million (first half of 2019: €1,980 million); see note 49.

## >> 07 Gains and losses on trading activities

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| Gains and losses on non-derivative financial instruments and embedded derivatives | 1,309 | -1,129 |
| Gains and losses on derivatives | -767 | 1,258 |
| Gains and losses on exchange differences | -3 | 12 |
| **Total** | **539** | **141** |

## >> 08 Gains and losses on investments

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Gains and losses on the disposal of bonds and other fixed-income securities** | **16** | 28 |
| **Gains and losses on the disposal of shares and other variable-yield securities** | **-4** | - |
| **Gains and losses on the disposal of investments in subsidiaries** | **6** | - |
| **Gains and losses on investments in joint ventures** | **-33** | 98 |
| Disposals | - | 98 |
| Impairment losses | -33 | - |
| **Gains and losses on investments in associates** | **-** | 4 |
| Disposals | - | 4 |
| Impairment losses | - | -7 |
| Reversals of impairment losses | - | 7 |
| **Total** | **-15** | 130 |

In the first half of 2019, the bulk of the gains from the sale of investments in joint ventures had been derived from the disposal of Českomoravská stavební spořitelna, a.s., Prague, Czech Republic, (ČMSS).

## >> 09 Other gains and losses on valuation of financial instruments

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Gains and losses from hedge accounting** | **9** | 2 |
| **Gains and losses on derivatives used for purposes other than trading** | **-114** | 27 |
| **Gains and losses on financial instruments designated as at fair value through profit or loss** | **-141** | 70 |
| Gains and losses on non-derivative financial instruments and embedded derivatives | -87 | -212[1] |
| Gains and losses on derivatives | -54 | 282[1] |
| **Gains and losses on financial assets mandatorily measured at fair value through profit or loss** | **-1** | 27 |
| **Total** | **-247** | 126 |

1 Amount restated (see note 2).

Gains and losses on derivatives used for purposes other than trading result from the recognition and measurement of derivatives that are used for economic hedging but are not included in hedge accounting.

## >> 10 Premiums earned

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Net premiums written** | **10,113** | **9,164** |
| Gross premiums written | 10,193 | 9,237 |
| Reinsurance premiums ceded | -80 | -73 |
| **Change in provision for unearned premiums** | **-892** | **-836** |
| Gross premiums | -908 | -857 |
| Reinsurers' share | 16 | 21 |
| **Total** | **9,221** | **8,328** |

## >> 11 Gains and losses on investments held by insurance companies and other insurance company gains and losses

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Income from investments held by insurance companies** | **4,324** | **4,624** |
| Interest income and current income | 1,149 | 1,273 |
| Income from reversals of impairment losses and reversals of loss allowances, and unrealized gains | 212 | 241 |
| Gains on valuation through profit or loss of investments | 2,296 | 2,764 |
| Gains on disposals | 667 | 346 |
| **Expenses in connection with investments held by insurance companies** | **-5,270** | **-1,040** |
| Administrative expenses | -113 | -104 |
| Depreciation/amortization expense, additions to loss allowances, and impairment losses and unrealized losses | -459 | -239 |
| Losses on valuation through profit or loss of investments | -3,768 | -469 |
| Losses on disposals | -930 | -228 |
| **Other gains and losses of insurance companies** | **295** | **-68** |
| Other insurance gains and losses | 138 | 154 |
| Other non-insurance gains and losses | 157 | -222 |
| **Total** | **-651** | **3,516** |

Income from and expenses in connection with investments held by insurance companies included additions to loss allowances of €45 million (first half of 2019: €2 million) and reversals of loss allowances of €4 million (first half of 2019: €2 million). There were no directly recognized impairment losses in the reporting period (first half of 2019: €1 million).

Around €29 million of the expenses for additions to loss allowances were related to the effects of the COVID-19 pandemic. The additions required because of the pandemic resulted from the updates to the macroeconomic forecasts that are used in the calculation of expected losses. In the event of an extreme weighting of 100 percent for both the baseline scenario and the risk scenario underlying the calculation of loss allowances, the additions to loss allowances required because of the pandemic would reduce by approximately 33 percent and increase by approximately 50 percent respectively.

## >> 12 Insurance benefit payments

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Expenses for claims** | **-5,588** | **-5,570** |
| Gross expenses for claims | -5,608 | -5,579 |
| Reinsurers' share | 20 | 9 |
| **Changes in the benefit reserve and in other insurance liabilities** | **-1,171** | **-2,479** |
| **Expenses for premium refunds** | **-124** | **-1,585** |
| Gross expenses for premium refunds | -307 | -409 |
| Expenses for deferred premium refunds | 183 | -1,176 |
| **Total** | **-6,883** | **-9,634** |

## >> 13 Insurance business operating expenses

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| Gross expenses | -1,563 | -1,451 |
| Reinsurers' share | 10 | 8 |
| **Total** | **-1,553** | **-1,443** |

## >> 14 Loss allowances

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Loss allowances for cash and cash equivalents** | **-2** | - |
| Additions | -3 | - |
| Reversals | 1 | - |
| **Loss allowances for loans and advances to banks** | **-10** | 2 |
| Additions | -17 | -8 |
| Reversals | 7 | 8 |
| Recoveries on loans and advances to banks previously impaired | - | 2 |
| **Loss allowances for loans and advances to customers** | **-454** | -104 |
| Additions | -1,237 | -799 |
| Reversals | 760 | 673 |
| Directly recognized impairment losses | -21 | -14 |
| Recoveries on loans and advances to customers previously impaired | 34 | 26 |
| Other | 10 | 10 |
| **Loss allowances for investments** | **-17** | 2 |
| Additions | -26 | -5 |
| Reversals | 9 | 7 |
| **Loss allowances for other assets** | **-1** | - |
| Directly recognized impairment losses | -1 | - |
| **Other loss allowances for loans and advances** | **-38** | -5 |
| Additions to and reversals of provisions for loan commitments | -24 | -11 |
| Additions to and reversals of provisions for financial guarantee contracts | -4 | 7 |
| Additions to and reversals of other provisions for loans and advances | -10 | -1 |
| **Total** | **-522** | -105 |

Gains and losses from credit-risk-related modifications and other gains and losses on POCI assets are reported under the 'Other' line item. Other gains and losses on POCI assets consist of the changes in the loss allowances for these assets within the reporting period.

Of the net addition of €522 million to loss allowances for loans and advances to banks and to customers, investments, and other lending business, €165 million was related to the effects of the COVID-19 pandemic. The additions required because of the pandemic resulted from the adjusted macroeconomic forecasts that are used in the calculation of expected losses. In the event of an extreme weighting of 100 percent for both the baseline scenario and the risk scenario underlying the calculation of loss allowances, the additions to loss allowances required because of the pandemic would reduce by approximately 27 percent and increase by approximately 43 percent respectively.

## >> 15 Administrative expenses

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| Staff expenses | -924 | -923 |
| General and administrative expenses | -954 | -993 |
| Depreciation and amortization | -138 | -130 |
| **Total** | **-2,016** | **-2,046** |

## >> 16 Other net operating income

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| Gains and losses on non-current assets and disposal groups classified as held for sale | 56 | 108 |
| Income from the reversal of provisions and accruals | 52 | 67 |
| Restructuring expenses | -1 | -50 |
| Expenses for other taxes | -5 | -11 |
| Residual other net operating income | 28 | 38 |
| **Total** | **130** | **152** |

## >> 17 Income taxes

IAS 34 states that income taxes in interim financial statements are to be calculated on the basis of the best possible estimate of the weighted average tax rate for the year as a whole. This tax rate is based on the legislation that is in force or has been adopted at the relevant balance sheet date.

## >> 18 Items reclassified to the income statement

The following amounts were recognized in other comprehensive income/loss or reclassified from other comprehensive income/loss to the income statement in the reporting period:

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Gains and losses on debt instruments measured at fair value through other comprehensive income** | **275** | **1,830** |
| Gains (+)/losses (-) arising during the reporting period | 482 | 1,913 |
| Gains (-)/losses (+) reclassified to the income statement during the reporting period | -207 | -83 |
| **Exchange differences on currency translation of foreign operations** | **-9** | **1** |
| Gains (+)/losses (-) arising during the reporting period | -9 | 1 |
| **Gains and losses on hedges of net investments in foreign operations** | **2** | **2** |
| Gains (+)/losses (-) arising during the reporting period | 2 | 2 |

## >> 19 Income taxes relating to components of other comprehensive income

The table below shows the income taxes on the various components of other comprehensive income:

| | Jan. 1 – Jun. 30, 2020 | | | Jan. 1 – Jun. 30, 2019 | | |
|---|---|---|---|---|---|---|
| € million | Amount before taxes | Income taxes | Amount after taxes | Amount before taxes | Income taxes | Amount after taxes |
| **Items that may be reclassified to the income statement** | **268** | **-228** | **40** | **1,833** | **-511** | **1,322** |
| Gains and losses on debt instruments measured at fair value through other comprehensive income | 275 | -227 | 48 | 1,830 | -510 | 1,320 |
| Exchange differences on currency translation of foreign operations | -9 | - | -9 | 1 | - | 1 |
| Gains and losses on hedges of net investments in foreign operations | 2 | -1 | 1 | 2 | -1 | 1 |
| **Items that will not be reclassified to the income statement** | **96** | **-85** | **11** | **-107** | **77** | **-30** |
| Gains and losses on equity instruments for which the fair value OCI option has been exercised | -227 | 16 | -211 | 258 | -41 | 217 |
| Gains and losses in relation to financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk | 318 | -99 | 219 | -135 | 42 | -93 |
| Gains and losses arising from remeasurement of defined benefit plans | 5 | -2 | 3 | -230 | 76 | -154 |
| **Total** | **364** | **-313** | **51** | **1,726** | **-434** | **1,292** |

# C Balance sheet disclosures

## >> 20 Cash and cash equivalents

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Cash on hand | 239 | 378 |
| Balances with central banks | 75,525 | 52,167 |
| **Total** | **75,764** | **52,545** |

## >> 21 Loans and advances to banks

| | Repayable on demand | | Other loans and advances | | Total | |
|---|---|---|---|---|---|---|
| € million | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| **Domestic banks** | **6,676** | **5,811** | **88,440** | **83,288** | **95,116** | **89,099** |
| Affiliated banks | 1,955 | 2,720 | 82,473 | 76,286 | 84,428 | 79,006 |
| Other banks | 4,721 | 3,091 | 5,967 | 7,002 | 10,688 | 10,093 |
| **Foreign banks** | **6,633** | **4,923** | **4,219** | **3,522** | **10,852** | **8,445** |
| **Total** | **13,309** | **10,734** | **92,659** | **86,810** | **105,968** | **97,544** |

## >> 22 Loans and advances to customers

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Loans and advances to domestic customers | 162,167 | 157,573 |
| Loans and advances to foreign customers | 27,930 | 28,651 |
| **Total** | **190,097** | **186,224** |

## >> 23 Hedging instruments (positive fair values)

Hedging instruments (positive fair values) amounted to €225 million (December 31, 2019: €201 million) and resulted solely from derivatives used as fair value hedges.

## >> 24 Financial assets held for trading

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **DERIVATIVES (POSITIVE FAIR VALUES)** | **22,893** | **19,291** |
| Interest-linked contracts | 20,698 | 17,063 |
| Currency-linked contracts | 1,155 | 1,270 |
| Share-/index-linked contracts | 738 | 554 |
| Other contracts | 31 | 30 |
| Credit derivatives | 271 | 374 |
| **BONDS AND OTHER FIXED-INCOME SECURITIES** | **12,449** | **12,644** |
| Money market instruments | 1,672 | 978 |
| Bonds | 10,777 | 11,666 |
| **SHARES AND OTHER VARIABLE-YIELD SECURITIES** | **1,000** | **1,210** |
| Shares | 976 | 1,208 |
| Investment fund units | 23 | 1 |
| Other variable-yield securities | 1 | 1 |
| **RECEIVABLES** | **13,721** | **11,636** |
| of which: from affiliated banks | 196 | 400 |
| from other banks | 12,573 | 8,505 |
| **Money market placements** | **12,774** | **10,594** |
| with banks | 12,275 | 8,242 |
| with customers | 499 | 2,352 |
| **Promissory notes and registered bonds** | **947** | **1,042** |
| from banks | 494 | 663 |
| from customers | 453 | 379 |
| **Total** | **50,063** | **44,781** |

## >> 25 Investments

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **Bonds and other fixed-income securities** | **56,506** | **54,231** |
| Money market instruments | 557 | 419 |
| Bonds | 55,949 | 53,812 |
| **Shares and other variable-yield securities** | **1,840** | **1,872** |
| Shares and other shareholdings | 332 | 321 |
| Investment fund units | 1,498 | 1,541 |
| Other variable-yield securities | 10 | 10 |
| **Investments in subsidiaries** | **262** | **310** |
| **Investments in joint ventures** | **311** | **313** |
| **Investments in associates** | **177** | **201** |
| **Total** | **59,096** | **56,927** |

The carrying amount of investments in joint ventures accounted for using the equity method totaled €311 million (December 31, 2019: €313 million). €177 million of the investments in associates has been accounted for using the equity method (December 31, 2019: €201 million).

## >> 26 Investments held by insurance companies

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Investment property | 3,683 | 3,558 |
| Investments in subsidiaries | 767 | 785 |
| Investments in joint ventures | 18 | 17 |
| Investments in associates | 1 | 1 |
| Mortgage loans | 10,234 | 9,749 |
| Promissory notes and loans | 7,189 | 7,235 |
| Registered bonds | 9,389 | 9,146 |
| Other loans | 778 | 716 |
| Variable-yield securities | 10,402 | 11,300 |
| Fixed-income securities | 58,832 | 55,811 |
| Derivatives (positive fair values) | 438 | 417 |
| Loss allowances | -6 | -3 |
| Deposits with ceding insurers and other investments | 422 | 449 |
| Assets related to unit-linked contracts | 13,283 | 14,368 |
| **Total** | **115,430** | **113,549** |

## >> 27 Property, plant and equipment, investment property, and right-of-use assets

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Land and buildings | 877 | 917 |
| Office furniture and equipment | 180 | 182 |
| Assets subject to operating leases | - | 17 |
| Investment property | 239 | 238 |
| Right-of-use assets | 249 | 278 |
| **Total** | **1,545** | **1,632** |

## >> 28 Other assets

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Other assets held by insurance companies | 3,515 | 3,759 |
| Goodwill | 41 | 41 |
| Other intangible assets | 456 | 462 |
| of which: software | 417 | 419 |
| acquired customer relationships | 4 | 4 |
| Other loans and advances | 357 | 382 |
| Residual other assets | 1,114 | 800 |
| **Total** | **5,483** | **5,444** |

The breakdown of other assets held by insurance companies is as follows:

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Intangible assets | 150 | 157 |
| Reinsurers' share of insurance liabilities | 149 | 130 |
| Receivables | 1,625 | 1,593 |
| Credit balances with banks, checks and cash on hand | 333 | 826 |
| Residual other assets | 1,260 | 1,055 |
| Loss allowances | -2 | -2 |
| **Total** | **3,515** | **3,759** |

Residual other assets included right-of-use assets amounting to €56 million (December 31, 2019: €56 million).

## >> 29 Loss allowances

Loss allowances for loans and advances to banks and for loans and advances to customers also comprise the loss allowances recognized for finance lease receivables.

The following table shows the changes in loss allowances, which are reported on the assets side of the balance sheet, broken down by individual balance sheet item:

| | Cash and cash equi-valents | Loans and advances to banks | | | Loans and advances to customers | | | |
|---|---|---|---|---|---|---|---|---|
| € million | Stage 1 | Stage 1 | Stage 2 | Stage 3 | Stage 1 | Stage 2 | Stage 3 | POCI assets |
| Balance as at Jan. 1, 2019 | - | 8 | - | 4 | 218 | 164 | 1,957 | 3 |
| Additions | - | 6 | - | 2 | 144 | 217 | 435 | 3 |
| Utilizations | - | - | - | - | - | -4 | -237 | - |
| Reversals | - | -6 | - | -2 | -212 | -95 | -359 | -5 |
| Other changes | - | - | - | - | 73 | -110 | 71 | - |
| **Balance as at Jun. 30, 2019** | **-** | **8** | **-** | **4** | **223** | **172** | **1,867** | **1** |
| Balance as at Jan. 1, 2020 | 1 | 7 | - | 5 | 202 | 203 | 1,807 | 1 |
| Additions | 3 | 11 | 3 | 3 | 159 | 385 | 688 | 3 |
| Utilizations | - | - | - | - | - | - | -151 | -1 |
| Reversals | -1 | -6 | - | -1 | -177 | -136 | -440 | -7 |
| Other changes | - | - | - | - | 57 | -107 | 44 | 8 |
| **Balance as at Jun. 30, 2020** | **3** | **12** | **3** | **7** | **241** | **345** | **1,948** | **4** |

| | Investments | | | Other assets | Total |
|---|---|---|---|---|---|
| € million | Stage 1 | Stage 2 | Stage 3 | Stage 1 | |
| Balance as at Jan. 1, 2019 | 5 | 40 | 17 | - | 2,416 |
| Additions | - | 3 | - | - | 810 |
| Utilizations | - | - | - | - | -241 |
| Reversals | -1 | -4 | - | - | -684 |
| Other changes | - | - | - | - | 34 |
| **Balance as at Jun. 30, 2019** | **4** | **39** | **17** | **-** | **2,335** |
| Balance as at Jan. 1, 2020 | 6 | 26 | 18 | 1 | 2,277 |
| Additions | 3 | 16 | 3 | - | 1,277 |
| Utilizations | - | - | - | - | -152 |
| Reversals | -1 | -2 | -4 | - | -775 |
| Other changes | -2 | - | 1 | - | 1 |
| **Balance as at Jun. 30, 2020** | **6** | **40** | **18** | **1** | **2,628** |

## >> 30 Non-current assets and disposal groups classified as held for sale

The non-current assets and disposal groups classified as held for sale include individual non-current assets together with assets and liabilities from disposal groups not qualifying as discontinued operations, as described below. Gains and losses arising from the classification of assets and disposal groups as held for sale are reported under other net operating income.

At the level of the DVB subgroup, a further part of the aviation finance business, which previously constituted a disposal group not qualifying as a discontinued operation, was sold in the first half of the year. The disposal gave rise to a net gain of €60 million, which was recognized under other net operating income. The impairment loss requirement of €10 million identified for this disposal group was also recognized under other net operating income.

The disposal group not qualifying as a discontinued operation, which was classified as such in 2019 and consists of associates and joint ventures of the DVB subgroup, was expanded to include two further fully consolidated subsidiaries. As at June 30, 2020, this disposal group included assets totaling €127 million and a small volume of liabilities. An impairment loss requirement of €11 million arose and was recognized under other net operating income. The sale of the shares in these entities is expected to be completed by the end of 2020.

Furthermore, the property, plant and equipment, and investment property held as at December 31, 2019 were sold in the first half of 2020. The net gain on disposal of €17 million was recognized under other net operating income.

Other disposal groups not qualifying as discontinued operations included units in various investment funds. The individual non-current assets classified as held for sale comprise items of property, plant and equipment, and investment property that were classified as held for sale in the first half of 2020.

## >> 31 Deposits from banks

| | Repayable on demand | | With agreed maturity or notice period | | Total | |
|---|---|---|---|---|---|---|
| € million | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| **Domestic banks** | **48,552** | 43,890 | **100,102** | 84,059 | **148,654** | 127,949 |
| Affiliated banks | 42,145 | 38,831 | 20,299 | 20,237 | 62,444 | 59,068 |
| Other banks | 6,407 | 5,059 | 79,803 | 63,822 | 86,210 | 68,881 |
| **Foreign banks** | **4,922** | 3,566 | **14,554** | 9,606 | **19,476** | 13,172 |
| **Total** | **53,474** | 47,456 | **114,656** | 93,665 | **168,130** | 141,121 |

## >> 32 Deposits from customers

| € million | Repayable on demand | | With agreed maturity or notice period | | Total | |
|---|---|---|---|---|---|---|
| | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 | Jun. 30, 2020 | Dec. 31, 2019 |
| Domestic customers | 22,994 | 17,158 | 96,002 | 95,887 | 118,996 | 113,045 |
| Foreign customers | 18,618 | 12,144 | 5,789 | 6,327 | 24,407 | 18,471 |
| **Total** | **41,612** | **29,302** | **101,791** | **102,214** | **143,403** | **131,516** |

## >> 33 Debt certificates issued including bonds

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **Bonds issued** | **58,609** | **51,536** |
| Mortgage Pfandbriefe | 23,181 | 22,445 |
| Public-sector Pfandbriefe | 2,253 | 2,180 |
| Other bonds | 33,175 | 26,911 |
| **Other debt certificates issued** | **20,164** | **33,587** |
| **Total** | **78,773** | **85,123** |

All other debt certificates issued are commercial paper.

## >> 34 Hedging instruments (negative fair values)

Hedging instruments (negative fair values) amounted to €1,672 million (December 31, 2019: €1,306 million) and resulted solely from derivatives used as fair value hedges.

## >> 35 Financial liabilities held for trading

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **DERIVATIVES (NEGATIVE FAIR VALUES)** | **24,055** | **18,901** |
| Interest-linked contracts | 19,315 | 15,768 |
| Currency-linked contracts | 2,099 | 1,772 |
| Share-/index-linked contracts | 2,341 | 1,181 |
| Other contracts | 194 | 105 |
| Credit derivatives | 106 | 75 |
| **SHORT POSITIONS** | **2,822** | **1,128** |
| **BONDS ISSUED** | **21,617** | **22,261** |
| **DEPOSITS** | **13,111** | **9,472** |
| of which: from affiliated banks | 3,219 | 2,616 |
| from other banks | 9,567 | 6,659 |
| **Money market deposits** | **12,903** | **9,306** |
| from banks | 12,689 | 9,167 |
| from customers | 214 | 139 |
| **Promissory notes and registered bonds issued** | **208** | **166** |
| to banks | 97 | 108 |
| to customers | 111 | 58 |
| **Total** | **61,605** | **51,762** |

Bonds issued mainly comprise share certificates and index-linked certificates.

## >> 36 Provisions

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **Provisions for employee benefits** | **1,664** | **1,706** |
| Provisions for defined benefit plans | 1,204 | 1,198 |
| Provisions for other long-term employee benefits | 155 | 165 |
| of which: for semi-retirement schemes | 27 | 27 |
| Provisions for termination benefits | 283 | 305 |
| of which: for early retirement schemes | 14 | 15 |
| for restructuring | 244 | 263 |
| Provisions for short-term employee benefits | 22 | 38 |
| **Provisions for share-based payment transactions** | **30** | **39** |
| **Other provisions** | **1,964** | **2,090** |
| Provisions for onerous contracts | 15 | 15 |
| Provisions for restructuring | 11 | 24 |
| Provisions for loan commitments | 95 | 71 |
| Provisions for financial guarantee contracts | 127 | 124 |
| Other provisions for loans and advances | 31 | 33 |
| Provisions relating to building society operations | 1,347 | 1,406 |
| Residual provisions | 338 | 417 |
| **Total** | **3,658** | **3,835** |

## >> 37 Insurance liabilities

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Provision for unearned premiums | 2,094 | 1,188 |
| Benefit reserve | 67,678 | 65,502 |
| Provision for claims outstanding | 13,926 | 13,415 |
| Provision for premium refunds | 11,508 | 12,149 |
| Other insurance liabilities | 54 | 59 |
| Reserve for unit-linked insurance contracts | 11,036 | 12,033 |
| **Total** | **106,296** | **104,346** |

In connection with the COVID-19 pandemic, €282 million was added to the provisions for claims outstanding in respect of the direct insurance companies in the non-life insurance division and in respect of inward reinsurance business. Of this amount, €80 million was attributable to claims already reported and €202 million to the provision for claims incurred but not reported. This was mitigated by a positive effect of €100 million in the provisions for individual claims in the branches of insurance not adversely affected by COVID-19 (particularly motor vehicle insurance). COVID-19 had no material impact on the provision for claims outstanding or on the partial provisions for surrenders at the R+V life insurance companies and at the R+V health insurance company.

## >> 38 Other liabilities

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Other liabilities of insurance companies | 6,639 | 6,780 |
| Accruals | 846 | 1,256 |
| Financial liabilities from contingent considerations in a business combination | 5 | 5 |
| Other payables | 201 | 189 |
| Lease liabilities | 249 | 279 |
| Residual other liabilities | 837 | 664 |
| **Total** | **8,777** | **9,173** |

The table below gives a breakdown of insurance companies’ other liabilities.

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Other provisions | 412 | 428 |
| Payables and residual other liabilities | 6,227 | 6,352 |
| **Total** | **6,639** | **6,780** |

Payables and residual other liabilities included lease liabilities of €60 million (December 31, 2019: €63 million).

## >> 39 Subordinated capital

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Subordinated liabilities | 2,003 | 2,106 |
| Profit-sharing rights | 66 | 68 |
| Share capital repayable on demand | 12 | 13 |
| **Total** | **2,081** | **2,187** |

## >> 40 Equity

The table below shows a breakdown of the reserve from other comprehensive income:

| | Items not reclassified to the income statement | | Items reclassified to the income statement | |
|---|---|---|---|---|
| € million | Reserve from equity instruments for which the fair value OCI option has been exercised | Reserve from gains and losses on financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk | Reserve from debt instruments measured at fair value through other comprehensive income | Currency translation reserve |
| Equity as at Jan. 1, 2019 | 361 | 23 | 131 | 84 |
| Other comprehensive income/loss | 198 | -91 | 1,192 | 3 |
| **Total comprehensive income/loss** | **198** | **-91** | **1,192** | **3** |
| Changes in scope of consolidation | 1 | - | - | -7 |
| Reclassifications within equity | -4 | - | - | - |
| **Equity as at Jun. 30, 2019** | **556** | **-68** | **1,323** | **80** |
| | | | | |
| Equity as at Jan. 1, 2020 | 465 | -42 | 1,186 | 85 |
| Other comprehensive income/loss | -187 | 217 | 46 | -2 |
| **Total comprehensive income/loss** | **-187** | **217** | **46** | **-2** |
| Changes in scope of consolidation | - | - | - | - |
| Reclassifications within equity | -5 | 7 | - | - |
| **Equity as at Jun. 30, 2020** | **273** | **182** | **1,232** | **83** |

The changes in loss allowances included in the reserve from other comprehensive income, broken down by individual balance sheet item, were as follows:

| | Loans and advances to customers | | Investments | | |
|---|---|---|---|---|---|
| € million | Stage 1 | Stage 2 | Stage 1 | Stage 2 | Stage 3 |
| Balance as at Jan. 1, 2019 | 1 | 2 | 3 | 1 | 29 |
| Additions | - | - | 2 | - | - |
| Reversals | -1 | -1 | -2 | - | - |
| **Balance as at Jun. 30, 2019** | **-** | **1** | **3** | **1** | **29** |
| | | | | | |
| Balance as at Jan. 1, 2020 | 1 | - | 4 | 1 | 30 |
| Additions | 1 | 1 | 4 | - | - |
| Utilizations | - | - | - | - | -8 |
| Reversals | - | - | -2 | - | - |
| Other changes | - | - | - | -1 | 2 |
| **Balance as at Jun. 30, 2020** | **2** | **1** | **6** | **-** | **24** |

| | Investments held by insurance companies | | Total |
|---|---|---|---|
| € million | Stage 1 | Stage 2 | |
| Balance as at Jan. 1, 2019 | 4 | - | 40 |
| Additions | 3 | - | 5 |
| Reversals | -2 | - | -6 |
| **Balance as at Jun. 30, 2019** | **5** | **-** | **39** |
| | | | |
| Balance as at Jan. 1, 2020 | 4 | - | 40 |
| Additions | 7 | 1 | 14 |
| Utilizations | - | - | -8 |
| Reversals | - | - | -2 |
| Other changes | - | - | 1 |
| **Balance as at Jun. 30, 2020** | **11** | **1** | **45** |

# D Financial instruments and fair value disclosures

## >> 41 Classes, categories, and fair values of financial instruments

The following tables show the breakdown of net carrying amounts and fair values of financial assets and financial liabilities by class (in accordance with IFRS 7) and by category of financial instrument (in accordance with IFRS 9):

| € million | Jun. 30, 2020 Carrying amount | Jun. 30, 2020 Fair value | Dec. 31, 2019 Carrying amount | Dec. 31, 2019 Fair value |
|---|---|---|---|---|
| **FINANCIAL ASSETS MEASURED AT FAIR VALUE** | **195,621** | **195,621** | **187,377** | **187,377** |
| **Financial assets measured at fair value through profit or loss** | **87,761** | **87,761** | **84,894** | **84,894** |
| ***Financial assets mandatorily measured at fair value through profit or loss*** | ***78,362*** | ***78,362*** | ***74,563*** | ***74,563*** |
| Loans and advances to banks | 7 | 7 | - | - |
| Loans and advances to customers | 263 | 263 | 258 | 258 |
| Hedging instruments (positive fair values) | 225 | 225 | 201 | 201 |
| Financial assets held for trading | 50,063 | 50,063 | 44,781 | 44,781 |
| Investments | 2,534 | 2,534 | 2,591 | 2,591 |
| Investments held by insurance companies | 25,270 | 25,270 | 26,732 | 26,732 |
| ***Financial assets designated as at fair value through profit or loss*** | ***9,399*** | ***9,399*** | ***10,331*** | ***10,331*** |
| Loans and advances to banks | 1,895 | 1,895 | 2,427 | 2,427 |
| Loans and advances to customers | 1,277 | 1,277 | 1,488 | 1,488 |
| Investments | 6,227 | 6,227 | 6,416 | 6,416 |
| **Financial assets measured at fair value through other comprehensive income** | **107,687** | **107,687** | **102,169** | **102,169** |
| ***Financial assets mandatorily measured at fair value through other comprehensive income*** | ***102,185*** | ***102,185*** | ***95,857*** | ***95,857*** |
| Loans and advances to banks | 117 | 117 | 152 | 152 |
| Loans and advances to customers | 3,444 | 3,444 | 3,569 | 3,569 |
| Investments | 32,879 | 32,879 | 29,731 | 29,731 |
| Investments held by insurance companies | 65,745 | 65,745 | 62,405 | 62,405 |
| ***Financial assets designated as at fair value through other comprehensive income*** | ***5,502*** | ***5,502*** | ***6,312*** | ***6,312*** |
| Investments | 327 | 327 | 379 | 379 |
| Investments held by insurance companies | 5,175 | 5,175 | 5,933 | 5,933 |
| **Non-current assets and disposal groups classified as held for sale** | **173** | **173** | **314** | **314** |
| **FINANCIAL ASSETS MEASURED AT AMORTIZED COST** | **395,870** | **403,948** | **359,662** | **366,937** |
| Cash and cash equivalents | 75,522 | 75,525 | 52,166 | 52,167 |
| Loans and advances to banks | 103,927 | 107,582 | 94,953 | 97,570 |
| Loans and advances to customers | 181,272 | 184,601 | 177,165 | 180,501 |
| Investments | 16,577 | 17,445 | 17,246 | 18,148 |
| Investments held by insurance companies | 15,135 | 17,339 | 14,472 | 16,259 |
| Other assets | 1,450 | 1,450 | 2,094 | 2,094 |
| Fair value changes of the hedged items in portfolio hedges of interest-rate risk | 1,981 | | 1,368[1] | |
| **Non-current assets and disposal groups classified as held for sale** | **6** | **6** | **198** | **198** |
| **FINANCE LEASES** | **1,303** | **1,330** | **1,531** | **1,534** |
| Loans and advances to customers | 1,303 | 1,330 | 1,531 | 1,534 |

1 Amount restated (see note 2).

| € million | Jun. 30, 2020 Carrying amount | Jun. 30, 2020 Fair value | Dec. 31, 2019 Carrying amount | Dec. 31, 2019 Fair value |
|---|---|---|---|---|
| **FINANCIAL LIABILITIES MEASURED AT FAIR VALUE** | **94,463** | **94,463** | **84,261** | **84,261** |
| **Financial liabilities mandatorily measured at fair value through profit or loss** | **63,331** | **63,331** | **53,093** | **53,093** |
| Hedging instruments (negative fair values) | 1,672 | 1,672 | 1,306 | 1,306 |
| Financial liabilities held for trading | 61,605 | 61,605 | 51,762 | 51,762 |
| Other liabilities | 54 | 54 | 25 | 25 |
| **Financial liabilities designated as at fair value through profit or loss** | **31,132** | **31,132** | **31,168** | **31,168** |
| Deposits from banks | 4,719 | 4,719 | 5,060 | 5,060 |
| Deposits from customers | 9,566 | 9,566 | 10,114 | 10,114 |
| Debt certificates issued including bonds | 16,523 | 16,523 | 15,647 | 15,647 |
| Subordinated capital | 324 | 324 | 347 | 347 |
| **FINANCIAL LIABILITIES MEASURED AT AMORTIZED COST** | **363,290** | **369,931** | **330,704** | **336,160** |
| Deposits from banks | 163,411 | 167,272 | 136,061 | 139,028 |
| Deposits from customers | 133,837 | 135,978 | 121,402 | 123,345 |
| Debt certificates issued including bonds | 62,250 | 63,063 | 69,476 | 70,137 |
| Other liabilities | 1,735 | 1,736 | 1,688 | 1,689 |
| Subordinated capital | 1,757 | 1,882 | 1,840 | 1,961 |
| Fair value changes of the hedged items in portfolio hedges of interest-rate risk | 300 | | 237[1] | |
| **LEASES** | **309** | **309** | **342** | **342** |
| Other liabilities | 309 | 309 | 342 | 342 |
| **FINANCIAL GUARANTEE CONTRACTS AND LOAN COMMITMENTS** | **222** | **222** | **195** | **195** |
| **Financial guarantee contracts** | **127** | **127** | **124** | **124** |
| Provisions | 127 | 127 | 124 | 124 |
| **Loan commitments** | **95** | **95** | **71** | **71** |
| Provisions | 95 | 95 | 71 | 71 |

1 Amount restated (see note 2).

Given the complex structure of home savings contracts and the multitude of scales of rates and charges, there is currently no suitable method for calculating the fair value of an individual contract as at the balance sheet date. Consequently, the fair value cannot be determined using either comparable market prices or suitable option pricing models. The fair values of financial assets and financial liabilities resulting from building society operations are therefore shown in simplified form at their carrying amounts. On the basis of the models used for building society management, which comprise both collective and non-collective business including deposits, the overall amount for building society operations during the reporting period was positive.

The carrying amounts and fair values reported under investments held by insurance companies relate to receivables and fixed-income securities matched as cover for long-term insurance contract obligations as part of insurance operations. Because these instruments are normally held over their entire maturity, interest-rate-related changes in fair value during the maturity of the financial assets balance each other out in full. The fair values of the investments held by insurance companies comprise both the proportion of the fair values that is attributable to the policyholders and the proportion attributable to the shareholders of the DZ BANK Group. The fair value attributable to the shareholders of the DZ BANK Group of investments held by insurance companies measured at amortized cost was €15,832 million (December 31, 2019: €15,050 million).

## >> 42 Assets and liabilities measured at fair value on the balance sheet

### Fair value hierarchy

The fair value measurements are assigned to the levels of the fair value hierarchy as follows:

| | Level 1 | | Level 2 | | Level 3 | |
|---|---|---|---|---|---|---|
| € million | **Jun. 30, 2020** | Dec. 31, 2019 | **Jun. 30, 2020** | Dec. 31, 2019 | **Jun. 30, 2020** | Dec. 31, 2019 |
| **Assets** | **83,876** | **82,382** | **103,060** | **96,062** | **8,685** | **8,933** |
| Loans and advances to banks | - | - | 2,019 | 2,579 | - | - |
| Loans and advances to customers | - | - | 4,057 | 4,408 | 927 | 907 |
| Hedging instruments (positive fair values) | - | - | 225 | 201 | - | - |
| Financial assets held for trading | 1,673 | 1,645 | 47,885 | 42,345 | 505 | 791 |
| Investments | 19,754 | 19,770 | 20,298 | 17,378 | 1,915 | 1,969 |
| Investments held by insurance companies | 62,339 | 60,873 | 28,522 | 29,106 | 5,329 | 5,091 |
| Non-current assets and disposal groups classified as held for sale | 110 | 94 | 54 | 45 | 9 | 175 |
| of which: non-recurring measurement | 110 | 94 | - | - | - | 41 |
| **Liabilities** | **4,950** | **4,320** | **101,846** | **93,039** | **854** | **1,172** |
| Deposits from banks | - | - | 4,719 | 5,060 | - | - |
| Deposits from customers | - | - | 9,566 | 10,114 | - | - |
| Debt certificates issued including bonds | 3,396 | 3,340 | 12,622 | 11,699 | 505 | 608 |
| Hedging instruments (negative fair values) | - | - | 1,672 | 1,306 | - | - |
| Financial liabilities held for trading | 1,540 | 973 | 59,752 | 50,274 | 313 | 515 |
| Financial liabilities arising from unit-linked insurance products | - | - | 13,187 | 14,270 | - | - |
| Other liabilities | 14 | 7 | 35 | 13 | 5 | 5 |
| Subordinated capital | - | - | 293 | 303 | 31 | 44 |

The investments held by insurance companies measured at fair value include assets related to unit-linked contracts. These are offset on the equity and liabilities side of the balance sheet by financial liabilities measured at fair value arising from unit-linked insurance products, which consist of the reserve for unit-linked insurance contracts and liabilities from capitalization transactions allocated to unit-linked life insurance.

## Transfers

Assets and liabilities held at the balance sheet date and measured at fair value on a recurring basis were transferred as follows between Levels 1 and 2 of the fair value hierarchy:

| | Transfers from Level 1 to Level 2 | | Transfers from Level 2 to Level 1 | |
|---|---|---|---|---|
| € million | **Jan. 1 – Jun. 30, 2020** | Jan. 1 – Jun. 30, 2019 | **Jan. 1 – Jun. 30, 2020** | Jan. 1 – Jun. 30, 2019 |
| **Financial assets measured at fair value** | **103** | **496** | **1,069** | **3,987** |
| Financial assets held for trading | - | 24 | - | - |
| Investments | - | - | - | 3,710 |
| Investments held by insurance companies | 103 | 472 | 1,069 | 277 |
| **Financial liabilities measured at fair value** | **-** | **1** | **-** | **-** |
| Financial liabilities held for trading | - | 1 | - | - |

Transfers from Level 1 to Level 2 were due to quoted prices no longer being obtainable in active markets for identical assets or liabilities. Transfers from Level 2 to Level 1 were due to the availability of quoted prices in active markets that had previously not existed.

In the DZ BANK Group, transfers between Levels 1 and 2 take place when there is a change in the inputs that is relevant to categorization in the fair value hierarchy.

## Fair value measurements within Levels 2 and 3

Fair value measurements within Level 2 of the fair value hierarchy either use prices available in active markets for similar, but not identical, financial instruments or use valuation techniques largely based on observable market data. If valuation techniques are used that include a significant valuation input that is not observable in the market, the relevant fair value measurements are categorized within Level 3 of the fair value hierarchy.

Generally, the discounted cash flow (DCF) method is used in the model-based measurement of the fair value of financial instruments without optionalities. Modeling of the yield curves is based on a multi-curve approach with collateral discounting. Simple products on which options exist are measured using customary standard models in which the inputs are quoted in active markets. For structured products on which options exist, a wide range of standard valuation techniques are used. Valuation models are calibrated to available market prices and validated regularly. The fair values of structured products can be measured by breaking these products into their constituent parts, which are then measured using the valuation methods described below.

The basis for measurement is the selection of an adequate yield curve for each specific instrument. The measurement is carried out by selecting appropriate tenor-specific forward curves for projecting variable cash flows. The nature and collateralization of the transactions determines how they are discounted using yield curves that can be adjusted on the basis of relevant spreads.

The DZ BANK Group uses prices in active markets (provided these prices are available) for the fair value measurement of loans and advances as well as unstructured bonds. Otherwise, it mainly uses the DCF method. Discounting is based on yield curves that are adjusted for liquidity-related and credit rating-related costs using spreads. Product-dependent funding spreads are added to the yield curve for liabilities attributable to registered creditors, debt certificates issued including bonds, and subordinated capital. Debt instruments held are adjusted using issuer-specific spreads or spreads derived from the issuer's internal and external credit rating, sector, and risk category. Customer-appropriate spreads and collateralization rates are taken into account for the measurement of loans when the DCF method is used. If significant unobservable inputs are used for measurement and there are no indications that the transaction price is not identical to the fair value at the time of first-time recognition on the balance sheet, the valuation method is calibrated in such a way that the model price at the time of acquisition corresponds to the transaction price. In exceptional cases, the nominal amount of the debt instrument in question provides the best evidence of fair value.

The fair value measurements of shares and other variable-yield securities and of long-term equity investments accounted for in accordance with IFRS 9 are determined by applying income capitalization approaches and observing transaction prices. The best indicator of fair value is deemed to be the transaction prices for recent transactions involving the relevant financial instruments, provided there have been any such transactions. Otherwise, the fair value is measured using income capitalization approaches in which future income and dividends – calculated on the basis of forecasts and estimates – are discounted, taking risk parameters into account.

The fair value measurements of investment fund units are determined using the pro rata net asset value. This is adjusted for any outstanding performance-related remuneration entitlements of fund managers; risk adjustments are also taken into account. Some long-term equity investments in real-estate companies are also measured at net asset value. In this case, the liabilities are subtracted from the fair values of the real estate tied up in the company and the result is multiplied by the percentage of shareholding. The prices of units in real-estate funds that are not managed by the DZ BANK Group are provided by the asset management company that manages these funds. These units are measured regularly at net asset value. Fair value measurements are also based on valuations, current values, and prices in recent transactions.

The fair value measurement of standardized derivatives traded in liquid markets is based on observable market prices and/or industry-standard models using observable inputs. To discount the cash flows of derivatives, a distinction is made between non-collateralized and collateralized transactions when using yield curves in order to take into account the specific funding costs. Moreover, calculation of the model prices for products on which options exist mostly requires the input of additional market data (e.g. volatilities, correlations, repo rates). As far as possible, this data is derived implicitly from quoted market prices that are available. If observable quoted market prices are not available, or only available to a limited extent, the DZ BANK Group uses customary interpolation and extrapolation mechanisms, historical time series analyses, and fundamentals analyses of economic variables to generate the required inputs. It also uses expert assessments on a small scale.

The fair value measurement of OTC financial derivatives applies the option in IFRS 13.48, which enables the total net amount to be measured. In the first step, credit risk is not taken into account. Counterparty-specific credit risk arising from derivatives is recognized after the total net amount has been determined. Credit valuation adjustments (CVAs) are recognized to take into account counterparty credit risk and debt valuation adjustments (DVAs) are recognized to take into account the group's own credit risk. Their measurement also takes account of collateral and uses market-implied parameters with matching maturities or internal parameters with matching maturities for the probability of default and loss given default.

The measurement of financial instruments also involves carrying out measurement adjustments to a suitable degree. These include, among other things, model reserves that enable uncertainties regarding model selection, model parameters, and model configuration to be taken into account. The DZ BANK Group measures financial instruments at the price at which these financial instruments can be realized in the market. If this differs from the measurement of the individual instruments (e.g. measurement at middle rates), the bid/ask adjustments (close-out reserves) are determined on a net basis applying the option in IFRS 13.48. Measurement takes account of the group's funding structure.

The following table shows the valuation techniques, the unobservable inputs, and the spreads of the unobservable inputs used for the fair value measurements at Level 3 of the fair value hierarchy as at June 30, 2020.

| Class according to IFRS 13 | Assets/liabilities | Fair value (€ million) | Valuation technique | Unobservable inputs | Spread of unobservable inputs (%) |
|---|---|---|---|---|---|
| Loans and advances to customers | Loans | 614 | DCF method | BVAL price adjustment | -4.0 to 4.0 |
| | | 104 | DCF method | Credit spread | 0.0 to 5.6 |
| | Profit-participation certificates | 46 | DCF method | Internal credit ratings | 4.4 to 19.1 |
| | Shareholders' loans | 109 | DCF method | Internal credit ratings | 4.4 to 19.1 |
| | Receivables arising from silent partnerships | 54 | DCF method | Internal credit ratings | 4.4 to 19.1 |
| Financial assets held for trading | ABSs | 3 | DCF method | Credit spread | 8.3 |
| | Equity/commodity basket products | 3 | Local volatility model | Correlation of the risk factors considered | 9.9 to 85.3 |
| | Loans and advances to issuers in default | 6 | DCF method | Recovery rate | - |
| | Collateralized loan obligations | 119 | Gaussian copula model | Liquidity spread | 1.9 to 5.2 |
| | Bearer securities | 232 | DCF method | BVAL price adjustment | 0.2 to 2.6 |
| | Registered securities | 114 | DCF method | BVAL price adjustment | -4.0 to 4.0 |
| | Option in connection with acquisition of long-term equity investments | 28 | Black-Scholes model | Earnings indicator | - |
| Investments | ABSs | 76 | DCF method | Credit spread | 0.6 to 7.3 |
| | Other variable-yield securities | 10 | DCF method | Assumptions for measurement of risk parameters | 10.1 to 13.5 |
| | Investments in subsidiaries | 30 | DCF method | Assumptions for measurement of risk parameters | 10.1 to 13.5 |
| | | 232 | Income capitalization approach, net asset value method | Future income | - |
| | Collateralized loan obligations | 4 | Gaussian copula model | Liquidity spread | 0.0 to 2.6 |
| | Loans and advances to issuers in default | 6 | DCF method | Recovery rate | - |
| | Bearer securities | 369 | DCF method | BVAL price adjustment | 0.2 to 140.8 |
| | Investment fund units | 18 | Net asset value | - | - |
| | Mortgage-backed securities | 293 | DCF method | Duration | - |
| | | 39 | DCF method | Recovery rate | 0.0 to 94.5 |
| | Other shareholdings | 77 | DCF method | Capitalization rate, growth factor | 1.0 to 10.9 |
| | | 255 | Income capitalization approach, net asset value method | Future income | - |
| | VR Circle | 506 | DCF method | Multiple-year default probabilities | 0 to 100 |

| Class according to IFRS 13 | Assets/liabilities | Fair value (€ million) | Valuation technique | Unobservable inputs | Spread of unobservable inputs (%) |
|---|---|---|---|---|---|
| Investments held by insurance companies | ABSs | 1,166 | Third-party pricing information | - | - |
| | Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments | 2,687 | Net asset value | - | - |
| | Investments in subsidiaries, associates, and joint ventures, other long-term equity investments, and shares in cooperatives | 396 | Income capitalization approach | Future income | 6.8 to 10.6 |
| | Fixed-income securities, convertible bonds, shares, and shares in cooperatives | 620 | Third-party pricing information | - | - |
| | Profit-participation certificates and promissory notes | 450 | DCF method | Credit spread | 5.0 to 6.8 |
| | Other shareholdings | 10 | Approximation | - | - |
| Non-current assets and disposal groups classified as held for sale | Loans | 9 | DCF method | Credit spread | 0.0 to 8.3 |
| Debt certificates issued including bonds | VR Circle | 505 | DCF method | Multiple-year default probabilities | 0 to 100 |
| Financial liabilities held for trading | Equity/commodity basket products | 285 | Local volatility model | Correlation of the risk factors considered | 9.9 to 85.3 |
| | Option in connection with acquisition of long-term equity investments | 10 | Black-Scholes model | Earnings indicators | - |
| | Products with commodity volatility derived from comparable instruments | 18 | Local volatility model | Volatility | 7.0 to 115.5 |
| Other liabilities | Incentivization commitment in connection with acquisition of long-term equity investments | 5 | Expected value | - | - |
| Subordinated capital | Loans | 31 | DCF method | Credit spread | -4.0 to 4.0 |

The following table shows the valuation techniques, the unobservable inputs, and the spreads of the unobservable inputs used for the fair value measurements at Level 3 of the fair value hierarchy as at December 31, 2019.

| Class according to IFRS 13 | Assets/liabilities | Fair value (€ million) | Valuation technique | Unobservable inputs | Spread of unobservable inputs (%) |
|---|---|---|---|---|---|
| Loans and advances to customers | Loans | 632 | DCF method | BVAL price adjustment | -4.0 to 4.0 |
| | | 69 | DCF method | Credit spread | 0.0 to 8.3 |
| | Profit-participation certificates | 46 | DCF method | Internal credit ratings | 5.2 to 16.5 |
| | Shareholders' loans | 102 | DCF method | Internal credit ratings | 5.2 to 16.5 |
| | Receivables arising from silent partnerships | 58 | DCF method | Internal credit ratings | 5.2 to 16.5 |
| Financial assets held for trading | ABSs | 4 | DCF method | Credit spread | 6.5 |
| | Equity/commodity basket products | 6 | Local volatility model | Correlation of the risk factors considered | 9.9 to 85.3 |
| | Loans and advances to issuers in default | 20 | DCF method | Recovery rate | - |
| | Collateralized loan obligations | 99 | Gaussian copula model | Liquidity spread | 1.1 to 4.5 |
| | Bearer securities | 466 | DCF method | BVAL price adjustment | -1.7 to 0.6 |
| | Registered securities | 168 | DCF method | BVAL price adjustment | -4.0 to 4.0 |
| | Option in connection with acquisition of long-term equity investments | 28 | Black-Scholes model | Earnings indicator | - |
| Investments | ABSs | 79 | DCF method | Credit spread | 0.5 to 5.4 |
| | Other variable-yield securities | 10 | DCF method | Assumptions for measurement of risk parameters | 9.6 to 13.5 |
| | Investments in subsidiaries | 37 | DCF method | Assumptions for measurement of risk parameters | 9.6 to 13.5 |
| | | 273 | Income capitalization approach, net asset value method | Future income | - |
| | Collateralized loan obligations | 6 | Gaussian copula model | Liquidity spread | 0.0 to 1.7 |
| | Bearer securities | 342 | DCF method | BVAL price adjustment | -1.7 to 132 |
| | Investment fund units | 20 | Net asset value | - | - |
| | Mortgage-backed securities | 334 | DCF method | Duration | - |
| | | 41 | DCF method | Recovery rate | 0.0 to 94.6 |
| | Other shareholdings | 72 | DCF method | Capitalization rate, growth factor | 0.0 to 11.6 |
| | | 249 | Income capitalization approach, net asset value method | Future income | - |
| | VR Circle | 506 | DCF method | Multiple-year default probabilities | 0 to 100 |

| Class according to IFRS 13 | Assets/liabilities | Fair value (€ million) | Valuation technique | Unobservable inputs | Spread of unobservable inputs (%) |
|---|---|---|---|---|---|
| Investments held by insurance companies | ABSs | 1,044 | Third-party pricing information | - | - |
| | Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments | 2,455 | Net asset value | - | - |
| | Investments in subsidiaries, associates, and joint ventures, other long-term equity investments, and shares in cooperatives | 404 | Income capitalization approach | Future income | 7.8 to 8.4 |
| | Fixed-income securities, convertible bonds, shares, and shares in cooperatives | 719 | Third-party pricing information | - | - |
| | Profit-participation certificates and promissory notes | 462 | DCF method | Credit spread | 4.4 to 6.0 |
| | Other shareholdings | 7 | Approximation | - | - |
| Non-current assets and disposal groups classified as held for sale | Loans | 175 | DCF method | Credit spread | 0.0 to 8.3 |
| Debt certificates issued including bonds | Bearer issue | 102 | DCF method | BVAL price adjustment | 0.1 |
| | VR Circle | 506 | DCF method | Multiple-year default probabilities | 0 to 100 |
| Financial liabilities held for trading | Equity/commodity basket products | 479 | Local volatility model | Correlation of the risk factors considered | 9.9 to 85.3 |
| | Option in connection with acquisition of long-term equity investments | 10 | Black-Scholes model | Earnings indicators | - |
| | Products with commodity volatility derived from comparable instruments | 26 | Local volatility model | Volatility | 7.0 to 59.5 |
| Other liabilities | Incentivization commitment in connection with acquisition of long-term equity investments | 5 | Expected value | - | - |
| Subordinated capital | Loans | 44 | DCF method | Credit spread | 0.3 to 3.2 |

## Fair value measurements within Level 3 of the fair value hierarchy

The table below shows the changes in the fair value measurements of assets within Level 3 of the fair value hierarchy:

| € million | Loans and advances to customers | Financial assets held for trading | Investments | Investments held by insurance companies | Non-current assets and disposal groups classified as held for sale |
|---|---|---|---|---|---|
| Balance as at Jan. 1, 2019 | 928 | 554 | 2,179 | 4,261 | 388 |
| Additions (purchases) | 30 | - | 138 | 482 | 122 |
| Transfers | -36 | -34 | -143 | -74 | - |
| from Level 3 to Levels 1 and 2 | -36 | -51 | -157 | -109 | - |
| from Levels 1 and 2 to Level 3 | - | 17 | 14 | 35 | - |
| Disposals (sales) | -26 | -53 | -80 | -255 | -247 |
| Changes resulting from measurement at fair value | 6 | 3 | 72 | 61 | - |
| through profit or loss | -6 | 3 | 23 | 17 | - |
| through other comprehensive income | 12 | - | 49 | 44 | - |
| Other changes | 9 | 3 | 3 | - | -2 |
| **Balance as at Jun. 30, 2019** | **911** | **473** | **2,169** | **4,475** | **261** |
| | | | | | |
| Balance as at Jan. 1, 2020 | 907 | 791 | 1,969 | 5,091 | 175 |
| Additions (purchases) | 42 | 393 | 49 | 562 | - |
| Transfers | - | 71 | 38 | -81 | - |
| from Level 3 to Levels 1 and 2 | - | -28 | -270 | -136 | - |
| from Levels 1 and 2 to Level 3 | - | 99 | 308 | 55 | - |
| Disposals (sales) | -17 | -746 | -141 | -148 | -163 |
| Changes resulting from measurement at fair value | -2 | -5 | -14 | -95 | -3 |
| through profit or loss | -5 | -5 | -22 | -78 | -3 |
| through other comprehensive income | 3 | - | 8 | -17 | - |
| Other changes | -3 | 1 | 14 | - | - |
| **Balance as at Jun. 30, 2020** | **927** | **505** | **1,915** | **5,329** | **9** |

The table below shows the changes in the fair value measurements of liabilities within Level 3 of the fair value hierarchy:

| € million | Debt certificates issued including bonds | Financial liabilities held for trading | Other liabilities | Subordinated capital |
|---|---|---|---|---|
| Balance as at Jan. 1, 2019 | 565 | 907 | 7 | 45 |
| Additions (issues) | - | 2 | - | - |
| Transfers | - | -242 | - | - |
| from Level 3 to Level 2 | - | -243 | - | - |
| from Level 2 to Level 3 | - | 1 | - | - |
| Disposals (settlements) | -26 | - | - | -3 |
| Changes resulting from measurement at fair value | -12 | 22 | 1 | 3 |
| through profit or loss | -12 | 22 | 1 | -1 |
| through other comprehensive income | - | - | - | 4 |
| Other changes | - | 1 | - | -1 |
| **Balance as at Jun. 30, 2019** | **527** | **690** | **8** | **44** |
| | | | | |
| Balance as at Jan. 1, 2020 | 608 | 515 | 5 | 44 |
| Additions (issues) | - | 37 | - | - |
| Transfers | -102 | -174 | - | - |
| from Level 3 to Level 2 | -102 | -308 | - | - |
| from Level 2 to Level 3 | - | 134 | - | - |
| Disposals (settlements) | - | -57 | - | -13 |
| Changes resulting from measurement at fair value | -1 | -8 | - | 1 |
| through profit or loss | - | -8 | - | 2 |
| through other comprehensive income | -1 | - | - | -1 |
| Other changes | - | - | - | -1 |
| **Balance as at Jun. 30, 2020** | **505** | **313** | **5** | **31** |

As part of the processes for fair value measurement, the DZ BANK Group reviews whether the valuation methods used for the measurement are typical and whether the valuation inputs used in the valuation methods are observable in the market. This review takes place at every balance sheet date, i.e. at least every 6 months. On the basis of this review, the fair value measurements are assigned to the levels of the fair value hierarchy. In the DZ BANK Group, transfers between the levels generally take place as soon as there is a change in the inputs that is relevant to categorization in the fair value hierarchy.

In each step of these processes, both the distinctive features of the particular product type and the distinctive features of the business models of the group entities are taken into consideration.

Transfers of fair values from Levels 1 and 2 to Level 3 of the fair value hierarchy during the reporting period are largely attributable to a revised estimate of the market observability of the valuation inputs used in the valuation methods. Transfers from Level 3 to Levels 1 or 2 are essentially due to the availability of a price listed in an active market and to the inclusion in the valuation method of material valuation inputs observable in the market.

The amount of gains or losses recognized in profit or loss resulting from the recurring fair value measurements within Level 3 of assets and liabilities held at the balance sheet date constituted a loss of €44 million during the reporting period (first half of 2019: gain of €67 million). The gains or losses are included in the line items net interest income, gains and losses on trading activities, other gains and losses on valuation of financial instruments, gains and losses on investments held by insurance companies and other insurance company gains and losses, loss allowances, and other net operating income.

For the fair values of investments held by insurance companies reported within Level 3, a worsening in the credit rating or a rise in the interest rate of 1 percent would lead to the recognition of a €38 million loss in the income statement (December 31, 2019: loss of €40 million) and a loss of €1 million under other comprehensive income/loss (December 31, 2019: loss of €1 million). In the case of the fair values of loans and advances to customers, the same change would lead to the recognition of a €9 million loss in the income statement (December 31, 2019: loss of €8 million). For the fair values of investments, there would be a €24 million loss under other comprehensive income/loss (December 31, 2019: loss of €26 million) and a €26 million loss in the income statement (December 31, 2019: loss of €24 million). Within financial assets held for trading, the changes would give rise to a loss of €8 million recognized in the income statement (December 31, 2019: loss of €8 million); however, changes within financial liabilities held for trading would result in a gain of €3 million recognized in the income statement (December 31, 2019: gain of €3 million). In the case of debt certificates issued including bonds, a worsening in the credit rating or a rise in the interest rate of 1 percent would not lead to any material change in fair value. As at December 31, 2019, a gain of €3 million would have been recognized under other comprehensive income/loss.

The fair values of bonds without liquid markets that are reported within financial assets held for trading, financial liabilities held for trading, investments, and loans and advances to customers are given an individual adjustment spread or are measured using Bloomberg Valuation Service prices, which are observable in the market. All other things being equal, an increase in the pertinent measurement assumptions of 1 percent would lead to the recognition of a €19 million loss in the income statement (December 31, 2019: loss of €14 million) and a loss of €18 million under other comprehensive income/loss (December 31, 2019: loss of €19 million). Historical spreads are used for bonds recognized under subordinated capital whose spread components are no longer observable in the market. All other things being equal, an increase of 1 percent in the spread would lead to a €2 million increase in fair value that would be recognized in the income statement (December 31, 2019: increase of €4 million).

An alternative assumption about the credit spreads used could lead to a significant change in the fair values of some of the ABSs reported under financial assets held for trading and under investments. All other things being equal, an increase of 1 percent in these spreads would lead to the recognition of a €2 million loss in the income statement (December 31, 2019: loss of €2 million) and a loss of €1 million under other comprehensive income/loss (December 31, 2019: loss of €1 million).

An alternative assumption about the liquidity spreads used could lead to a significant change in respect of collateralized loan obligations reported under investments and under financial assets held for trading. All other things being equal, a rise in the liquidity spread assumptions by 1 percent would lead to a €5 million decrease in the fair values of these financial assets that would be recognized in the income statement (December 31, 2019: decrease of €5 million).

Sensitivity analysis is used to calculate the aforementioned changes in the fair value measurements. Non-performing exposures and strategically held investments in subsidiaries and other shareholdings whose fair values are calculated using an income capitalization approach are not included in the sensitivity analysis.

## Exercise of option pursuant to IFRS 13.48

The option offered by IFRS 13.48 of measuring a net risk position for financial assets and financial liabilities is used for portfolios whose components are recognized under the balance sheet items loans and advances to banks, loans and advances to customers, financial assets held for trading, investments, and financial liabilities held for trading.

## >> 43 Hedge accounting

Gains and losses arising on hedging instruments and hedged items that need to be recognized in profit or loss are reported in the gains and losses from hedge accounting under other gains and losses on valuation of financial instruments. The breakdown of gains and losses from hedge accounting, by type of hedge, is as follows:

| € million | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Gains and losses on fair value hedges** | **-3** | 1 |
| Gains and losses on hedging instruments | -103 | -131 |
| Gains and losses on hedged items | 100 | 132 |
| **Gains and losses on portfolio fair value hedges** | **12** | 1 |
| Gains and losses on hedging instruments | -1,087 | -1,337 |
| Gains and losses on hedged items | 1,099 | 1,338 |
| **Total** | **9** | 2 |

## >> 44 Nature and extent of risks arising from financial instruments and insurance contracts

With the exception of the qualitative and quantitative disclosures pursuant to IFRS 7.35-36, selected disclosures on the nature and extent of risks arising from financial instruments (IFRS 7.31-42) and insurance contracts (IFRS 4.38-39A) are included in the opportunity and risk report within the interim group management report. The selected disclosures pursuant to IFRS 7.35-36 can be found in the notes to the interim consolidated financial statements.

## Credit risk management practices

The rules for recognizing loss allowances are based on the calculation of expected losses in the lending business, on investments, on investments held by insurance companies, and on other assets. The impairment rules are applied only to those financial assets that are not measured at fair value through profit or loss. These are:

– Financial assets measured at amortized cost and
– Debt instruments held as financial assets measured at fair value through other comprehensive income.

The impairment rules are also applied to:

– Financial guarantee contracts and loan commitments that fall within the scope of IFRS 9 and are not recognized at fair value through profit or loss,
– Lease receivables, and
– Trade receivables and contract assets pursuant to IFRS 15.

In accordance with IFRS 9, the three-stage approach is used, additionally taking POCI assets into account, to determine the expected losses:

- Stage 1: For financial assets whose credit risk has not increased significantly since initial recognition that were not impaired upon initial recognition, the 12-month credit loss is recognized. Interest is recognized on the basis of the gross carrying amount.
- Stage 2: For financial assets whose credit risk has increased significantly since initial recognition, the loss allowances are determined in the amount of the assets' lifetime expected credit losses. Interest is recognized on the basis of the gross carrying amount.
- Stage 3: Financial assets are classified as impaired if they are deemed to be in default pursuant to article 178 of the Capital Requirements Regulation (CRR) as operationalized in the DZ BANK Group's definition of default. Here too, loss allowances are recognized in the amount of the lifetime expected credit losses. Interest income is calculated on the amortized cost after loss allowances using the effective interest method.
- POCI assets: Financial assets that are already deemed impaired upon initial recognition are not assigned to the 3-stage model and are reported separately. Credit-impaired financial assets are initially recognized at fair value rather than at their gross carrying amount. Consequently, interest is recognized for these assets using a risk-adjusted effective interest rate.

The review of whether the credit risk of financial assets, financial guarantee contracts, and loan commitments has increased significantly since initial recognition is carried out on an ongoing basis. The assessment is conducted both for individual financial assets and for portfolios of assets using quantitative and qualitative analysis. As a rule, quantitative analysis looks at the expected credit risk over the entire residual life of the financial instruments in question. Macroeconomic information is also factored in. To this end, the credit risk as at the balance sheet date for the residual life is compared with the assets' credit risk over the same maturity period estimated at the time of initial recognition. The thresholds that indicate a significant increase in credit risk are determined for each portfolio separately relative to the portfolio's past migrations of default probability. Internal risk measurement systems, external credit ratings, and risk forecasts are also used to assess the credit risk of financial assets. This test is extended to look at qualitative criteria that increase credit risk. Furthermore, allocation to stage 2 is generally assumed no later than when payments become more than 30 days past due. Depending on the business line, this criterion has been defined as an additional backstop. As a rule, however, the other transfer criteria mean that financial assets are allocated to stage 2 well before payments become more than 30 days past due.

Securities with low credit risk are not tested to ascertain whether credit risk has increased significantly. Investment-grade securities are thus assigned to stage 1. This exemption does not apply to loans and receivables.

If, on the balance sheet date, it is found that there is no longer a significant increase in credit risk compared with previous balance sheet dates, the financial assets in question are transferred back to stage 1 and the loss allowances are brought back down to the level of the 12-month expected credit loss. If a financial instrument in stage 3 recovers, the difference between the interest income determined for the period of credit impairment on the basis of amortized cost and the actual interest income recognized in respect of the financial instrument for the period concerned is reported as a reversal of an impairment loss or a reversal of loss allowances. In the case of a transfer back from stage 3, the default status (as defined in the regulatory requirements) is only revoked after the necessary cure period, which is thereby taken into account in the transfer criterion.

Expected losses are calculated as the probability-weighted present value of the expected defaults over the estimated lifetime from default events within the next 12 months for assets assigned to stage 1 of the impairment model and from default events over the entire residual life for assets assigned to stage 2. The expected losses are discounted with their original effective interest rate. This calculation uses the regulatory model (probability of default, loss given default, and expected loan amount at the time of default), with adjustments to satisfy the requirements of IFRS 9. The estimated probability of default incorporates both historical and forward-looking default information. This is applied when loss allowances are determined, in the form of shifts in the default probabilities calculated using statistical methods (known as shift factors). Depending on the portfolio, the calculation of the expected loss for specific exposures in stage 3 also uses this type of parameter-based approach or draws on individual expert appraisals of the achievable cash flows and probability-weighted scenarios at individual transaction level.

Loss histories, adjusted to reflect forecast future defaults, serve as the basis for determining expected losses. Two macroeconomic scenarios based on empirical estimates are also factored in. These scenarios specifically look at future trends in the labor market, interest rates in the money market, changes in gross domestic product, inflation, and real estate prices. To ensure that the expected loss is not distorted, the DZ BANK Group uses a number of scenarios when determining the risk parameters, which are then factored into the level of the loss allowance with a probability weighting. The methods and assumptions, including the forecasts, are validated regularly.

For the purpose of calculating loss allowances for portfolios, the portfolios are grouped according to shared credit risk characteristics, e.g. credit rating, date of origination, residual life, industry and origin of the borrower, and type of asset.

Directly recognized impairment losses reduce the carrying amounts of assets directly. Unlike loss allowances, which are estimates, directly recognized impairment losses are specified in an exact amount if this is justified because the receivable is not collectible (e.g. as a result of the notification of an insolvency ratio). Impairment losses can be recognized directly by writing down the asset value and/or by using existing loss allowances. As a rule, asset values are written down directly after all recovery and enforcement measures have been completed. Directly recognized impairment losses are also applied to insignificant amounts.

## Impact of COVID-19

During the COVID-19 pandemic, the established models and processes for calculating expected losses in accordance with IFRS 9 have generally been retained.

Current economic conditions against the backdrop of COVID-19 are mainly taken into consideration by updating the macroeconomic forecasts. In this context, the entities in the DZ BANK Group are guided by the Research division’s macroeconomic forecasts for 2020 to 2024, which are used in the calculation of expected losses.

The expected macroeconomic conditions are taken into account by adjusting the model-driven default probability profiles used in economic and regulatory risk management (known as shift factors). These shift factors are derived from macroeconomic inputs for various levels of default probability using existing stress test models. As is the case for strategic planning, the basis for the shift factors applied as at the balance sheet date are the macroeconomic forecasts provided by the Research division in March 2020. As at the balance sheet date, two macroeconomic scenarios (baseline scenario and risk scenario) were taken into account with a weighting of 60 percent (baseline scenario) and 40 percent (risk scenario). The shift factors were used to include current economic conditions (known as a point-in-time focus) and forecasts of future economic conditions for the years covered by the macroeconomic forecast period in these scenarios.

The baseline scenario is based on the assumption that large swathes of the economy took a severe macroeconomic hit during the reporting period as a result of the lockdown imposed due to COVID-19. Supported by fiscal measures, a strong recovery will begin at the end of 2020/start of 2021 and continue into 2022. The adverse effects on the real economy are of a similar magnitude in Germany and in the eurozone as a whole. In the United States, the macroeconomic effects are greater than in the eurozone. US government debt is rising very rapidly due to extensive fiscal packages.

The risk scenario is based on the assumption that the recession triggered by COVID-19 will be deeper and longer than assumed in the baseline scenario. Because of the weaker global economy, the oil price will stay at a very low level for longer and will not return to a level of US$ 35 per barrel before 2021. Consequently, there continues to be more downward pressure on inflation rates than in the baseline scenario. The recovery will remain lackluster in this risk scenario. Growth rates are very weak, even in the medium term, and inflation rates are low. The ECB will therefore not consider raising interest rates any further, even after it has ended the phase of negative interest rates.

The main macroeconomic forecasts for 2020 to 2024 used to calculate the expected loss as at the balance sheet date were as follows.

| | | 2020 | | 2021 | | 2022 | | 2023 | | 2024 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Baseline | Risk | Baseline | Risk | Baseline | Risk | Baseline | Risk | Baseline | Risk |
| DAX 30, Germany | Index | 10,600 | 8,600 | 12,720 | 10,750 | 13,100 | 11,830 | 13,490 | 11,830 | 13,760 | 11,830 |
| EURO STOXX 50, EU | Index | 2,800 | 2,250 | 3,360 | 2,810 | 3,460 | 3,090 | 3,560 | 3,090 | 3,630 | 3,090 |
| Unemployment rate, Germany | % | 6.00 | 7.00 | 6.00 | 7.00 | 5.75 | 6.50 | 5.50 | 6.00 | 5.25 | 5.75 |
| Harmonized unemployment rates, EU | % | 8.00 | 9.00 | 9.00 | 10.00 | 8.10 | 9.00 | 7.50 | 8.50 | 7.25 | 8.00 |
| Real GDP growth, Germany (seasonally and calendar-adjusted) | Compared with prior year (%) | -4.00 | -6.00 | 3.50 | 2.00 | 2.50 | 1.50 | 1.25 | 1.00 | 1.25 | 1.00 |
| Real GDP growth, EU (seasonally and calendar-adjusted) | Compared with prior year (%) | -5.25 | -7.00 | 3.25 | 2.50 | 2.25 | 2.25 | 1.25 | 1.50 | 1.25 | 1.00 |

For selected portfolio segments, the shift factors determined using statistical methods were overridden because of the extreme macroeconomic changes, which have not been seen on this scale before, and because of the extensive government support measures. The values determined using the stress test model were validated by conducting surveys of economic experts and were supplemented with management estimates. This ensures that the shift factors used are in line both with experts' expectations and with the forecast changes in macroeconomic factors for the calculation of expected losses.

In addition, the ongoing monitoring process for the customer rating was supplemented with an ad hoc review (known as a re-rating) for significant parts of the portfolio. Given the extreme macroeconomic situation, the re-ratings were operationalized by means of an override in the same way as for the adjustment of the shift factors. The ad hoc review should ensure that the assumed credit risk promptly reflects the impact of COVID-19. The re-rating took account of the likely long-term effects of the pandemic, factoring in the statutory and private support measures.

The shift factors used were also validated at sectoral level and their overall appropriateness was confirmed. Furthermore, the macroeconomic scenarios published by the ECB on June 4, 2020 were sufficiently taken into account by means of the scenario weightings used in the strategic planning, and the assumptions made in March 2020 were confirmed.

The aforementioned adjustments constitute adjustments to inputs in the models for taking account of the COVID-19 pandemic. The DZ BANK Group therefore did not need to make any additional post-model adjustments.

To mitigate the impact of COVID-19, borrowers and the entities in the DZ BANK Group reached agreement on individual support measures, including the temporary deferral of capital repayments. Besides these individual measures, there were also measures as part of general legislative and non-legislative moratoria on repayments. In the DZ BANK Group, repayments under consumer loans are deferred due to legislative moratoria in Germany, Hungary, Austria, and Slovakia. Repayments under consumer loans were also deferred due to the moratorium of Verband der Privaten Bausparkassen e.V. [Association of Private Bausparkassen]. In accordance with the EBA Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis, the general legislative and non-legislative moratoria are not classified as forbearance measures and therefore do not lead to a forbearance-related transfer between stages within the impairment model. A transfer between stages does take place if other transfer criteria are met. This exemption does not apply to individual support measures.

Government support measures in the form of development loans specifically in connection with the COVID-19 pandemic helped to mitigate the impact of the crisis.

No material deterioration in the value of collateral held in the form of mortgages on real estate is currently observable in connection with the COVID-19 pandemic. Any potential write-down of the value of real estate held as collateral is monitored on an ongoing basis, taking account of how the pandemic unfolds. Any pandemic-related decreases in the value of the real estate held as collateral could be offset by, for example, low interest rates, low vacancy rates, and conservative finance structures. The pandemic has a direct impact on the collateral received in connection with the financing of aircraft and ships. The value of these types of collateral is validated using stress data and market data so that any write-down caused by the pandemic can be determined. The updated collateral values are incorporated into the calculation of loss allowances for expected losses in the reporting period.

The COVID-19 pandemic resulted in transfers between the stages of the impairment model in the case of the gross carrying amounts of the financial instruments in the classes 'financial assets measured at fair value', 'financial assets measured at amortized cost', and 'finance leases' and in the case of the nominal amounts in the class 'financial guarantee contracts and loan commitments'. The transfers were largely attributable to the adjusted forecast for the macroeconomic factors and to rating downgrades. In the 'financial assets measured at fair value' class, the pandemic also resulted in decreases in the fair values of financial instruments.

Additions to loss allowances that are presented in the tables of loss allowances and reflect the effects of the COVID-19 pandemic are also attributable to the changed macroeconomic forecasts used to calculate expected losses, the rating downgrades, and the decrease in collateral values. The updating has a direct effect on the probability of default of the financial instruments, which is reflected both in the transfer between stages and in the addition to loss allowances within a stage. Loss allowances in stage 3 also went up due to significant individual additions that were not solely attributable to the pandemic.

# Loss allowances and gross carrying amounts

In the DZ BANK Group, loss allowances are recognized for the classes ‘financial assets measured at fair value’, ‘financial assets measured at amortized cost’, ‘finance leases’, and ‘financial guarantee contracts and loan commitments’ in the amount of the expected credit losses. Trade receivables and contract assets that fall within the scope of IFRS 15 are assigned to the ‘financial assets measured at amortized cost’ class.

## Financial assets measured at fair value

| | Stage 1 | | Stage 2 | | Stage 3 | |
|---|---|---|---|---|---|---|
| € million | Loss allowances | Fair value | Loss allowances | Fair value | Loss allowances | Fair value |
| **Balance as at Jan. 1, 2019** | 8 | 80,068 | 3 | 182 | 29 | 25 |
| Addition/increase in loan drawdowns | 2 | 11,703 | - | - | - | - |
| Change to financial assets due to transfer between stages | - | 5 | - | -5 | - | - |
| Transfer from stage 2 | - | 5 | - | -5 | - | - |
| Derecognitions and repayments | -3 | -8,624 | - | -33 | - | -2 |
| Changes to models/risk parameters | 1 | - | -1 | - | - | - |
| Additions | 3 | - | - | - | - | - |
| Reversals | -2 | - | -1 | - | - | - |
| Amortization, fair value changes, and other changes in measurement | - | 4,805 | - | 4 | - | - |
| **Balance as at Jun. 30, 2019** | **8** | **87,957** | **2** | **148** | **29** | **23** |
| | | | | | | |
| **Balance as at Jan. 1, 2020** | 9 | 95,779 | 1 | 59 | 30 | 19 |
| Addition/increase in loan drawdowns | 1 | 12,858 | - | - | - | - |
| Change to financial assets due to transfer between stages | 1 | -281 | -1 | 281 | - | - |
| Transfer from stage 1 | - | -288 | - | 288 | - | - |
| Transfer from stage 2 | 1 | 7 | -1 | -7 | - | - |
| Use of loss allowances/directly recognized impairment losses | - | - | - | - | -8 | - |
| Derecognitions and repayments | - | -7,288 | - | -34 | - | -9 |
| Changes to models/risk parameters | 9 | - | 2 | - | - | - |
| Additions | 10 | - | 2 | - | - | - |
| Reversals | -1 | - | - | - | - | - |
| Amortization, fair value changes, and other changes in measurement | - | 801 | - | -4 | - | 8 |
| Exchange differences and other changes | - | -4 | - | - | -1 | - |
| Deferred taxes | -1 | - | - | - | 3 | - |
| **Balance as at Jun. 30, 2020** | **19** | **101,865** | **2** | **302** | **24** | **18** |

Financial assets measured at amortized cost

| € million | Stage 1 | | Stage 2 | | Stage 3 | | POCI assets | |
|---|---|---|---|---|---|---|---|---|
| | Loss allowances | Gross carrying amount | Loss allowances | Gross carrying amount | Loss allowances | Gross carrying amount | Loss allowances | Gross carrying amount |
| Balance as at Jan. 1, 2019 | 231 | 330,226 | 196 | 7,864 | 1,972 | 4,349 | 3 | 22 |
| Addition/increase in loan drawdowns | 80 | 5,737,169 | 12 | 4,270 | 165 | 952 | - | 3 |
| Change to financial assets due to transfer between stages | 70 | -451 | -108 | 43 | 38 | 408 | - | - |
| Transfer from stage 1 | -26 | -2,297 | 24 | 2,139 | 2 | 158 | - | - |
| Transfer from stage 2 | 88 | 1,812 | -149 | -2,284 | 61 | 472 | - | - |
| Transfer from stage 3 | 8 | 34 | 17 | 188 | -25 | -222 | - | - |
| Use of loss allowances/directly recognized impairment losses | - | - | - | - | -237 | -14 | - | -1 |
| Derecognitions and repayments | -61 | -5,713,524 | -26 | -4,253 | -113 | -1,145 | - | -13 |
| Changes to models/risk parameters | -86 | - | 131 | - | 23 | - | -2 | - |
| Additions | 69 | - | 199 | - | 267 | - | 2 | - |
| Reversals | -155 | - | -68 | - | -244 | - | -4 | - |
| Amortization, fair value changes, and other changes in measurement | - | -147 | - | 13 | - | -115 | - | - |
| Positive change in fair value of POCI assets | | | | | | | | 10 |
| Exchange differences and other changes | - | -500 | - | -101 | 34 | -257 | - | - |
| **Balance as at Jun. 30, 2019** | **234** | **352,773** | **205** | **7,836** | **1,882** | **4,178** | **1** | **21** |
| | | | | | | | | |
| Balance as at Jan. 1, 2020 | 218 | 348,217 | 224 | 8,229 | 1,823 | 3,885 | 1 | 31 |
| Addition/increase in loan drawdowns | 85 | 1,710,839 | 40 | 5,030 | 374 | 1,045 | - | 29 |
| Change to financial assets due to transfer between stages | 55 | -3,404 | -97 | 2,742 | 44 | 662 | - | - |
| Transfer from stage 1 | -34 | -5,162 | 32 | 4,838 | 2 | 324 | - | - |
| Transfer from stage 2 | 82 | 1,709 | -152 | -2,188 | 73 | 479 | - | - |
| Transfer from stage 3 | 7 | 49 | 23 | 92 | -31 | -141 | - | - |
| Use of loss allowances/directly recognized impairment losses | - | -1 | - | - | -150 | -20 | -1 | -2 |
| Derecognitions and repayments | -50 | -1,672,829 | -53 | -5,920 | -269 | -1,358 | -7 | -20 |
| Changes to models/risk parameters | -40 | - | 275 | - | 137 | - | 2 | - |
| Additions | 93 | - | 357 | - | 310 | - | 3 | - |
| Reversals | -133 | - | -82 | - | -173 | - | -1 | - |
| Amortization, fair value changes, and other changes in measurement | - | -410 | - | -1 | - | -57 | - | - |
| Positive change in fair value of POCI assets | | | | | | | | 10 |
| Exchange differences and other changes | - | -270 | -7 | 46 | 2 | 24 | 9 | 1 |
| **Balance as at Jun. 30, 2020** | **268** | **382,142** | **382** | **10,126** | **1,961** | **4,181** | **4** | **49** |

The undiscounted expected credit losses on purchased or originated credit-impaired assets that were recognized for the first time during the reporting period totaled €69 million (first half of 2019: €77 million).

## Non-current assets and disposal groups classified as held for sale that were previously recognized as financial assets measured at amortized cost

| € million | Stage 1 Loss allowances | Stage 1 Gross carrying amount | Stage 2 Loss allowances | Stage 2 Gross carrying amount | Stage 3 Loss allowances | Stage 3 Gross carrying amount |
|---|---|---|---|---|---|---|
| Balance as at Jan. 1, 2019 | 5 | 5,853 | - | 105 | 13 | 40 |
| Addition/increase in loan drawdowns | - | 1,174 | - | - | - | - |
| Change to financial assets due to transfer between stages | -1 | -195 | 1 | 188 | - | 7 |
| Transfer from stage 1 | -1 | -210 | 1 | 210 | - | - |
| Transfer from stage 2 | - | 15 | - | -22 | - | 7 |
| Derecognitions and repayments | -1 | -2,923 | - | -15 | -7 | -3 |
| Changes to models/risk parameters | 3 | - | 4 | - | 1 | - |
| Additions | 4 | - | 4 | - | 3 | - |
| Reversals | -1 | - | - | - | -2 | - |
| Amortization, fair value changes, and other changes in measurement | - | 70 | - | 1 | - | - |
| Exchange differences and other changes | -1 | 85 | - | 8 | 2 | 2 |
| Changes in scope of consolidation | - | -168 | - | -3 | - | - |
| **Balance as at Jun. 30, 2019** | **5** | **3,896** | **5** | **284** | **9** | **46** |
| | | | | | | |
| Balance as at Jan. 1, 2020 | - | 194 | - | - | 3 | 7 |
| Addition/increase in loan drawdowns | - | 23 | - | - | - | - |
| Derecognitions and repayments | - | -215 | - | - | - | - |
| **Balance as at Jun. 30, 2020** | **-** | **2** | **-** | **-** | **3** | **7** |

## Finance leases

| € million | Stage 1 Loss allowances | Stage 1 Gross carrying amount | Stage 2 Loss allowances | Stage 2 Gross carrying amount | Stage 3 Loss allowances | Stage 3 Gross carrying amount |
|---|---|---|---|---|---|---|
| Balance as at Jan. 1, 2019 | 4 | 1,811 | 8 | 186 | 8 | 23 |
| Addition/increase in loan drawdowns | 1 | 158 | 7 | 2 | 4 | 1 |
| Change to finance leases due to transfer between stages | 4 | -28 | -2 | 16 | -2 | 12 |
| Transfer from stage 1 | - | -89 | - | 84 | - | 5 |
| Transfer from stage 2 | 3 | 56 | -4 | -72 | 1 | 16 |
| Transfer from stage 3 | 1 | 5 | 2 | 4 | -3 | -9 |
| Use of loss allowances/directly recognized impairment losses | - | - | -3 | - | - | - |
| Derecognitions and repayments | -4 | -343 | -4 | -31 | -4 | -16 |
| Exchange differences and other changes | - | - | - | - | 1 | - |
| **Balance as at Jun. 30, 2019** | **5** | **1,598** | **6** | **173** | **7** | **20** |
| | | | | | | |
| Balance as at Jan. 1, 2020 | 3 | 1,374 | 5 | 148 | 8 | 25 |
| Addition/increase in loan drawdowns | 1 | 91 | 7 | 3 | 8 | 1 |
| Change to finance leases due to transfer between stages | 1 | -168 | -3 | 124 | - | 44 |
| Transfer from stage 1 | -1 | -237 | 1 | 223 | - | 14 |
| Transfer from stage 2 | 2 | 67 | -5 | -103 | - | 36 |
| Transfer from stage 3 | - | 2 | 1 | 4 | - | -6 |
| Derecognitions and repayments | -3 | -258 | -3 | -42 | -4 | -18 |
| Changes to models/risk parameters | - | - | 1 | - | - | - |
| Additions | - | - | 1 | - | - | - |
| **Balance as at Jun. 30, 2020** | **2** | **1,039** | **7** | **233** | **12** | **52** |

## Financial guarantee contracts and loan commitments

| | Stage 1 | | Stage 2 | | Stage 3 | |
|---|---|---|---|---|---|---|
| € million | Loss allowances | Nominal amount | Loss allowances | Nominal amount | Loss allowances | Nominal amount |
| Balance as at Jan. 1, 2019 | 35 | 60,787 | 9 | 834 | 118 | 250 |
| Addition/increase in loan drawdowns | 57 | 28,480 | 2 | 334 | 3 | 66 |
| Change to financial guarantee contracts and loan commitments due to transfer between stages | 1 | -94 | -4 | 45 | 3 | 49 |
| Transfer from stage 1 | -1 | -356 | 1 | 344 | - | 12 |
| Transfer from stage 2 | 1 | 257 | -5 | -299 | 4 | 42 |
| Transfer from stage 3 | 1 | 5 | - | - | -1 | -5 |
| Derecognitions and repayments | -24 | -28,361 | -4 | -448 | -10 | -103 |
| Changes to models/risk parameters | -28 | - | 4 | - | 3 | - |
| Additions | 14 | - | 6 | - | 23 | - |
| Reversals | -42 | - | -2 | - | -20 | - |
| Amortization, fair value changes, and other changes in measurement | - | 12 | - | - | - | - |
| Exchange differences and other changes | 1 | 176 | - | 1 | - | 1 |
| **Balance as at Jun. 30, 2019** | **42** | **61,000** | **7** | **766** | **117** | **263** |
| Balance as at Jan. 1, 2020 | 45 | 64,937 | 10 | 575 | 140 | 282 |
| Addition/increase in loan drawdowns | 43 | 35,581 | 13 | 861 | 22 | 234 |
| Change to financial guarantee contracts and loan commitments due to transfer between stages | -1 | -408 | 1 | 381 | - | 27 |
| Transfer from stage 1 | -3 | -515 | 3 | 502 | - | 13 |
| Transfer from stage 2 | 2 | 105 | -2 | -123 | - | 18 |
| Transfer from stage 3 | - | 2 | - | 2 | - | -4 |
| Derecognitions and repayments | -32 | -29,144 | -10 | -739 | -30 | -268 |
| Changes to models/risk parameters | -1 | - | 8 | - | 16 | - |
| Additions | 22 | - | 17 | - | 39 | - |
| Reversals | -23 | - | -9 | - | -23 | - |
| Amortization, fair value changes, and other changes in measurement | - | -42 | - | - | - | - |
| Exchange differences and other changes | - | -204 | - | - | -2 | 1 |
| **Balance as at Jun. 30, 2020** | **54** | **70,720** | **22** | **1,078** | **146** | **276** |

## Liabilities included in disposal groups classified as held for sale that were previously recognized as financial guarantee contracts and loan commitments

| | Stage 1 | |
|---|---|---|
| € million | Loss allowances | Nominal amount |
| Balance as at Jan. 1, 2019 | - | 549 |
| Addition/increase in loan drawdowns | - | 63 |
| Derecognitions and repayments | - | -259 |
| Changes to models/risk parameters | 1 | - |
| Additions | 1 | - |
| Exchange differences and other changes | - | -133 |
| **Balance as at Jun. 30, 2019** | **1** | **220** |
| | | |
| Balance as at Jan. 1, 2020 | - | 75 |
| Derecognitions and repayments | - | -75 |
| **Balance as at Jun. 30, 2020** | **-** | **-** |

## >> 45 Exposures to countries particularly affected by the sovereign debt crisis

The table below shows the carrying amounts of the DZ BANK Group's exposures to bonds issued by governments and public authorities in countries particularly affected by the sovereign debt crisis, broken down into the categories applied to financial instruments under IFRS 9.

| | Jun. 30, 2020 | | Dec. 31, 2019 | |
|---|---|---|---|---|
| € million | Carrying amount | Fair value | Carrying amount | Fair value |
| **Portugal** | **820** | **836** | **814** | **831** |
| Financial assets measured at fair value through profit or loss | 418 | 418 | 423 | 423 |
| Financial assets measured at fair value through other comprehensive income | 352 | 352 | 342 | 342 |
| Financial assets measured at amortized cost | 50 | 66 | 49 | 66 |
| **Italy** | **4,779** | **4,859** | **4,973** | **5,058** |
| Financial assets measured at fair value through profit or loss | 1,890 | 1,890 | 1,915 | 1,915 |
| Financial assets measured at fair value through other comprehensive income | 2,369 | 2,369 | 2,538 | 2,538 |
| Financial assets measured at amortized cost | 520 | 600 | 520 | 605 |
| **Spain** | **2,140** | **2,188** | **2,123** | **2,170** |
| Financial assets measured at fair value through profit or loss | 1,264 | 1,264 | 1,253 | 1,253 |
| Financial assets measured at fair value through other comprehensive income | 636 | 636 | 630 | 630 |
| Financial assets measured at amortized cost | 240 | 288 | 240 | 287 |
| **Total** | **7,739** | **7,883** | **7,910** | **8,059** |

Bonds issued by countries particularly affected by the sovereign debt crisis and held as part of the insurance business are only recognized in the proportion attributable to the shareholders of the DZ BANK Group.

## Fair value hierarchy

The recurring fair value measurements as measured and recognized on the balance sheet are assigned to the levels of the fair value hierarchy as follows:

| € million | Level 1 Jun. 30, 2020 | Level 1 Dec. 31, 2019 | Level 2 Jun. 30, 2020 | Level 2 Dec. 31, 2019 | Level 3 Jun. 30, 2020 | Level 3 Dec. 31, 2019 |
|---|---|---|---|---|---|---|
| **Portugal** | **768** | 765 | **2** | - | **-** | - |
| Financial assets measured at fair value through profit or loss | 416 | 423 | 2 | - | - | - |
| Financial assets measured at fair value through other comprehensive income | 352 | 342 | - | - | - | - |
| **Italy** | **4,173** | 4,382 | **56** | 41 | **30** | 30 |
| Financial assets measured at fair value through profit or loss | 1,854 | 1,897 | 36 | 18 | - | - |
| Financial assets measured at fair value through other comprehensive income | 2,319 | 2,485 | 20 | 23 | 30 | 30 |
| **Spain** | **1,602** | 1,659 | **167** | 158 | **131** | 66 |
| Financial assets measured at fair value through profit or loss | 966 | 1,029 | 167 | 158 | 131 | 66 |
| Financial assets measured at fair value through other comprehensive income | 636 | 630 | - | - | - | - |
| **Total** | **6,543** | 6,806 | **225** | 199 | **161** | 96 |

## Maturity analysis

AS AT JUNE 30, 2020

| € million | ≤ 1 month | > 1 month – 3 months | > 3 months – 1 year | > 1 year – 5 years | > 5 years |
|---|---|---|---|---|---|
| Portugal | - | - | 25 | 104 | 777 |
| Italy | 6 | 141 | 290 | 1,360 | 3,850 |
| Spain | 10 | 2 | 98 | 518 | 1,871 |
| **Total** | **16** | **143** | **413** | **1,982** | **6,498** |

AS AT DECEMBER 31, 2019

| € million | ≤ 1 month | > 1 month – 3 months | > 3 months – 1 year | > 1 year – 5 years | > 5 years |
|---|---|---|---|---|---|
| Portugal | - | - | 25 | 102 | 783 |
| Italy | 7 | 95 | 237 | 1,521 | 4,091 |
| Spain | 4 | 9 | 64 | 555 | 1,876 |
| **Total** | **11** | **104** | **326** | **2,178** | **6,750** |

The maturity analysis shows the contractually agreed cash inflows.

# E Other disclosures

## >> 46 Contingent liabilities

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| Contingent liabilities arising from contributions to the resolution fund for CRR credit institutions | 88 | 37 |
| Contingent liabilities in respect of litigation risk | 12 | 9 |
| **Total** | **100** | **46** |

The contingent liabilities arising from contributions to the resolution fund for CRR credit institutions consist of irrevocable payment commitments that were made after the applications to furnish collateral in partial settlement of the contribution to the European bank levy were approved by the Single Resolution Board (SRB).

The contingent liabilities in respect of litigation risk comprise a small number of court proceedings relating to different cases. Where provisions have been recognized for particular claims, no contingent liabilities are recognized.

## >> 47 Financial guarantee contracts and loan commitments

| € million | Jun. 30, 2020 | Dec. 31, 2019 |
|---|---|---|
| **Financial guarantee contracts** | **8,162** | **7,842** |
| Loan guarantees | 4,397 | 4,187 |
| Letters of credit | 670 | 562 |
| Other guarantees and warranties | 3,095 | 3,093 |
| **Loan commitments** | **63,912** | **57,952** |
| Credit facilities to banks | 21,737 | 17,163 |
| Credit facilities to customers | 18,115 | 18,690 |
| Guarantee credits | 696 | 464 |
| Letters of credit | 1 | 1 |
| Global limits | 23,363 | 21,634 |
| **Total** | **72,074** | **65,794** |

The amounts shown for financial guarantee contracts and loan commitments are the nominal values of the commitment in each case.

## >> 48 Trust activities

Trust assets and trust liabilities amounted to €1,589 million as at June 30, 2020 (December 31, 2019: €761 million).

# >> 49 Disclosures on revenue from contracts with customers

## Disclosures on revenue from contracts with customers, broken down by operating segment

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2020

| € million | BSH | R+V | TeamBank | |
|---|---|---|---|---|
| **Income type** | | | | |
| Fee and commission income from securities business | - | - | - | |
| Fee and commission income from asset management | - | - | - | |
| Fee and commission income from payments processing including card processing | - | - | - | |
| Fee and commission income from lending business and trust activities | - | - | 2 | |
| Fee and commission income from financial guarantee contracts and loan commitments | - | - | - | |
| Fee and commission income from international business | - | - | - | |
| Fee and commission income from building society operations | 19 | - | - | |
| Other fee and commission income | 31 | - | 61 | |
| Fee and commission income in gains and losses on investments held by insurance companies and other insurance company gains and losses | - | 20 | - | |
| Other income in gains and losses on investments held by insurance companies and other insurance company gains and losses | - | 33 | - | |
| Other operating income | - | - | 6 | |
| **Total** | **50** | **53** | **69** | |
| **Main geographical markets** | | | | |
| Germany | 45 | 53 | 69 | |
| Rest of Europe | 5 | - | - | |
| Rest of World | - | - | - | |
| **Total** | **50** | **53** | **69** | |
| **Type of revenue recognition** | | | | |
| At a point in time | 50 | 2 | 69 | |
| Over a period of time | - | 51 | - | |
| **Total** | **50** | **53** | **69** | |

| | UMH | DZ BANK – CICB | DZ HYP | DZ PRIVAT-BANK | VR Smart Finanz | DVB | Other/ Consolidation | Total |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | 1,377 | 224 | - | 102 | - | - | -36 | 1,667 |
| | 6 | - | - | 122 | - | - | -2 | 126 |
| | - | 119 | - | 1 | - | - | 33 | 153 |
| | - | 35 | 3 | - | - | 14 | - | 54 |
| | - | 27 | 4 | - | - | 1 | - | 32 |
| | - | 6 | - | - | - | - | - | 6 |
| | - | - | - | - | - | - | - | 19 |
| | - | 28 | - | 1 | 9 | 2 | -58 | 74 |
| | - | - | - | - | - | - | - | 20 |
| | - | - | - | - | - | - | - | 33 |
| | 4 | - | - | - | - | - | 16 | 26 |
| | **1,387** | **439** | **7** | **226** | **9** | **17** | **-47** | **2,210** |
| | | | | | | | | |
| | 1,073 | 439 | 7 | 75 | 9 | 2 | -51 | 1,721 |
| | 314 | - | - | 150 | - | 13 | 4 | 486 |
| | - | - | - | 1 | - | 2 | - | 3 |
| | **1,387** | **439** | **7** | **226** | **9** | **17** | **-47** | **2,210** |
| | | | | | | | | |
| | 245 | 158 | 5 | 98 | 9 | 2 | -77 | 561 |
| | 1,142 | 281 | 2 | 128 | - | 15 | 30 | 1,649 |
| | **1,387** | **439** | **7** | **226** | **9** | **17** | **-47** | **2,210** |

## INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2019

| € million | BSH | R+V | TeamBank | |
|---|---|---|---|---|
| **Income type** | | | | |
| Fee and commission income from securities business | - | - | - | |
| Fee and commission income from asset management | - | - | - | |
| Fee and commission income from payments processing including card processing | - | - | - | |
| Fee and commission income from lending business and trust activities | - | - | 2 | |
| Fee and commission income from financial guarantee contracts and loan commitments | - | - | - | |
| Fee and commission income from international business | - | - | - | |
| Fee and commission income from building society operations | 17 | - | - | |
| Other fee and commission income | 30 | - | 77 | |
| Fee and commission income in gains and losses on investments held by insurance companies and other insurance company gains and losses | - | 31 | - | |
| Other income in gains and losses on investments held by insurance companies and other insurance company gains and losses | - | 38 | - | |
| Other operating income | - | - | 6 | |
| **Total** | **47** | **69** | **85** | |
| **Main geographical markets** | | | | |
| Germany | 42 | 69 | 85 | |
| Rest of Europe | 5 | - | - | |
| Rest of World | - | - | - | |
| **Total** | **47** | **69** | **85** | |
| **Type of revenue recognition** | | | | |
| At a point in time | 47 | 17 | 85 | |
| Over a period of time | - | 52 | - | |
| **Total** | **47** | **69** | **85** | |

| | UMH | DZ BANK – CICB | DZ HYP | DZ PRIVAT-BANK | VR Smart Finanz | DVB | Other/ Consolidation | Total |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | 1,265 | 183 | - | 80 | - | - | -31 | 1,497 |
| | 8 | - | - | 112 | - | - | -8 | 112 |
| | - | 111 | - | - | - | 1 | 34 | 146 |
| | - | 30 | 2 | - | - | 24 | 12 | 70 |
| | - | 26 | 3 | - | - | 1 | -1 | 29 |
| | - | 5 | - | - | - | - | - | 5 |
| | - | - | - | - | - | - | - | 17 |
| | - | 30 | 1 | 10 | 17 | 4 | -65 | 104 |
| | - | - | - | - | - | - | - | 31 |
| | - | - | - | - | - | - | - | 38 |
| | 2 | - | - | - | - | - | 5 | 13 |
| | **1,275** | **385** | **6** | **202** | **17** | **30** | **-54** | **2,062** |
| | | | | | | | | |
| | 990 | 385 | 6 | 42 | 17 | 4 | -39 | 1,601 |
| | 285 | - | - | 159 | - | 18 | -15 | 452 |
| | - | - | - | 1 | - | 8 | - | 9 |
| | **1,275** | **385** | **6** | **202** | **17** | **30** | **-54** | **2,062** |
| | | | | | | | | |
| | 211 | 139 | 4 | 85 | 17 | 6 | -63 | 548 |
| | 1,064 | 246 | 2 | 117 | - | 24 | 9 | 1,514 |
| | **1,275** | **385** | **6** | **202** | **17** | **30** | **-54** | **2,062** |

## >> 50 Employees

Average number of employees by employee group:

| | Jan. 1 – Jun. 30, 2020 | Jan. 1 – Jun. 30, 2019 |
|---|---|---|
| **Female employees** | **14,168** | **14,045** |
| Full-time employees | 8,592 | 8,600 |
| Part-time employees | 5,576 | 5,445 |
| **Male employees** | **16,994** | **16,801** |
| Full-time employees | 15,813 | 15,713 |
| Part-time employees | 1,181 | 1,088 |
| **Total** | **31,162** | **30,846** |

## >> 51 Events after the balance sheet date

The transaction involving the remaining part of the aviation finance business – assets of €15 million and liabilities of €1 million – cannot be completed, as had originally been intended, because of regulatory restrictions on the buyer's business activities. Alternative options for disposing of the business units are being examined. A solution for the disposal of the remaining part of the aviation finance business is expected to be found by the end of 2020.

## >> 52 Board of Managing Directors

**Uwe Fröhlich**
(Co-Chief Executive Officer)
Responsibilities: Cooperative Banks/Verbund; Communications & Marketing; Research and Economics; Strategy & Group Development; Structured Finance

**Dr. Cornelius Riese**
(Co-Chief Executive Officer)
Responsibilities: Group Audit; Legal; Strategy & Group Development

**Uwe Berghaus**
Responsibilities: Corporate Banking Baden-Württemberg; Corporate Banking Bavaria; Corporate Banking North and East; Corporate Banking West/Central; Investment Promotion; Central Corporate Banking

**Dr. Christian Brauckmann**
Responsibilities: IT; Services & Organisation

**Ulrike Brouzi**
Responsibilities: Bank Finance; Compliance; Group Finance; Group Financial Services

**Wolfgang Köhler**
Responsibilities: Capital Markets Trading; Capital Markets Institutional Clients; Capital Markets Retail Clients; Group Treasury

**Michael Speth**
Responsibilities: Group Risk Controlling; Credit; Credit Services

**Thomas Ullrich**
Responsibilities: Group Human Resources; Operations; Payments & Accounts; Transaction Management

## >> 53 Supervisory Board

**Henning Deneke-Jöhrens**
(Chairman of the Supervisory Board)
Chief Executive Officer
Volksbank eG Hildesheim-Lehrte-Pattensen

**Ulrich Birkenstock**
(Deputy Chairman of the Supervisory Board)
Employee
R+V Allgemeine Versicherung AG

**Martin Eul**
(Deputy Chairman of the Supervisory Board)
Chief Executive Officer
Dortmunder Volksbank eG

**Heiner Beckmann**
Senior manager
R+V Allgemeine Versicherung AG

**Hermann Buerstedde**
Employee
Union Asset Management Holding AG
(until May 27, 2020)

**Uwe Goldstein**
Bank director (ret.)
(until May 27, 2020)

**Timm Häberle**
Chief Executive Officer
VR-Bank Neckar-Enz eG

**Dr. Peter Hanker**
Spokesman of the Board of Managing Directors
Volksbank Mittelhessen eG

**Andrea Hartmann**
Employee
Bausparkasse Schwäbisch Hall AG

**Pilar Herrero Lerma**
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

**Dr. Dierk Hirschel**
Head of the Economic Policy Division
ver.di Bundesverwaltung

**Marija Kolak**
President
Bundesverband der Deutschen Volksbanken
und Raiffeisenbanken e.V. (BVR)

**Renate Mack**
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

**Rainer Mangels**
Employee
R+V Rechtsschutz-
Schadenregulierungs-GmbH

**Rolf Dieter Pogacar**
Employee
R+V Allgemeine Versicherung AG
(since May 27, 2020)

**Gregor Scheller**
Chief Executive Officer
VR Bank Bamberg-Forchheim eG

**Sigrid Stenzel**
Regional Group Director
ver.di Bayern

**Dr. Wolfgang Thomasberger**
Chief Executive Officer
VR Bank Rhein-Neckar eG

**Sascha Monschauer**
Chief Executive Officer
Volksbank RheinAhrEifel eG
(since May 27, 2020)

**Stephan Schack**
Chief Executive Officer
Volksbank Raiffeisenbank eG, Itzehoe

**Uwe Spitzbarth**
Departmental coordinator
ver.di Bundesverwaltung

**Ingo Stockhausen**
Chief Executive Officer
Volksbank Oberberg eG

# Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the group in accordance with German principles of proper accounting, and the interim group management report includes a fair review of the development and performance of the business and the position of the group, together with a description of the material opportunities and risks associated with the expected development of the group.

Frankfurt am Main, August 18, 2020

DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

The Board of Managing Directors

| | | | |
|---|---|---|---|
| Fröhlich | Dr. Riese | Berghaus | Dr. Brauckmann |
| Brouzi | Köhler | Speth | Ullrich |

# Review report (translation)

To DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main

We have reviewed the interim condensed consolidated financial statements, comprising the condensed income statement, the statement of comprehensive income, the balance sheet, the statement of changes in equity, the condensed statement of cash flows, and selected explanatory notes, and the interim group management report of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, for the period from January 1 to June 30, 2020, which are part of the six-monthly financial report pursuant to Sec. 115 WpHG ["Wertpapierhandelsgesetz": German Securities Trading Act]. The preparation of the interim condensed consolidated financial statements in accordance with IFRSs on interim financial reporting as adopted by the EU and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports is the responsibility of the Company's management. Our responsibility is to issue a report on the interim condensed consolidated financial statements and the interim group management report based on our review.

We conducted our review of the interim condensed consolidated financial statements and the interim group management report in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the review to obtain a certain level of assurance in our critical appraisal to preclude that the interim condensed consolidated financial statements are not prepared, in all material respects, in accordance with IFRSs on interim financial reporting as adopted by the EU and that the interim group management report is not prepared, in all material respects, in accordance with the provisions of the WpHG applicable to interim group management reports. A review is limited primarily to making inquiries of company personnel and applying analytical procedures and thus does not provide the assurance that we would obtain from an audit of financial statements. In accordance with our engagement, we have not performed an audit and, accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the interim condensed consolidated financial statements are not prepared, in all material respects, in accordance with IFRSs on interim financial reporting as adopted by the EU or that the interim group management report is not prepared, in all material respects, in accordance with the provisions of the WpHG applicable to interim group management reports.

Eschborn/Frankfurt am Main, August 18, 2020

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

| | |
|---|---|
| Eckl | Mai |
| Wirtschaftsprüferin | Wirtschaftsprüfer |
| (German Public Auditor) | (German Public Auditor) |

## Editorial information

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This half-year financial report is available in electronic form on our website at www.halfyearreport.dzbank.com.

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