Volksbanken Raiffeisenbanken
cooperative financial network

2021
Half-Year Financial Report

DZ BANK Group

Key figures

DZ BANK GROUP

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
FINANCIAL PERFORMANCE		
Income[1]	3,860	3,095
Loss allowances	114	-522
Profit before taxes	1,832	557
Net profit	1,308	372
Cost/income ratio (percent)	55.5	65.1

	Jun. 30, 2021	Dec. 31, 2020
FINANCIAL POSITION		
Assets		
Loans and advances to banks	102,419	103,020
Loans and advances to customers	191,583	190,294
Financial assets held for trading	52,776	42,846
Investments	57,934	60,232
Investments held by insurance companies	127,239	121,668
Remaining assets	105,919	76,513
Equity and liabilities		
Deposits from banks	197,586	177,852
Deposits from customers	143,090	133,925
Debt certificates issued including bonds	76,110	70,500
Financial liabilities held for trading	55,758	50,404
Insurance liabilities	116,662	111,213
Remaining liabilities	20,161	21,520
Equity	28,503	29,159
Total assets/total equity and liabilities	**637,870**	**594,573**
Volume of business	**1,147,971**	**1,059,874**

	Jun. 30, 2021	Dec. 31, 2020
RISK POSITION		
LIQUIDITY ADEQUACY		
DZ BANK Group		
Economic liquidity adequacy (€ billion)	17.8	15.3
DZ BANK banking group		
Liquidity coverage ratio – LCR (percent)	157.2	146.3
Net stable funding ratio – NSFR (percent)	124.9	122.4
CAPITAL ADEQUACY		
DZ BANK Group		
Economic capital adequacy (percent) [2]	185.6	171.7
DZ BANK financial conglomerate		
Coverage ratio (percent)[2]	140.4	146.0
DZ BANK banking group		
Common equity Tier 1 capital ratio (percent)	15.4	15.3
Tier 1 capital ratio (percent)[2]	16.8	17.0
Total capital ratio (percent)[2]	18.7	19.5
Leverage ratio (percent)[2]	7.2	5.7
MREL ratio (percent)[3]	11.0	11.9
AVERAGE NUMBER OF EMPLOYEES DURING THE PERIOD	**32,220**	**31,162**
LONG-TERM RATING		
Standard & Poor's	A+	AA-
Moody's Investors Service	Aa1	Aa1
Fitch Ratings	AA-	AA-

1 Total of 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.
2 Values based on the CRR I transitional guidance.
3 The value as at June 30, 2021 was not yet available at the time that the interim group management report was prepared by the Board of Managing Directors. The value measured as at March 31, 2021 is therefore shown.

Contents

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

Dear Shareholders,

The DZ BANK Group's business performance was very encouraging in the first half of 2021. At €1.83 billion, profit before taxes was more than three times higher than in the first half of 2020, far exceeding the figure that we had expected at the start of this year. This exceptional result, which we achieved despite the ongoing challenges, highlights the strength of our banking group. Nearly all of the entities in the DZ BANK Group delivered a healthy business performance and generated further growth.

This result was underpinned by robust economic growth and the uptrend in the capital markets. Following an uncertain start to 2021, the German economy was able to stage a marked recovery as coronavirus case numbers fell steadily and vaccination programs gathered pace. The anticipated wave of insolvencies has not materialized so far, despite the suspension of the obligation to file for insolvency having now expired. Furthermore, business sentiment is improving noticeably. Alongside the economic recovery, the capital markets were buoyed by optimism and new record highs. Because it is an institutional investor, the DZ BANK Group is highly dependent on changes in the markets and is thus prone to earnings volatility.

The determining factors for our financial results for the first half of the year were a very good operating performance, an unremarkable risk situation, and upbeat sentiment in the capital markets. Union Investment's very strong contribution to profits reflects both sustained volume growth and a rise in performance-related income components. R+V Versicherung's business performance was heavily impacted by the pandemic in the prior-year period. Profit before taxes increased sharply in the reporting period. The DZ BANK Group's banking business also fared very well: DZ HYP and TeamBank both reported a healthy profit before taxes thanks to their strong operating performance and an unremarkable level of loss allowances. The same was true of the central institution and corporate bank, whose capital markets business flourished on the back of the economic recovery. Gains and losses on trading activities deteriorated year on year owing to IFRS-related valuation effects in connection with own issues. In corporate banking, the central institution and corporate bank was able to maintain its strong position. Good progress is being made with the scaling back of DVB Bank, which saw a further substantial reduction of the portfolio, the successful completion of the two remaining disposals, and reversals of loss allowances.

The key results in detail:

The DZ BANK Group's **net interest income** amounted to €1.42 billion, which was lower than the figure for the first half of 2020 of €1.51 billion. The net interest income of the central institution and corporate bank increased, whereas interest income fell sharply at Bausparkasse Schwäbisch Hall and at DVB Bank owing to the reduction of the portfolio. **Net fee and commission income** swelled to €1.60 billion (first half of 2020: €1.05 billion) thanks to very strong growth at Union Investment. The central institution and corporate bank also contributed to this increase. In its bond issuance business, the central institution and corporate bank recorded a significant year-on-year increase. However, **gains and losses on trading activities** deteriorated to €0 million (first half of 2020: net gain of €539 million) as a result of IFRS-related valuation effects in connection with own issues in the period under review. **Gains and losses on investments** improved to a net gain of €37 million (first half of 2020: net loss of €15 million). This was due to the absence of negative non-recurring items that had adversely affected the prior-year figure. **Other gains and losses on valuation of financial instruments** improved to a net gain of €203 million (first half of 2020: net loss of €247 million), primarily because of positive valuation effects at DVB Bank and in DZ HYP's government bond portfolio and because of positive changes in the valuation of guarantee commitments at Union Investment. **Net income from insurance business**, which had been severely affected by unfavorable equity market and spread movements triggered by the COVID-19 pandemic in the prior-year period, rose sharply again to reach €522 million on the back of a healthy operating performance and the recovery of the capital markets (first half of 2020: €124 million). **Loss allowances** amounted to a net reversal of €114 million (first half of 2020: net addition of €522 million) in view of the improved economic outlook, particularly at the central institution and corporate bank and at DVB Bank. **Administrative expenses** increased slightly to stand at €2.14 billion due to a higher bank levy and contributions to the BVR protection scheme (first half of 2020: €2.02 billion). In addition, the ZBI Group was consolidated within Union Investment for the first time.

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

The DZ BANK Group's capital adequacy continued to strengthen, partly due to proactive management of risk-weighted assets. At 15.4 percent as at June 30, 2021 (December 31, 2020: 15.3 percent), the group's common equity Tier 1 capital ratio remained well above the market average. The leverage ratio stood at 7.2 percent. Moreover, DZ BANK AG's healthy capital and liquidity position enabled it to routinely terminate and repay all outstanding Tier 1 issues in a total amount of €1.4 billion in the first half of 2021.

We welcome the European Central Bank's decision to lift all of the restrictions on dividends at the end of the third quarter of 2021. These restrictions have been in place since the start of the pandemic. As planned, we will distribute an additional dividend to our shareholders following the Extraordinary General Meeting scheduled for the fourth quarter. In this year's EU-wide stress test conducted by the European Banking Authority (EBA), the DZ BANK Group again demonstrated the strength of its capital base and the robustness of its business model. It achieved an above-average result compared with the other major German banks.

Our economists predict growth of 2.7 percent for the German economy in 2021. However, a setback in the economic recovery cannot be ruled out given the spread of new variants of the virus and the consequences of the flooding that affected some parts of Germany. We will therefore keep a very close eye on possible risks in the second half of the year. Despite these uncertainties, we are confident of being able to generate further growth in the remaining months of 2021. However, our financial performance is likely to lose significant momentum in the second half of the year.

Looking to the future, we want to continue to raise our profile as a robust and effective financial services provider and expand our market share in all areas of business. We passed significant milestones in recent months. In Capital Markets business, for example, DZ BANK participated three times in the European Union’s SURE bonds and was one of the five lead underwriters for the placement of the first EU bond in the context of the Next Generation Europe recovery fund. The volume of supranational, government, and quasi-government bond issues that we supported was up by 150 percent in the first half of 2021, helping us toward our goal of always being a first port of call for major investment briefs. In Corporate Banking, the crisis has powerfully highlighted the enduring strength of our customer relationships. The volume of lending to corporate customers held steady despite fierce competition. Income from cross-selling rose by 5 percent compared with the prior-year period. We continue to be a sought-after funding partner for investment in the transformation of the economy. In Transaction Banking too, we are systematically evolving. Payments processing should remain a major source of income for the cooperative banks. We are following developments in digitalization and internationalization of the business as a matter of high strategic priority and are playing an active role in German and international initiatives.

From a strategic perspective, we are taking decisive action at three levels. Each entity in the DZ BANK Group follows its own market-oriented, ambitious strategy. At the same time, we are working systematically to unlock cross-organizational potential for greater efficiency – such as in purchasing – and seize growth opportunities. We are also heavily involved in the strategic development of the cooperative financial network in the context of the digitalization initiative and strategic agenda. Investment is currently focused on digitalizing the customer interface, expanding the platform business, and modernizing the IT and process architecture. We are also driving the development of solutions and innovations both in payments processing and those based on blockchain technologies.

In addition to the continued digitalization of products and processes, sustainability will be a dominant theme in the financial institutions’ core business in the years ahead. The DZ BANK Group believes that it can rise to this challenge. We have systematically refined our ESG profile in recent months. As well as enshrining sustainability aspects in our strategic planning processes, we are primarily focusing on setting out clear criteria, metrics, and targets for our business portfolios. The analytical framework that we have developed for this purpose equips us to work closely with our customers to support their transformation. Despite the urgency, a sustained successful transformation requires us to bring all economic players on board. This will also open up considerable market opportunities for the cooperative financial network which we want to exploit together.

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 2020 Annual Report. Those disclosures are also applicable to the first half of 2021 unless otherwise indicated.

1.1 DVB

DVB Bank SE, Frankfurt am Main, (DVB Bank; subgroup abbreviated to DVB) is a specialist niche provider in the area of international transport finance, focusing on shipping finance. Since the start of the restructuring of DVB initiated in 2017, strategic options for DVB's lines of business have been examined and evaluated. On this basis, DVB has undertaken a number of strategic initiatives, resulting in the sale of core business areas. This has enabled DVB to make progress with implementing its amortisation plan over the past few years, i.e. reducing the volume of the portfolio, simplifying the organizational structure, and lowering the cost base.

A review of whether to integrate DVB's remaining activities into DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK) led to the decision, published on April 1, 2021, that DVB will be merged with DZ BANK in 2022. A detailed integration plan and migration concept are currently being drawn up for the upcoming integration of DVB into DZ BANK.

2 Management of the DZ BANK Group

The management of the DZ BANK Group is described in detail on page 18 onward of the 2020 Annual Report. Those disclosures are also applicable to the first half of 2021.

II Business report

1 Economic conditions

The crisis resulting from the COVID-19 pandemic and its after-effects continued to dominate the environment in the first half of 2021. In the first quarter of the year, the restrictions on economic activity imposed because of the third wave of the pandemic caused economic output in Germany to fall by 2.1 percent compared with the previous quarter. The restrictions were gradually lifted in the second quarter, which enabled GDP to recover by 1.5 percent quarter on quarter. Adjusted for inflation, average overall economic output in the first half of this year therefore decreased by 1.0 percent compared with the second half of 2020. In the first half of 2020, it had slumped by 6.7 percent compared with the second half of 2019.

German economic output in the first quarter of 2021 was down by 1.5 percent compared with the preceding quarter.

The closure of shops and hospitality venues because of the COVID-19 pandemic restricted economic activity in the first quarter of 2021 and to an extent also in the second quarter. This put a dampener on consumer spending. The market in the industrial sector, however, had already begun to recover during the course of 2020, with international demand in manufacturing exceeding even pre-crisis levels in the first half of 2021.

The economy of the eurozone was also still weak overall in the first six months of 2021. Following a 5.3 percent year-on-year rise in gross domestic product (GDP) in the second half of 2020, the eurozone's economic output shrank by 0.4 percent in the period under review. GDP decreased by 0.3 percent in the first quarter of 2021. In the second quarter, it rose by 2.0 percent compared with the previous quarter.

In the reporting period, the economy in the United States recovered much more quickly from the effects of the pandemic than its European counterpart. Highly expansionary fiscal policy in the form of several very extensive expenditure programs boosted consumer spending in particular. As a result, US economic output was already back to its pre-crisis level by the middle of 2021.

China was affected by the pandemic earlier than Europe and the United States. But its economy began to recover much earlier too and in the first half of 2021 was characterized by strong growth. In many other emerging markets, however, the economic problems caused by the pandemic and efforts to contain it dominated conditions during the reporting period. Brazil and India, for example, were particularly hard hit by the emergence of new variants of coronavirus.

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

The capital markets continued to stage a recovery in the first half of 2021. Conversely, the main focus in the first half of 2020 had been on dealing with the economic impact of the action taken to contain the spread of the COVID-19 pandemic and with the recession that resulted from this action. The pandemic emergency purchase program (PEPP) – the biggest bond-buying program undertaken by the European Central Bank (ECB) since the creation of the euro area – helped to avert a collapse in the market for periphery government bonds like the one that had occurred after the financial crisis of 2008.
The STOXX Europe 600, a share index comprising 600 large, listed European companies, stood at 452.84 points as at June 30, 2021, which was 53.81 points higher than its level at the end of the prior year (December 31, 2020: 399.03 points). In the equivalent period of 2020, the index had declined by 55.50 points.

Some EU countries still exceeded the ratios for new and overall indebtedness required for 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 2021, the total borrowing of the 19 eurozone countries equated to 100.5 percent of their GDP, an increase of 14.4 percentage points compared with the figure of 86.1 percent as at March 31, 2020.

Greece's public debt as a percentage of GDP was 209.3 percent in the first quarter of 2021 (first quarter of 2020: 180.7 percent). In April 2021, the rating agency S&P upgraded Greece's rating by one notch to BB and change its outlook to positive. The rating agency's decision was tied to the expectation that both the Greek economy and its public finances will recover quickly from the COVID-19 pandemic. The structural reforms of the government in Athens were one reason given for this expectation, and S&P also highlighted how Greece is benefiting from the money that it receives from the EU recovery fund. In addition, the ECB's PEPP is ensuring favorable financing conditions.

Italy's public debt as a percentage of GDP stood at 160.0 percent in the first quarter of 2021 (first quarter of 2020: 137.8 percent), which is the highest in the eurozone after that of Greece. Italy too has benefited from the favorable financing conditions maintained by the ECB's PEPP bond-buying program.

Portugal's public debt as a percentage of GDP was 137.2 percent in the first quarter of 2021, compared with 119.2 percent in the first quarter of 2020.

In Spain, public debt as a percentage of GDP stood at 125.2 percent in the first quarter of 2021 (first quarter of 2020: 99.1 percent).

Based on a policy of quantitative easing, the ECB has continued to support the markets for government bonds, thereby creating the necessary time over the last few years for the European Monetary Union (EMU) countries burdened with excessive debt to reduce their budget deficits. In the reporting period, the ECB's monetary policy was still predominantly focused on mitigating the negative impact of the protective measures introduced to contain the spread of the COVID-19 pandemic on EU member state public finances and on financial markets. Nonetheless, even in the years prior to the COVID-19 pandemic, the countries specified above had not made sufficient efforts to reduce their high levels of indebtedness, which are above the Maastricht limit of 60 percent. The ECB made additional liquidity available under the TLTRO III program in order to support lending to households and companies during the COVID-19 pandemic.

The ECB's policy of zero and negative interest rates prevailing in the first half of 2020 was maintained in the reporting period. At its meeting on June 10, 2021, 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 ECB Governing Council again 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 a level sufficiently close to, but still below, 2.00 percent. The Council also decided that it would continue to conduct net asset purchases under the PEPP with a total envelope of €1,850.0 billion until at least the end of March 2022 and, in any case, until it judges that the COVID-19 crisis phase is over. The net purchases under the asset purchase program (APP) were sustained in the reporting period with a monthly volume of €20.0 billion. The ECB Governing Council still expects monthly net asset purchases under the APP to be made for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it starts raising the key ECB interest rates.

On June 16, 2021, the US Federal Reserve (Fed) announced that the federal funds rate would remain unchanged in the range of 0.00 to 0.25 percent. It also let it be known that it would be maintaining its bond-buying program with a monthly volume of US$ 120.0 billion. However, the Fed did make the continuation of these purchases contingent on the economic data.

3 Financial performance

3.1 Financial performance at a glance

Despite the persistently challenging market conditions resulting from the effects of the COVID-19 pandemic and the extremely low level of interest rates, the DZ BANK Group was able to report a profit before taxes of €1,832 million in the first half of 2021 that was significantly higher than in the prior-year period (first half of 2020: €557 million).

The year-on-year changes in the key figures that made up the net profit generated by the DZ BANK Group in the reporting period were as described below.

FIG. 1 – INCOME STATEMENT

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Net interest income	1,423	1,505
of which net income from long-term equity investments[1]	30	62
Net fee and commission income	1,596	1,052
Gains and losses on trading activities	-	539
Gains and losses on investments	37	-15
Other gains and losses on valuation of financial instruments	203	-247
Gains and losses from the derecognition of financial assets measured at amortized cost	6	7
Net income from insurance business	522	124
Loss allowances	114	-522
Administrative expenses	-2,142	-2,016
Staff expenses	-966	-924
Other administrative expenses[2]	-1,177	-1,092
Other net operating income	73	130
Profit before taxes	1,832	557
Income taxes	-524	-185
Net profit	**1,308**	**372**

1 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).
2 General and administrative expenses plus depreciation/amortization expense.

Operating income in the DZ BANK Group amounted to €3,860 million (first half of 2020: €3,095 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 fell by €82 million year on year to €1,423 million (first half of 2020: €1,505 million).

Net interest income at DZ BANK – CICB went up by €87 million in the reporting period. Conversely, net interest income went down by €16 million at DZ PRIVATBANK, by €32 million at DVB, and by €39 million at BSH. The specific reasons for the year-on-year change in net interest income were the factors described in the details for these operating segments.

Net income from long-term equity investments in the DZ BANK Group amounted to €30 million (first half of 2020: €62 million). The change compared with the prior-year period was mainly due to the increase in the level of profit reported by Deutsche WertpapierService Bank AG, Frankfurt am Main, for the first half of 2020. In accordance with the equity method, this profit is recognized under net income from long-term equity investments in an amount proportional to the investment.

Net fee and commission income in the DZ BANK Group increased by €544 million to €1,596 million (first half of 2020: €1,052 million).

Net fee and commission income advanced by €496 million at UMH, by €28 million at DZ BANK – CICB, by €14 million at TeamBank, and by €10 million at DZ PRIVATBANK. The specific reasons for the year-on-year change in net fee and commission income were the factors described in the details for these operating segments.

The DZ BANK Group's **gains and losses on trading activities** in the first half of 2021 came to €0 million compared with a net gain of €539 million for the prior-year period. This was largely attributable to the gains and losses on trading activities at DZ BANK – CICB, amounting to a net loss of €8 million (first half of 2020: net gain of €521 million).

Gains and losses on investments improved by €52 million to a net gain of €37 million (first half of 2020: net loss of €15 million). BSH and DZ BANK – CICB contributed to this result with net gains of €33 million and €22 million respectively. The specific reasons for the year-on-year change in gains and losses on investments were the factors described in the details for these operating segments.

Other gains and losses on valuation of financial instruments in the DZ BANK Group amounted to a net gain of €203 million in the reporting period (first half of 2020: net loss of €247 million).

Other gains and losses on valuation of financial instruments rose by €196 million at DZ HYP, primarily due to a narrowing of credit spreads on bonds from eurozone periphery countries, by €155 million at UMH, mainly because of a positive change in the valuation of guarantee commitments, by €92 million at DVB, and by €24 million in the DZ BANK – CICB operating segment. The specific reasons for the year-on-year change in other gains and losses on valuation of financial instruments were the factors described in the details for these operating segments.

Gains and losses from the derecognition of financial assets measured at amortized cost amounted to a net gain of €6 million in the reporting period (first half of 2020: net gain of €7 million).

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 2021, this figure improved by €398 million to €522 million (first half of 2020: €124 million).

This year-on-year increase 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 reversal of €114 million (first half of 2020: net addition of €522 million). Compared with the prior-year period, loss allowances were lower by €334 million at DZ BANK – CICB, by €228 million at DVB, by €49 million at TeamBank, and by €21 million at VR Smart Finanz. The specific reasons for the year-on-year change in loss allowances were the factors described in the details for the individual operating segments.

Disclosures on the nature and extent of risks arising from financial instruments and insurance contracts can be found in note 46 in the notes to the interim consolidated financial statements.

Administrative expenses in the DZ BANK Group increased by €126 million to €2,142 million (first half of 2020: €2,016 million). The rise in administrative expenses, excluding the total of €111 million attributable to the higher bank levy, to the contributions to the BVR protection scheme, and to the first-time consolidation of ZBI Partnerschafts-Holding GmbH within UMH, amounted to €15 million or 0.7 percent. Staff expenses rose to €966 million compared with €924 million reported for the first half of 2020. Other administrative expenses increased to €1,177 million (first half of 2020: €1,092 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 €73 million (first half of 2020: €130 million).

Other net operating income improved by €11 million at DVB. However, it declined by €12 million at DZ BANK – CICB, by €15 million at R+V, and by €32 million at UMH. The year-on-year change in other net operating income can be explained by the factors described in the details for the individual operating segments.

Profit before taxes for the first half of 2021 amounted to €1,832 million, compared with €557 million in the prior-year period.

The DZ BANK Group's **cost/income ratio** (i.e. the ratio of administrative expenses to operating income) for the reporting period came to 55.5 percent (first half of 2020: 65.1 percent).

The **regulatory return on risk-adjusted capital (RORAC)** was 18.4 percent (first half of 2020: 5.3 percent).

The DZ BANK Group's **income taxes** amounted to €524 million in the first half of 2021 (first half of 2020: €185 million).

Net profit for the first half of 2021 was €1,308 million compared with €372 million for the first half of 2020.

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 2021 compared with the corresponding period of 2020.

FIG. 2 – SEGMENT INFORMATION

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2021

€ million	BSH	R+V	TeamBank	UMH
Net interest income	293	-	241	4
Net fee and commission income	1	-	-1	1,264
Gains and losses on trading activities	-	-	-	-
Gains and losses on investments	13	-	-	-1
Other gains and losses on valuation of financial instruments	-	-	1	74
Gains and losses from the derecognition of financial assets measured at amortized cost	4	-	-	-
Premiums earned	-	9,497	-	-
Gains and losses on investments held by insurance companies and other insurance company gains and losses	-	2,759	-	-
Insurance benefit payments	-	-10,126	-	-
Insurance business operating expenses	-	-1,645	-	-
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business	-	-	-	-
Loss allowances	-19	-	-22	-
Administrative expenses	-257	-	-138	-503
Other net operating income	18	-2	4	-14
Profit/loss before taxes	**54**	**482**	**84**	**825**
Cost/income ratio (%)	78.1	-	56.3	37.9
Regulatory RORAC (%)	8.3	9.5	29.9	>100.0
Average own funds/solvency requirement	1,295	10,194	565	516
Total assets/total equity and liabilities as at Jun. 30, 2021	82,286	134,924	9,566	3,744

	DZ BANK – CICB	DZ HYP	DZ PRIVAT-BANK	VR Smart Finanz	DVB	DZ BANK – holding function	Other/ Consolidation	**Total**
	501	364	28	64	-12	-20	-40	1,423
	258	4	103	-15	8	-	-26	1,596
	-8	-4	11	-	-1	-	2	-
	24	-	-	-	-	-	1	37
	31	70	1	-	24	-	2	203
	3	-	-	-	-	-	-1	6
	-	-	-	-	-	-	-	9,497
	-	-	-	-	-	-	-26	2,733
	-	-	-	-	-	-	-	-10,126
	-	-	-	-	-	-	63	-1,582
	-	-	-	-	-	-	-	-
	78	1	-	-5	80	-	1	114
	-664	-157	-125	-41	-68	-119	-70	-2,142
	-5	8	1	-3	39	-	27	73
	218	**287**	**19**	**-**	**70**	**-139**	**-68**	**1,832**
	82.6	35.5	86.8	89.1	>100.0	-	-	55.5
	8.2	39.9	11.4	0.3	>100.0	-	-	18.4
	5,299	1,441	331	185	103	-	-	19,929
	348,170	91,758	22,679	3,479	8,570	20,446	-87,752	637,870

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 Dec. 31, 2020	81,673	130,027	9,285	3,561

	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
	314,612	94,486	17,691	3,684	10,247	21,297	-91,990	594,573

3.2.1 BSH

Net interest income in the BSH subgroup fell by €39 million to €293 million (first half of 2020: €332 million).

The main reason for the decrease in net interest income was the persistently low level of interest rates. At the end of the reporting period, the ten-year swap rate was 0.10 percent (June 30, 2020: minus 0.17 percent).

Interest income arising on investments declined by €55 million to €173 million (first half of 2020: €228 million) because capital market rates for investments remained low.

In the case of loans issued under advance or interim financing arrangements and other building loans, income amounted to €501 million (first half of 2020: €500 million) on the back of the expansion in business over the last few years and despite a fall in average returns. Income from home savings loans amounted to €34 million (first half of 2020: €34 million). Net interest income was also adversely impacted by a year-on-year increase of €17 million to €98 million (first half of 2020: €81 million) in BSH's fees, commissions, and transaction costs directly assignable to the acquisition of home savings contracts and loan agreements and incorporated into the effective interest method applied to home savings deposits and building loans.

The volume of home savings deposits from retail customers in the BSH subgroup grew by €1.7 billion to €65.7 billion as at June 30, 2021 (June 30, 2020: €64.0 billion). Despite this growth, the interest expense went down by €17 million because of the lower interest rates of the current tariffs and because of portfolio measures.

Net fee and commission income amounted to €1 million in the period under review (first half of 2020: net expense of €5 million).

In the home savings business in the first half of 2021, BSH entered into approximately 291 thousand (first half of 2020: 222 thousand) new home savings contracts with a volume of €14.7 billion (first half of 2020: €11.9 billion) in Germany.

In the home finance business, the realized volume of new business advanced to €9.3 billion in Germany in the reporting period (first half of 2020: €8.4 billion). This figure includes finance of €4.4 billion referred to institutions in the cooperative financial network (first half of 2020: €3.7 billion). It does not include home savings loans and bridging loans from BSH and other referrals, which totaled €0.9 billion (first half of 2020: €1.0 billion). Further financing of €4.0 billion (first half of 2020: €2.1 billion) was referred to cooperative banks via the BAUFINEX brokering platform.

Gains and losses on investments stood at a net gain of €13 million (first half of 2020: net loss of €20 million). This was attributable to the disposal of securities in an amount of €13 million (first half of 2020: €12 million). In the prior-year period, gains and losses on investments had been particularly affected by the write-down of more than €30 million on the carrying amount, calculated using the equity method, of Slovakian building society PSS.

Loss allowances amounted to a total net addition of €19 million (first half of 2020: net addition of €13 million). The main factor that adversely affected loss allowances in the period under review was the update to the scoring systems used for the building society's business, whereas an addition of €7 million had been required in the prior-year period owing to the COVID-19 pandemic.

Administrative expenses increased by €4 million to €257 million (first half of 2020: €253 million). At €117 million, staff expenses were €1 million higher than the level in the prior-year period of €116 million. Other administrative expenses grew by €3 million to €140 million (first half of 2020: €137 million), primarily because of greater depreciation and amortization expenses and IT investment.

Other net operating income amounted to €18 million (first half of 2020: €17 million).

Profit before taxes declined by €21 million to €54 million (first half of 2020: €75 million) as a consequence of the changes described above.

The **cost/income ratio** in the period under review came to 78.1 percent (first half of 2020: 74.2 percent).

Regulatory RORAC was 8.3 percent (first half of 2020: 12.7 percent).

3.2.2 R+V

Premiums earned went up by €276 million to €9,497 million (first half of 2020: €9,221 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 €233 million to €4,724 million.

Premiums earned from the life insurance business rose by €206 million to €4,367 million. Occupational pensions, unit-linked life insurance, and new guarantees were the main areas of business contributing to this increase. On the other hand, credit insurance and traditional product business have recently seen a decline. In the health insurance business, net premiums earned rose by €27 million to €357 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 €62 million to €3,294 million, with most of this growth being generated from motor vehicle insurance and corporate customer business.

Premiums earned from the inward reinsurance business fell by €19 million to €1,479 million. Europe remained the largest market for inward reinsurance. Growth was generated from fire and property insurance and from loan/deposit business, whereas motor vehicle insurance and other products declined.

Gains and losses on investments held by insurance companies and other insurance company gains and losses improved by €3,381 million to a net gain of €2,759 million (first half of 2020: net loss of €622 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 addition or reversal of the same amount. The net gain on investments held by insurance companies, excluding unit-linked contracts, amounted to €1,401 million in the reporting period (first half of 2020: €458 million).

The level of long-term interest rates was higher than in the first half of 2020. The movement of spreads on interest-bearing securities had a positive impact on this item. Spreads had widened in the first six months of 2020 but held steady in the period under review. A weighted spread calculated in accordance with R+V's portfolio structure stood at 54.0 points as at June 30, 2021 (December 31, 2020: 50.3 points). In the comparative period, this spread had risen from 53.5 points as at December 31, 2019 to 70.3 points as at June 30, 2020.

During the reporting period, equity markets relevant to R+V performed better than in the comparative period. For example, the EURO STOXX 50, a share index comprising 50 large listed companies in the eurozone, saw a rise of 511 points from the start of 2021, closing the reporting period on 4,064 points. This index had fallen by 511 points in the first half of 2020. In the reporting period, movements in exchange rates between the euro and various currencies were generally more favorable than in the comparative period. For example, the US dollar/euro exchange rate on June 30, 2021 was 0.843 compared with 0.817 as at December 31, 2020. In the first half of 2020, the US dollar/euro exchange rate had changed from 0.891 as at December 31, 2019 to 0.890 on June 30, 2020.

Overall, these trends in the first half of 2021 essentially resulted in a €2,952 million positive change in unrealized gains and losses to a net gain of €1,486 million (first half of 2020: net loss of €1,466 million), a €274 million increase in the contribution to earnings from the derecognition of investments to a gain of €3 million (first half of 2020: loss of €271 million), an improvement of €503 million in the foreign exchange gains and losses to a net gain of €335 million (first half of 2020: net loss of €168 million), and a €35 improvement in the balance of depreciation, amortization, impairment losses, and reversals of impairment losses to a net expense of €45 million (first half of 2020: net expense of €80 million). In addition, net income under current income and expense fell by €22 million to €1,044 million (first half of 2020: €1,066 million). Other insurance gains and losses and non-insurance gains and losses deteriorated by €362 million to a net loss of €65 million (first half of 2020: net gain of €297 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 amounted to €10,126 million, which equated to a rise of €3,243 million compared with the corresponding figure of €6,883 million in the prior-year period.

The increase 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. For example, a large part of the net gain of €2,810 million under gains and losses on investments held by insurance companies from unit-linked life insurance was also reflected in insurance benefit payments. There was a reversal of €103 million from the supplementary change-in-discount-rate reserve (first half of 2020: reversal of €89 million).

In the non-life insurance business, the claims rate trend was in line with expectations. The overall claims rate was below the level of the prior-year period. Claims expenses for major claims and basic claims have recently fallen. June saw an accumulation of natural disaster claims owing to storms, resulting in claims incurred of approximately €190 million as at the reporting date. There was again a mitigating impact from motor vehicle insurance as a result of the COVID-19 pandemic.

In the inward reinsurance business, the net claims ratio was down by 6.8 percentage points compared with the prior-year period (first half of 2020: 78.1 percent). The ratios for major and basic claims were below those in the first six months of 2020, but the ratio for medium claims went up. As a result, the overall claims rate was below the level of the prior-year period. Notably, the COVID-19 pandemic had given rise to an insurance expense of around €140 million in the first half of 2020, with a corresponding impact on earnings. As at the reporting date, claims of €121 million had been received from ceding insurers, an increase of €25 million compared with the figure of €96 million at the end of 2020. By the end of the first half of 2021, major claims of €77 million had arisen in connection with the Texas Freeze winter storm in the United States.

Insurance business operating expenses incurred in the course of ordinary business activities went up by just €28 million to €1,645 million (first half of 2020: €1,617 million). This change was primarily attributable to the life/health division, which saw an increase of €22 million or 5.7 percent. Expenses also rose in the inward reinsurance business, by €8 million or 2.1 percent. In the non-life insurance division, however, expenses were down by €2 million or 0.3 percent.

As a result of the factors described above, **profit before taxes** improved by €380 million to €482 million (first half of 2020: €102 million).

Regulatory RORAC was 9.5 percent (first half of 2020: 1.9 percent).

3.2.3 TeamBank

At €241 million, **net interest income** was down by €7 million year on year (first half of 2020: €248 million).

As at June 30, 2021, the volume of consumer finance stood at €8,826 million (December 31, 2020: €8,818 million). As at June 30, 2020, it had amounted to €8,909 million (December 31, 2019: €8,873 million). The change in the volume of consumer finance should be viewed in the context of the consequences of the ongoing COVID-19 pandemic.

As at June 30, 2021, TeamBank was working with 735 (December 31, 2020: 734) of Germany's 809 (December 31, 2020: 814) cooperative banks and with 150 (December 31, 2020: 145) partner banks in Austria. In addition, more than 32 thousand (first half of 2020: 34 thousand) members of cooperative banks benefited from favorable terms and conditions in the first six months of 2020.

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 hold loans and advances to customers at €9,043 million against the backdrop of the fallout from the pandemic (December 31, 2020: €9,031 million). The number of customers rose to 972 thousand (December 31, 2020: 962 thousand). TeamBank had made credit facilities from easyCredit-Finanzreserve totaling €2,204 million available to its customers as at June 30, 2021 (December 31, 2020: €1,912 million). In the first half of 2021, 16.9 percent of new business was generated through easyCredit-Finanzreserve.

Net fee and commission income improved by €14 million to a net loss of €1 million (first half of 2020: net loss of €15 million). This line item included income from the ECB's TLTRO III tender of €7 million (first half of 2020: €0 million).

The addition to **loss allowances** amounted to €22 million, which was down by €49 million compared with the figure of €71 million in the prior-year period. This change was due to a reversal of €16 million in connection with credit rating improvements during the reporting period as a result of customers' positive payment history and, in particular, the large addition of €33 million that had been required in the first half of 2020 due to the pandemic.

Administrative expenses increased by €19 million to €138 million (first half of 2020: €119 million). Staff expenses rose by €3 million to €52 million (first half of 2020: €49 million), mainly due to the growth of headcount. Other administrative expenses went up by €16 million to €86 million (first half of 2020: €70 million), notably because of year-on-year increases in IT costs as a result of capital investment as well as consultancy costs and the bank levy.

Profit before taxes for the period under review amounted to €84 million. The increase of €35 million compared with the figure of €49 million reported for the first half of 2020 was a consequence of the factors described above.

TeamBank's **cost/income ratio** came to 56.3 percent (first half of 2020: 49.8 percent).

Regulatory RORAC was 29.9 percent (first half of 2020: 17.2 percent).

3.2.4 UMH

Net fee and commission income at UMH rose by €496 million to €1,264 million (first half of 2020: €768 million). The change in net fee and commission income was predominantly due to the factors described below.

Because of the rise in the average assets under management of the Union Investment Group, which climbed by €44.4 billion to €403.3 billion (first half of 2020: €358.9 billion), the volume-related contribution to net fee and commission income rose to €827 million (first half of 2020: €675 million).

The assets under management of the Union Investment Group comprise the assets and the 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 €372 million (first half of 2020: €21 million). The increase was largely the result of a higher number of high-volume funds more comfortably fulfilling the conditions for the transfer of a performance-related management fee in the first half of 2021. Income from real estate fund transaction fees came to €22 million in the period under review (first half of 2020: €22 million).

Union Investment managed to generate net inflows from its retail business of €9.7 billion in the first six months of 2021 (first half of 2020: €3.7 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 3.5 million contracts as at June 30, 2021, with an increase in the 12-month savings volume to €6.9 billion (December 31, 2020: €5.8 billion).

The total assets in the portfolio of Riester pension products swelled to €24.8 billion (December 31, 2020: €22.0 billion).

The number of fund-linked savings plans managed by Union Investment in its retail business as at June 30, 2021 totaled 6.0 million (December 31, 2020: 5.7 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 €1.4 billion in the first half of 2021 (first half of 2020: €1.3 billion).

Assets under management in the PrivatFonds family amounted to €25.9 billion as at June 30, 2021 (December 31, 2020: €25.0 billion).

In its institutional business, the Union Investment Group generated net inflows amounting to €14.7 billion (first half of 2020: €0.6 billion).

The portfolio of sustainably managed funds expanded to €74.0 billion (December 31, 2020: €61.0 billion). This growth demonstrates that institutional clients are increasingly focusing on socially responsible investing.

Other gains and losses on valuation of financial instruments improved by €155 million to a net gain of €74 million (first half of 2020: net loss of €81 million), which was largely attributable to income of €63 million from the valuation of guarantee commitments (first half of 2020: expense of €78 million) and the net gain of

€11 million arising on the valuation of Union Investment's own-account investments (first half of 2020: net loss of €2 million).

Administrative expenses increased by €61 million to €503 million (first half of 2020: €442 million). Staff expenses climbed by €41 million to €259 million (first half of 2020: €218 million), primarily owing to the pro rata effects in connection with the acquisition of a majority stake in ZBI Partnerschafts-Holding GmbH of €19 million and also to average salary increases and appointments to new and vacant posts. Salary components also took into account the performance of the business reflected in UMH's KPIs. Other administrative expenses rose by €20 million to €244 million (first half of 2020: €224 million), largely because of higher expenses for consultancy.

Other net operating income went down by €32 million to a net expense of €14 million (first half of 2020: net income of €18 million).

Based on the changes described above, **profit before taxes** amounted to €825 million (first half of 2020: €264 million).

The **cost/income ratio** came to 37.9 percent in the first half of this year (first half of 2020: 62.6 percent).

Regulatory RORAC was greater than 100.0 percent (first half of 2020: 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 increased by €87 million to €501 million (first half of 2020: €414 million).

In the Corporate Banking business line, net interest income went up by €41 million to €274 million (first half of 2020: €233 million). The net interest income in the four regional corporate customer divisions plus Central Corporate Banking rose by €26 million to €155 million (first half of 2020: €129 million). This was due to the increased volume of lending and receipt of the bonus interest of €16 million as a result of participating in the TLTRO III program.

Net interest income in the Structured Finance division amounted to €87 million, an increase of €9 million compared with the figure for the first half of 2020 of €78 million. This increase was driven by international trade finance, especially export finance. Income of €2 million from the TLTRO III program was also included.

In the Investment Promotion division, net interest income advanced by €6 million to €32 million (first half of 2020: €26 million). This year-on-year increase was mainly due to substantial growth in volume driven by the strong demand for business support programs in connection with the COVID-19 pandemic.

At €9 million, net interest income from the separately managed real estate lending portfolio was down compared with the figure of €16 million for the first half of 2020 due to the reduction in the size of portfolio caused by the transfer of some of its components to DZ HYP.

In the Capital Markets business line, net interest income fell by €57 million to €87 million (first half of 2020: €144 million). This was primarily attributable to business with institutional customers and the treasury portfolios. The figure for the reporting period included positive effects of €22 million from TLTRO III. The year-on-year reduction resulted largely from the positive impact of the specific funding structure in the first half of 2020.

Other net interest income swelled by €51 million to €60 million (first half of 2020: €9 million). For the first time, the figure for the reporting period included income of €49 million from TLTRO III that was not allocated to the operating business lines. Moreover, income from loan administration fees rose by €2 million to €11 million (first half of 2020: €9 million).

Current income and expense from long-term equity investments amounted to net income of €71 million (first half of 2020: net income of €13 million).

Net fee and commission income rose by €28 million to €258 million (first half of 2020: €230 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 €9 million higher than in the prior-year period at €72 million (first half of 2020: €63 million). Of this increase, €4 million was attributable to the corporate finance business and €2 million to restructuring fees. In addition, fee and commission income from financial guarantee contracts and loan commitments went up by €2 million.

In the Capital Markets business line, the contribution to net fee and commission income rose by €19 million to €136 million (first half of 2020: €117 million). Of particular note were the €14 million increase in income from syndicated business and issuance business and the €6 million increase in income from fund sales commissions.

Net fee and commission income in the Transaction Banking business line was also up year on year at €74 million, a rise of €9 million (first half of 2020: €65 million). Of this increase, €4 million was attributable to safe custody and management of securities, which was primarily driven by volume growth, €3 million to lower costs for securities processing as a result of newly awarded volume rebates, and €2 million to deferred instant payment fees.

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 Cash Logistik Security AG, 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 2020: €93 million) and were broken down and reported under the net fee and commission income for the business lines as follows: Corporate Banking €4 million (first half of 2020: €4 million) and Capital Markets/Transaction Banking €89 million (first half of 2020: €89 million).

Aside from the aforementioned business lines, net fee and commission income from other financial services amounted to a greater net expense of €24 million in the reporting period (first half of 2020: net expense of €15 million). This figure included the reclassification of loan administration fees of €11 million (first half of 2020: €12 million) and the expense of €15 million as a result of passing on the bonus interest from the TLTRO III program to the participating group subsidiaries.

Gains and losses on trading activities deteriorated to a net loss of €8 million (first half of 2020: net gain of €521 million).

Gains and losses on trading activities reflect the business activity of the Capital Markets business line and gains and losses on money market business entered into for trading purposes (mainly repurchase agreements) and on derivatives of the Group Treasury division ('financial assets and liabilities measured at fair value through profit or loss' (fair value PL)). The fair value gains and losses on financial assets and liabilities designated as at fair value through profit or loss (fair value option) are also included in gains and losses on trading activities. During the reporting period, there was an improvement in gains and losses on operating trading activities on the one hand and a sharp fall as a result of IFRS-related valuation effects on the other.

Gains and losses on operating trading activities in the Capital Markets business line amounted to a net gain of €363 million, a year-on-year rise of €104 million (first half of 2020: net gain of €259 million). In the customer business, demand from institutional clients for interest-rate derivatives and credit linked notes and demand from retail customers for equity derivatives and share certificates contributed to the higher net gain. Apart from the customer business, the increase in the net gain on operating trading activities was driven by the current situation in the capital markets (further narrowing of credit spreads, movements in the equity market) and by risk management for trade.

There were also negative IFRS-related effects of €372 million in the first half of 2021. Both in the prior-year period and in the reporting period, such effects were primarily driven by changes in fair value gains and losses on own issues in the subcategories 'financial assets and liabilities measured at fair value through profit or loss' (fair value PL) and 'financial assets and liabilities designated as at fair value through profit or loss' (fair value option). In the prior-year period, a net gain had been achieved for these issues under fair value gains and losses, primarily due to the widening of mark-ups in the bond market in the context of the COVID-19 crisis. However, this item had the opposite effect on the income statement in the first six months of 2021 due to the calmer conditions in the bond markets.

In the first half of 2021, the fair value gains and losses on issues in the aforementioned categories amounted to a net loss of €163 million. Reserves increased in the category of financial instruments measured at amortized cost.

There was also an adverse impact from derivative hedging transactions that are related to group finance and are therefore not permitted to be included in hedge accounting. In subsequent years, this adverse impact on earnings will be eliminated due to the pull-to-par effect. To a lesser extent, ineffectiveness in hedge accounting also took its toll on earnings. This expense was matched by income in the same amount recognized under other gains and losses on valuation of financial instruments.

Gains and losses on investments improved by €22 million to a net gain of €24 million (first half of 2020: net gain of €2 million). The net gain in the reporting period resulted from the combination of income of €41 million from the sale of securities in the category 'fair value through other comprehensive income' and expenses of €22 million arising from the termination of hedges accounted for in the category 'fair value through other comprehensive income' and held in the fair value hedge accounting portfolio. There was also a contribution of €5 million resulting from the repayment of outstanding Tier I issues.

Other gains and losses on valuation of financial instruments increased to a net gain of €31 million (first half of 2020: net gain of €7 million). Within this figure, the net gain on valuation of financial instruments measured at fair value through profit or loss improved by €9 million to €5 million (first half of 2020: net loss of €4 million) and the net gain from ineffectiveness in hedge accounting rose by €15 million to €26 million (first half of 2020: net gain of €11 million).

The net gain under **gains and losses from the derecognition of financial assets measured at amortized cost** was unchanged year on year at €3 million. Within this figure, the gains on the derecognition of financial assets measured at amortized cost rose by €5 million to €8 million. Conversely, the reversal of adjustments to carrying amounts (hedge adjustments) in the context of hedge accounting gave rise to a negative effect of €5 million (first half of 2020: negative effect of €1 million).

Loss allowances amounted to a net reversal of €78 million (first half of 2020: net addition of €256 million). Within this figure, the net reversals in the lending business and in respect of investments amounted to €41 million. Of this total, net reversals of €26 million related to loss allowances in stage 1, net additions of €50 million related to loss allowances in stage 2, and net reversals of €65 million related to loss allowances in stage 3. The net reversal in respect of recoveries on loans and advances previously impaired, directly recognized impairment losses, and additions to other provisions for loans and advances was €37 million (first half of 2020: net addition of €1 million).

The net reversals of loss allowances in stage 1 were influenced by the transfer of a counterparty between stages, resulting in a reversal of €16 million under investments. The additions in stage 2 were primarily due to the worsening of major counterparties' credit ratings. The reversals in stage 3 were largely the result of the scaling back of an individual exposure of €51 million. There were also recoveries on loans and advances previously impaired of €20 million due to the recovery of collateral from a counterparty.

In the first half of 2020, the requirement for the addition of €98 million in stages 1 and 2 (first half of 2021: addition of €10 million) had arisen because the anticipated macroeconomic conditions were included in the calculation in connection with the COVID-19 pandemic, in particular by adjusting the model-based default probability profiles (referred to as shift factors), which are taken into account when determining the expected losses. Loss allowances in stage 3 had also gone up due to significant individual additions.

Administrative expenses increased by €21 million to €664 million (first half of 2020: €643 million).

The €5 million rise in staff expenses to €298 million (first half of 2020: €293 million) was largely due to salary increases.

Other administrative expenses went up by €16 million to €366 million (first half of 2020: €350 million). The expenses included in this total relating to the restructuring fund for banks (bank levy) and contributions to the BVR protection scheme rose by €27 million to €82 million (first half of 2020: €55 million taking into account the reversal of provisions).

Conversely, consultancy expenses fell by €17 million to €81 million (first half of 2020: €98 million). The depreciation and amortization charges included in other administrative expenses went down by €1 million to €40 million (first half of 2020: €41 million). The breakdown of these charges was as follows: depreciation of right-of-use assets €17 million (first half of 2020: €18 million), depreciation of property, plant and equipment, and investment property €13 million (first half of 2020: €14 million), and amortization of other intangible assets €10 million (first half of 2020: €9 million).

Other net operating income, which amounted to a net expense of €5 million (first half of 2020: net income of €7 million) included reversals of provisions and accruals amounting to income of €15 million (first half of 2020: income of €20 million), expenses for the transfer of losses amounting to €4 million (first half of 2020: expenses of €13 million), and expenses for paydirekt of €8 million (first half of 2020: expenses of €8 million).

Profit before taxes amounted to €218 million in the reporting period, which was €67 million lower than the figure of €285 million reported for the comparative period.

The **cost/income ratio** came to 82.6 percent in the first half of this year (first half of 2020: 54.3 percent).

Regulatory RORAC was 8.2 percent (first half of 2020: 10.5 percent).

3.2.6 DZ HYP

At €364 million, the **net interest income** of DZ HYP was €6 million above the level of the prior-year period (first half of 2020: €358 million). DZ HYP's participation in the ECB's TLTRO III program gave rise to bonus interest of €7 million during the reporting period (first half of 2020: €0 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 €2,835 million to €54,140 million (June 30, 2020: €51,305 million). The volume of new business (including public-sector finance) increased by €1,478 million to €5,374 million (first half of 2020: €3,896 million).

In the corporate customer business, the volume of new business came to €3,705 million (first half of 2020: €2,978 million). The volume of new lending jointly generated with the local cooperative banks in this area of business amounted to €2,245 million (first half of 2020: €2,191 million). In the retail customer business, the volume of new commitments reached €1,408 million (first half of 2020: €750 million). Of this amount, the new commitment volume referred by local cooperative banks came to €1,337 million (first half of 2020: €699 million). In the public-sector business, DZ HYP generated a new business volume of €261 million (first half of 2020: €168 million). Of this amount, €215 million (first half of 2020: €127 million) was attributable to business brokered through the cooperative banks and €46 million to direct business (first half of 2020: €42 million).

Other gains and losses on valuation of financial instruments improved by €196 million to a net gain of €70 million (first half of 2020: net loss of €126 million). Spreads narrowed during the reporting period, whereas they had widened in the first half of 2020 owing to the COVID-19 pandemic. For example, the gains and losses on valuation of bonds from the peripheral countries of the eurozone amounted to a net gain of €57 million in the six months under review (first half of 2020: net loss of €114 million). Of this amount, a net gain of €30 million (first half of 2020: net loss of €45 million) was attributable to Italian government bonds, a net gain of €21 million (first half of 2020: net loss of €43 million) to Spanish government bonds, and a net gain of €6 million (first half of 2020: net loss of €26 million) to Portuguese government bonds.

Loss allowances amounted to a net reversal of €1 million (first half of 2020: net addition of €6 million). The loss allowance requirement in the prior-year period had largely been attributable to additions in connection with the COVID-19 pandemic.

Administrative expenses increased by €22 million to €157 million (first half of 2020: €135 million). Staff expenses went up by €1 million to €48 million (first half of 2020: €47 million). Other administrative expenses rose by €21 million to €109 million (first half of 2020: €88 million) owing to the higher contribution to the deposit guarantee fund and higher bank levy.

Profit before taxes amounted to €287 million, which was up by €181 million compared with the equivalent figure for the first half of 2020 of €106 million, predominantly as a consequence of the factors described above.

The **cost/income ratio** came to 35.5 percent (first half of 2020: 54.7 percent).

Regulatory RORAC was 39.9 percent (first half of 2020: 13.3 percent).

3.2.7 DZ PRIVATBANK

Net interest income at DZ PRIVATBANK fell by €16 million to €28 million (first half of 2020: €44 million) as a result of the persistently low interest rates.

In the prior-year period, net interest income had particularly benefited from lower 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 2020: €4.9 billion).

Net fee and commission income rose by €10 million to €103 million (first half of 2020: €93 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 June 30, 2021, the volume of assets under management relating to high-net-worth clients amounted to €21.8 billion (June 30, 2020: €18.6 billion). The assets under management comprise the volume of securities, derivatives, and deposits of customers in the private banking business.

The value of funds under management amounted to €169.5 billion (June 30, 2020: €122.2 billion). The number of fund-related mandates was 540 (June 30, 2020: 534).

Administrative expenses increased by €4 million to €125 million (first half of 2020: €121 million). Staff expenses amounted to €69 million (first half of 2020: €68 million). Other administrative expenses are subject to stringent process and cost management but increased year on year to €56 million (first half of 2020: €53 million) due, in particular, to the higher bank levy.

Profit before taxes declined by a total of €8 million to €19 million (first half of 2020: €27 million) as a consequence of the changes described above.

The **cost/income ratio** came to 86.8 percent (first half of 2020: 81.2 percent).

Regulatory RORAC was 11.4 percent (first half of 2020: 13.7 percent).

3.2.8 VR Smart Finanz

Following the sale of VR Factorem to DZ BANK on September 29, 2020, the composition of the operating segment has changed compared with the prior-year period.

Net interest income at VR Smart Finanz declined by €8 million to €64 million in the reporting period (first half of 2020: €72 million).

New lending and object finance business remained modest during the reporting period as a result of the COVID-19 pandemic and was 41.4 percent below the level of the prior-year period (first half of 2020: up by 13.9 percent). However, the first half of 2020 had been dominated by significant demand for liquidity from self-employed and small-business customers and a 37.0 percent increase in disbursements of the 'VR Smart flexibel' business loan in the first quarter of 2020. From spring 2020 onward, the COVID-19 pandemic meant that the 'VR Smart flexibel' business loan was temporarily replaced with the 'VR Smart flexibel' support loan, which is aligned with the 2020 special program of Germany's KfW development bank aimed at established and start-up companies.

As at June 30, 2021, more than 50,000 inquiries had been received and loans of approximately €1,009 million had been approved in respect of the 'VR Smart flexibel' support loan, which will be offered until the end of 2021 following the extension of the KfW support program. Since the reintroduction of the 'VR Smart flexibel' business loan on November 30, 2020, VR Smart Finanz has approved loans with a total volume of around €230 million.

Expenses for **loss allowances** amounted to €5 million (first half of 2020: €26 million). In the prior-year period, loss allowances had been influenced by the adjustment of the scorecards, the adjustment of risk parameters used to calculate expected credit risk, and the addition in connection with the COVID-19 pandemic.

Administrative expenses decreased by €11 million to €41 million (first half of 2020: €52 million). Staff expenses declined by €5 million to €24 million (first half of 2020: €29 million), mainly due to the lower headcount. Other administrative expenses decreased by €6 million to €17 million (first half of 2020: €23 million), largely as a result of outsourcing IT operations and payments processing.

VR Smart Finanz's **profit before taxes** amounted to €0 million (first half of 2020: loss before taxes of €24 million), largely as a consequence of the factors described above.

The **cost/income ratio** came to 89.1 percent (first half of 2020: 96.3 percent).

Regulatory RORAC was 0.3 percent (first half of 2020: minus 17.1 percent).

3.2.9 DVB

The DVB subgroup's **net interest income** decreased by €32 million to a net expense of €12 million (first half of 2020: net income of €20 million). This decline was essentially due to the absence of interest income following the scaling back of the portfolio over the course of the first six months of 2020 and in the first half of 2021.

The nominal volume of customer loans in the DVB subgroup stood at €2.5 billion as at June 30, 2021 (December 31, 2020: €3.9 billion).

Net fee and commission income amounted to €8 million (first half of 2020: €16 million). This decrease predominantly arose because of the absence of income following the reduction of the portfolio.

Other gains and losses on valuation of financial instruments amounted to a net gain of €24 million (first half of 2020: net loss of €68 million). In the prior-year period, there had notably been a negative valuation impact in respect of derivatives that were not included in hedge accounting and negative valuation effects from use of the fair value option. The net gain in the reporting period was attributable to positive effects.

Loss allowances amounted to a net reversal of €80 million in the period under review (first half of 2020: net addition of €148 million), predominantly because of the progress made with scaling back the portfolio. The higher expense for loss allowances in the first half of 2020 had been primarily attributable to the COVID-19 pandemic and the further adjustment of risk parameters used to calculate expected credit risk.

Administrative expenses amounted to €68 million (first half of 2020: €78 million), a year-on-year fall of €10 million. Staff expenses declined by €6 million to €28 million owing to the reduction in headcount (first half of 2020: €34 million). Other administrative expenses came to €40 million, which was down year on year owing, in particular, to the lower level of legal and consultancy expenses (first half of 2020: €44 million).

Profit before taxes amounted to €70 million (first half of 2020: loss before taxes of €228 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 2020: greater than 100.0 percent).

Regulatory RORAC was greater than 100.0 percent (first half of 2020: greater than minus 100.0 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 amounted to a net expense of €20 million in the period under review (first half of 2020: net expense of €23 million).

The average level of subordinated capital for the twelve month period to the end of the first half of 2021 was lower than in the prior-year period and the interest expense on this capital went down by €2 million to €24 million (first half of 2020: €26 million).

Net interest income from the funding of long-term equity investment carrying amounts and the investment of capital amounted to €4 million in the reporting period (first half of 2020: €3 million).

Administrative expenses increased by €18 million year on year to €119 million (first half of 2020: €101 million).

The expenses for the bank levy and contributions (notably to the BVR protection scheme) rose by €13 million to €47 million (first half of 2020: €34 million taking into account the reversal of provisions). Furthermore, IT and project expenses increased from €22 million in the first six months of 2020 to €28 million in the period under review. Other expenses for the benefit of the group and local cooperative banks decreased by €1 million to €14 million (first half of 2020: €15 million). Expenses from the group management function were on a par with the prior-year period at €29 million (first half of 2020: €30 million).

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 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.

4 Net assets

As at June 30, 2021, the DZ BANK Group's **total assets** had increased by €43.3 billion, or 7.3 percent, to €637.9 billion (December 31, 2020: €594.6 billion). This increase was largely attributable to a higher level of total assets at DZ BANK – CICB (up by €33.6 billion), DZ PRIVATBANK (up by €5.0 billion), and R+V (up by €4.9 billion), whereas DZ HYP (down by €2.7 billion) and DVB (down by €1.7 billion) recorded a decrease.

The **volume of business** amounted to €1,147,971 million (December 31, 2020: €1,059,874 million). This figure comprised the total assets, the assets under management at UMH as at June 30, 2021 amounting to €427,241 million (December 31, 2020: €385,935 million), the financial guarantee contracts and loan commitments amounting to €80,588 million (December 31, 2020: €77,272 million), and the volume of trust activities amounting to €2,272 million (December 31, 2020: €2,094 million).

The DZ BANK Group's **cash and cash equivalents** went up by €29.5 billion, or 43.1 percent, to €97.9 billion (December 31, 2020: €68.4 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** declined to €102.4 billion, a reduction of €0.6 billion or 0.6 percent. Loans and advances to banks in Germany went up by €0.6 billion to €94.9 billion, whereas loans and advances to foreign banks fell by €1.2 billion to €7.5 billion.

The DZ BANK Group's **loans and advances to customers** amounted to €191.6 billion, which was €1.3 billion, or 0.7 percent, higher than at the end of 2020. Within this figure, loans and advances to customers in Germany rose by €1.7 billion to €165.8 billion, whereas loans and advances to customers outside Germany went down by €0.4 billion to €25.8 billion.

As at June 30, 2021, **financial assets held for trading** amounted to €52.8 billion, an increase of €10.0 billion, or 23.2 percent, on the figure as at December 31, 2020. This change was largely attributable to a rise in money market placements (up by €11.4 billion) and in bonds and other fixed-income securities (up by €2.5 billion) combined with a decline in derivatives (positive fair values) (down by €4.1 billion).

Investments were down by €2.3 billion, or 3.8 percent, to €57.9 billion. The main reason for this change was the €2.2 billion decrease in the portfolio of bonds and other fixed-income securities.

Investments held by insurance companies rose by €5.5 billion (4.6 percent) to €127.2 billion (December 31, 2020: €121.7 billion). This was due, above all, to a €2.0 billion increase in assets related to unit-linked contracts to €16.8 billion, a €1.9 billion increase in mortgage loans to €12.8 billion, and a €1.6 billion increase in variable-yield securities to €13.2 billion.

The DZ BANK Group's **deposits from banks** as at June 30, 2021 amounted to €197.6 billion, which was €19.8 billion, or 11.1 percent, higher than the figure reported as at December 31, 2020. Deposits from domestic banks were up by €16.1 billion to €185.6 billion, while deposits from foreign banks increased by €3.7 billion to €12.0 billion. The growth reflects the expansion of development lending business since the outbreak of the coronavirus crisis. As at June 30, 2021, the DZ BANK Group had also participated in the ECB's TLTRO III program with a total drawdown amount of approximately €33 billion, leading to a further increase in deposits from banks.

Deposits from customers grew by €9.2 billion, or 6.8 percent, to €143.1 billion (December 31, 2020: €133.9 billion). Deposits from domestic customers decreased by €2.1 billion to €114.1 billion (December 31, 2020: €116.2 billion). Deposits from foreign customers rose by €11.3 billion to €29.0 billion (December 31, 2020: €17.7 billion).

At the end of the reporting half-year, the carrying amount of **debt certificates issued including bonds** in the DZ BANK Group was €76.1 billion (December 31, 2020: €70.5 billion). The rise of €5.6 billion was largely due to growth of €2.7 billion in the portfolio of other debt certificates issued to €10.4 billion while, at the same time, the portfolio of bonds issued expanded by €2.9 billion to €65.7 billion.

Financial liabilities held for trading went up by €5.4 billion, or 10.6 percent, to €55.8 billion (December 31, 2020: €50.4 billion). This change was largely due to a rise in money market deposits (up by €5.5 billion), short positions (up by €2.1 billion), and bonds issued (up by €1.1 billion). The figure under derivatives (negative fair values) decreased by €3.3 billion.

Insurance liabilities went up by €5.5 billion, or 4.9 percent, to €116.7 billion (December 31, 2020: €111.2 billion). This was largely attributable to rises of €1.9 billion in the benefit reserve, €1.0 billion in the provision for claims outstanding, €1.0 billion in the provision for unearned premiums, and €1.8 billion in the reserve for unit-linked insurance contracts.

As at June 30, 2021, the **equity** reported by the DZ BANK Group was €28.5 billion (December 31, 2020: €29.2 billion). The decrease of €0.7 billion compared with the end of 2020 was due to the reduced reserve from other comprehensive income (down by €0.4 billion) and the decrease in non-controlling interests (down by €1.3 billion), which was essentially attributable to the repayment in full of the issued bonds of DZ BANK Perpetual Funding Issuer (Jersey) Limited, St. Helier, Jersey, and of the non-cumulative trust preferred securities of DZ BANK Capital Funding Trust I, DZ BANK Capital Funding Trust II, and DZ BANK Capital Funding Trust III, all Wilmington, Delaware, USA. These factors were offset by a rise in retained earnings (up by €0.4 billion) and unappropriated earnings (June 30, 2021: €1.2 billion, December 31, 2020: €0.6 billion).

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 the risk report within this interim group management report (chapter VI.7.2).

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 the Group Treasury division 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).

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 local cooperative banks. This enables cooperative banks to invest available liquidity with DZ BANK or obtain liquidity from DZ BANK if they need it. This regularly results in a liquidity surplus, which provides one of the main bases for short-term funding in the unsecured money markets. Corporate customers and institutional clients are another important source of funding for covering operational liquidity requirements.

For funding purposes, the DZ BANK Group also issues money market products based on debt certificates under a standardized groupwide multi-issuer euro commercial paper program through its offices and branches in Frankfurt, New York, Hong Kong, London, and Luxembourg. In addition, a US CP head office program is used centrally by DZ BANK Frankfurt.

Key repo and securities lending activities, together with the collateral management process, are managed centrally in DZ BANK's Group Treasury division as a basis for secured money market financing activities. Funding on the interbank market is not strategically important to the DZ BANK Group.

The DZ BANK Group also has at its disposal liquid securities that form part of its counterbalancing capacity. These securities can be used as collateral in monetary policy funding transactions with central banks, or in connection with secured funding in private markets.

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.

As at June 30, 2021, the DZ BANK Group had participated in the ECB's TLTRO III program with a total drawdown amount of approximately €33 billion.

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. In addition to this description of the funding structure, the risk report within this interim group management report includes disclosures on **liquidity risk** (chapter VI.6.1). 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

Events of particular importance that occurred after the end of the first half of 2021 are described in note 54 of the notes to the interim consolidated financial statements.

IV Outlook

1 Economic conditions

1.1 Global economic trends

In 2020, the COVID-19 pandemic plunged the global economy into the deepest recession since the end of the Second World War. Global economic output contracted by more than 3 percent in 2020.

Even in mid-2021, coronavirus is continuing to have a dominant effect on the current economic situation and on expectations for the remainder of the year. Progress with worldwide vaccination campaigns in the year to date has stabilized the health emergency and consequently also helped economic activity to start returning to normal.

The global economy is expected to continue its recovery in the remaining months of 2021, with growth predicted at 5.8 percent. Nevertheless, there is still a risk that the vaccination program cannot deliver a sufficient level of protection, as a consequence of which the COVID-19 pandemic could weigh on the economy and society at large for a much longer period.

There is significant but temporary upward pressure on consumer prices this year. Inflation rates are likely to remain at an elevated level in key national economies over the remainder of 2021, although central banks view this as only a short-term phenomenon.

1.2 Trends in the USA

While the changeover in the White House at the beginning of 2021 led to more intensive international dialog, the trade disputes between the United States, China, and Europe have not been eliminated. In the absence of a lasting solution, there is still a risk that countries will impose protectionist measures, delivering a further blow to world trade already weakened by the impact of the COVID-19 pandemic. This would adversely affect the global economy and hit the heavily export-dependent German economy particularly hard.

As a result of the vast fiscal stimulus package, US economic output is likely to rise by 6.7 percent in 2021. The recovery will probably be driven mainly by consumer spending.

1.3 Trends in the eurozone

The eurozone's economic rebound began in spring 2021, with economic growth having been held back in the first quarter of the year due to the containment measures. The situation should continue to normalize over the course of the year and the economy is likely to kick into gear with the help of rising vaccination rates and warmer weather. Following a 6.5 percent contraction in GDP in 2020, economic growth of 4.0 percent is projected for 2021 as a whole.

Upward pressure on consumer prices is likely to remain until the end of 2021. However, the effect of the year-on-year increases in energy prices should diminish over the course of 2021. The reopening of the economy and strong demand are predicted to push up prices for goods and services in the second half of the year. While the inflation rate in 2020 was low at just 0.3 percent, consumer prices are expected to rise by an average of 2.3 percent in 2021.

1.4 Trends in Germany

The lockdown imposed due to the third wave of COVID-19 caused the economy as a whole to contract in the first quarter of 2021.

However, a vigorous recovery began in spring 2021, bolstered by progress in the vaccine campaign. An economic growth rate of 2.7 percent is projected for 2021.

The average rate of inflation in Germany for 2021 will be markedly higher than in the previous year at 3.0 percent (2020: 0.4 percent). The main reasons are the end of the temporary reduction in VAT, higher energy prices, and rises in prices for goods and services as a result of the reopening process and the recovery of demand. Strong inflationary pressure is not expected to persist in Germany either over the longer term.

1.5 Trends in the financial sector

The continued bounce-back of the global economy in 2021 and the resulting upward pressure on consumer prices led to rising yields in the capital markets in the first half of the year. However, they have recently stagnated. In the view of the central banks, this inflationary pressure is only temporary, although ongoing success with vaccination programs combined with a boom in private-sector demand and support from government investment programs may exert further upward pressure on prices.

In its latest decision of July 8, 2021, the ECB formulated an inflation target of 2 percent but will temporarily tolerate a higher or lower level. This gives the central bank the flexibility to continue with its expansionary monetary policy and asset purchase programs in the bond market.

Against this backdrop, nominal interest rates are expected to remain at their comparatively low level in the second half of 2021. This will be accompanied by a relatively flat yield curve and will prevent any significant increase in margins in interest-related business.

In the last few years, the ECB's expansionary approach combined with its asset purchase programs largely prevented structural problems in some EMU member countries from becoming apparent in the capital markets. The fiscal stimulus measures introduced to tackle the fallout from the COVID-19 pandemic have resulted in a sharp increase in the need to obtain funding in the capital markets. There is a risk that yields could rise further at the long end if a potentially more restrictive approach to the asset purchase programs is taken.

Because of the expansionary monetary policy pursued by central banks and the fiscal policy measures implemented in many countries, it is reasonable to assume that there will be a global economic recovery, which should also help to stabilize financial performance in the financial sector. However, it is still not possible to rule out potential negative effects from the COVID-19 pandemic on businesses and consumers – such as higher debt – in the second half of 2021, which in turn could have an adverse impact on the financial sector.

The uncertain political and economic trends outlined above could spill over and have an adverse effect on the economic position of the financial sector. Relevant information on macroeconomic risk factors can be found in the risk report (chapter VI.3).

2 Financial performance

The forecasts below are based on the outcome of the DZ BANK Group's projection process. Forecasting uncertainty, particularly as a result of the macroeconomic conditions described above, may lead to deviations from the underlying assumptions.

Profit before taxes is likely to rise sharply in 2021 compared with 2020; the increase in the second half of the year will be far smaller than in the first half. The predicted encouraging financial performance will primarily be driven by positive trends in the operating business, such as those emerging in the UMH and DZ BANK – CICB operating segments, and by the capital markets' recovery from COVID-19-related price falls, which will have a positive impact on the R+V operating segment, for example.

In 2022, profit before taxes is forecast to be lower than in 2021. This will essentially be because the positive non-recurring items in 2021 – some of which are attributable to the pandemic – will not be repeated.

Net interest income including income from long-term equity investments is predicted to be unchanged year on year in 2021 in view of the healthy performance of the operating business despite persistently low interest rates.

Economic conditions in the eurozone, which continue to be heavily influenced by the COVID-19 pandemic, coupled with a yield curve that remains relatively flat, 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 expected to be significantly higher in 2021 than in 2020 thanks to 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.

Gains and losses on trading activities are anticipated to deteriorate markedly in 2021 owing to negative IFRS-related valuation effects. Positive impetus is particularly likely to come from customer-driven capital markets business in the DZ BANK – CICB operating segment.

The 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 improve significantly this year, partly due to the inclusion in the prior-year figure of negative non-recurring items.

Other gains and losses on valuation of financial instruments are expected to improve sharply year on year to a substantial net gain in 2021, mainly due to positive effects of measuring securities from government issuers in European periphery countries in the DZ HYP operating segment and measuring guarantee commitments for investment products in the UMH operating segment. Moreover, the negative effects that impacted on DVB operating segment in 2020 will not be repeated.

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 2021 is expected to be well above the 2020 figure. This is because of the projected significant improvement in gains and losses on investments held by insurance companies, although premiums earned are likely to decline slightly.

From the current perspective, the severe weather event referred to as Bernd, a loss event that occurred in July 2021, will have limited financial implications (see also note 53 in the notes to the consolidated financial statements). Further exceptional events in financial and capital markets, loss events, and changes in underwriting practices may adversely affect the level of net income expected to be earned from insurance business.

Expenses for **loss allowances** are likely to fall considerably in 2021 compared with their elevated level in 2020, which had been influenced by the potential impact of COVID-19 on the real economy.

The effects of economic conditions, which continue to be 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 2021, **administrative expenses** are expected to rise moderately year on year. This will predominantly be due to growth-related increases in general and administrative expenses in selected operating segments, higher contributions to protection schemes, and the effects of the acquisition of a majority stake in ZBI Partnerschaftsholding GmbH by the UMH operating segment.

Other net operating income is anticipated to be substantially lower in 2021 than in 2020, partly because of the impact of positive non-recurring items in the prior-year period.

The DZ BANK Group is likely to see a slight year-on-year improvement in its **cost/income ratio** in 2021.

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 rise substantially year on year in 2021 in view of the expected significant increase in profit before taxes.

3 Liquidity and capital adequacy

The DZ BANK Group is assuming that it can continue to maintain an appropriate level of **liquidity adequacy** in the second half of 2021. Further information on liquidity adequacy can be found in the risk report (chapter VI).

As matters currently stand, the DZ BANK Group's **capital adequacy** will continue to be assured for the second half of 2021 from both economic and regulatory perspectives; 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 the risk report (chapter VI).

V Opportunity report

1 Management of opportunities

The DZ BANK Group defines **opportunities** as situations presenting the potential for further returns that could be exploited.

The management of opportunities is integrated into the **annual strategic planning process**. The potential for returns is identified and analyzed on the basis of various macroeconomic scenarios, trends, and changes in the market environment, and then included in strategic financial planning. Details about the strategic planning process can be found in the 2020 group management report (chapter I.2.4 in ‘DZ BANK Group fundamentals’).

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.

Opportunity management is an integral component of **governance** and is therefore taken into account in the general management approach, in the management of subsidiaries via appointments to key posts, and in the DZ BANK Group’s committees. Details about the governance of the DZ BANK Group can be found in the 2020 group management report (chapter I.2.2 in ‘DZ BANK Group fundamentals’).

The opportunity management system is not integrated into the risk management system.

2 Potential opportunities

The potential opportunities described in the 2020 ‘DZ BANK Group and DZ BANK opportunity report’ – **corporate strategy** and **digitalization and new competitors** – continued to be relevant to the DZ BANK Group in the first six months of this year and apply equally to the second half of 2021.

The ‘Outlook’ (chapter IV of this interim group management report) describes expected developments in the market and business environment and their implications for the anticipated financial performance in 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 its subsidiaries are critical in determining the funding opportunities available on money and capital markets. The relatively high ratings compared with other entities in the market open up potential opportunities for the entities in the DZ BANK Group, primarily in terms of customer acquisition, pricing, and funding through capital markets. The credit ratings for DZ BANK can be found in the ‘Key figures’ at the front of the half-year financial report.

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

VI Risk report

1 Disclosure principles

In its capacity as the parent company in the DZ BANK Group, DZ BANK is publishing this risk report in order to meet the **transparency requirements** for risks applicable to the DZ BANK Group as specified in sections 115 and 117 of the German Securities Trading Act (WpHG) and German Accounting Standard (GAS) 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 risk report also includes information in compliance with those **recommended risk-related disclosures** that have been issued by the Financial Stability Board, the European Banking Authority, and the European Securities and Markets Authority that extend beyond the statutory requirements and that are intended to improve the usefulness of the disclosures in the decision-making process.

The quantitative disclosures in this 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.

DZ BANK Group

2 Risk management system

The DZ BANK Group's risk management system was described in the DZ BANK Group and DZ BANK risk report ('2020 risk report') within the 2020 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 risk management system are presented below.

2.1 Fundamental features

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 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 risk appetite.

Management and control tools are used in all areas of risk. These tools are subject to continual further development and refinement. The methods used for measuring risk are integrated into the risk management system. Risk model calculations are used to manage the DZ BANK Group.

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

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, 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.

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 in respect of **liquidity** are the minimum liquidity surplus, the liquidity coverage ratio (LCR), and the net stable funding ratio (NSFR). The key risk management figures used in respect of **capital** are economic capital adequacy, the coverage ratio for the financial conglomerate, and the regulatory capital ratios, plus the leverage ratio and the minimum requirement for own funds and eligible liabilities (MREL).

2.3 Management units

Based on the requirements set out in GAS 20.A1.3, this risk report is structured according to **risk type**. The DZ BANK Group is managed using the main types of risk, taking into account particular features relating to DZ BANK and its material subsidiaries (referred to below as **management units**).

All entities in the DZ BANK Group are integrated into the groupwide risk management system. The DZ BANK Group largely comprises the regulatory DZ BANK banking group and R+V. The management units form the core of the financial services group.

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 and 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 integrated into 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.

3 Risk factors

The entities in the DZ BANK Group are exposed to a number of risk factors. These include adverse factors that affect multiple types of risk (**general risk factors**) and **risk factors specific to each type of risk**. Low interest rates, risks to the global economy, economic divergence in the eurozone, and climate change have been identified as general risk factors.

These risk factors were explained in detail in the 2020 risk report. They continued to be of material relevance to the DZ BANK Group in the first six months of this year and apply equally to the second half of 2021. The business risk factor 'switch in interest-rate benchmarks' constitutes an exception. Material changes to the regulatory framework were introduced in this respect in the first half of 2021. The implications of these changes are described in section 12.1.

4 Dealing with the impact of the COVID-19 pandemic

4.1 Relaxation of supervisory requirements
The lowering of the **external minimum targets** for regulatory key figures that was carried out by the supervisory authorities in 2020 continued to apply unchanged in the first half of 2021. The same was true for the lower **internal thresholds** for selected regulatory capital adequacy metrics that were adopted by the Board of Managing Directors of DZ BANK in 2020. The banking supervisor's relaxing of requirements relating to the preparation of a group recovery plan in 2020 was scaled back significantly. In particular, the number of stress scenarios to be prepared increased from one in 2020 to two in the reporting period. Before the start of the COVID-19 pandemic, banks were required to present four stress scenarios to the banking supervisor.

4.2 Risk management measures

The changes to the **risk reporting** (financial and risk radar, CET1 radar, credit risk report) to the Board of Managing Directors of DZ BANK that were made in 2020 due to the COVID-19 pandemic were maintained in the first half of 2021. The same applied to the **stress testing** regarding the impact of the COVID-19 pandemic that was introduced in 2020 and to the associated internal reporting.

The COVID-19 pandemic primarily affected **credit risk** in the Bank sector during the first six months of 2021. Signs recently emerged that pressure is easing as a result of the economic upturn and rising vaccination rates. This was also reflected in improved credit risk metrics. Nonetheless, the credit portfolio of the Bank sector remains subject to **close monitoring**, both at individual borrower level and at sector and country level, as part of the adapted risk reporting.

Ad hoc remeasurements in the first half of 2021 mostly related to **cruise ships** and companies from the **service and automotive sectors**. The quality of the **hotel and department store financing** portfolio of DZ HYP remains stable. Further information on the volume of lending to industries that have been hit particularly hard by the COVID-19 pandemic is provided in section 8.2.

In the first half of 2021, existing customers submitted only a small number of **applications for liquidity support**. To process them, DZ BANK continued to use the support programs of the Federal Republic of Germany provided through Germany's KfW development bank and the development banks of the individual federal states. Applications from borrowers to **defer repayments** declined noticeably in the reporting period after a surge in 2020. Information on the scale of the liquidity support and deferred repayments are also included in section 8.2.

The COVID-19 pandemic may continue to have an adverse impact on credit risk in the Bank sector in the **second half of 2021**. The extent of this impact will depend primarily on the duration and intensity of the pandemic and any measures taken by the government in response. An increase in corporate insolvencies and private bankruptcies could become a source of pressure, although there were no signs of a pronounced increase as at the reporting date.

To ensure that day-to-day operations could continue during the lockdowns that were imposed to contain the pandemic, the entities in the DZ BANK Group made additional technical equipment available to facilitate **remote working**. Medical protective measures and safety plans for enclosed spaces were implemented in order to protect the **health of employees**.

5 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. 3 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. The KPIs are explained in more detail later in this risk report.

FIG. 3 – LIQUIDITY AND CAPITAL ADEQUACY KPIS

	Measured figure		Internal minimum threshold value[1]		External minimum target	
	Jun. 30, 2021	Dec. 31, 2020	2021	2020	2021	2020
LIQUIDITY ADEQUACY						
DZ BANK Group (economic perspective)						
Economic liquidity adequacy (€ billion)[2]	17.8	15.3	4.0	4.0	0.0	0.0
DZ BANK banking group (normative internal perspective)						
Liquidity coverage ratio – LCR (%)[3]	157.2	146.3	110.0	110.0	100.0	100.0
Net stable funding ratio – NSFR (%)	124.9	122.4	105.0		100.0	
CAPITAL ADEQUACY						
DZ BANK Group (economic perspective)						
Economic capital adequacy (%)[4, 5]	185.6	171.7	120.0	120.0	100.0	100.0
DZ BANK financial conglomerate (normative internal perspective)						
Coverage ratio (%)[6]	140.4	146.0	110.0	110.0	100.0	100.0
DZ BANK banking group (normative internal perspective)						
Common equity Tier 1 capital ratio (%)[6, 7]	15.4	15.3	10.0	10.0	9.0	9.0
Tier 1 capital ratio (%)[6, 7]	16.8	17.0	11.9	11.9	10.8	10.8
Total capital ratio (%)[6, 7]	18.7	19.5	14.3	14.3	13.3	13.3
Leverage ratio (%)[6, 8]	7.2	5.7	3.5	3.5	3.26	
MREL ratio (%)[9]	11.0	11.9	8.3	8.3	8.0	8.0

Not available

1 As specified by the Board of Managing Directors.
2 The measured value relates to the stress scenario with the lowest minimum liquidity surplus. The internal minimum target relates to the observation threshold.
3 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.
4 The value measured as at December 31, 2020 takes account of the annual recalculation of the overall solvency requirement. A different value was stated in the 2020 risk report.
5 The internal threshold value is the amber threshold in the traffic light system for managing and monitoring economic capital adequacy.
6 Measured values based on the CRR transitional guidance. In the 2020 risk report, the values stated as at December 31, 2020 were 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 7.2.3.
8 The external minimum target for 2021 applies from June 30, 2021. It is generally 3.0 percent, but was raised to 3.26 percent owing to temporary use of the exemption for balances with central banks. The higher target ends on March 31, 2022.
9 The value as at June 30, 2021 was not available at the time that the interim group management report was prepared by the Board of Managing Directors. The value measured as at March 31, 2021 is therefore shown.

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.

The **solvency** of DZ BANK and its subsidiaries was never in jeopardy at any point 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 2021 and also complied with regulatory requirements for capital adequacy on every reporting date.

6 Liquidity adequacy

6.1 Economic perspective

6.1.1 Quantitative variables

Liquid securities

The available liquid securities have a significant influence on the level of the minimum liquidity surplus. Liquid securities are a component of the **counterbalancing capacity** and are largely held in the portfolios managed by

DZ BANK's Group Treasury and Capital Markets Trading divisions or in the portfolios 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 one-year forecast period that is relevant for liquidity risk.

Securities are only eligible as liquid securities if 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. 4 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, 2021 amounted to €30.7 billion (December 31, 2020: €36.9 billion). The decline in the volume of liquid securities was attributable to their use as pledged collateral under the targeted longer-term refinancing operations (TLTRO) carried out by the European Central Bank (ECB). The main reason for the decline in the first half of the year was the TLTRO III.7 open-market operation entered into with the ECB.

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. 4 – LIQUID SECURITIES

€ billion	Jun. 30, 2021	Dec. 31, 2020
Liquid securities eligible for GC Pooling (ECB Basket)[1]	**16.2**	21.7
Securities in own portfolio	28.3	29.7
Securities received as collateral	20.2	8.5
Securities provided as collateral	-32.2	-16.5
Liquid securities eligible as collateral for central bank loans	**8.0**	9.1
Securities in own portfolio	21.8	20.5
Securities received as collateral	6.9	5.7
Securities provided as collateral	-20.7	-17.2
Other liquid securities	**6.4**	6.1
Securities in own portfolio	6.0	5.7
Securities received as collateral	0.5	0.8
Securities provided as collateral	-0.1	-0.3
Total	**30.7**	**36.9**
Securities in own portfolio	56.1	55.9
Securities received as collateral	27.6	15.0
Securities provided as collateral	-53.0	-33.9

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

Unsecured short- and medium-term funding

Other than liquid securities, the main factors determining the minimum liquidity surplus are the availability and composition of the sources of funding.

The range of funding sources in the unsecured money markets is shown in Fig. 5. The changes in the composition of the sources of funding compared with the end of 2020 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 chapter II.5 in the business report in the interim group management report.

FIG. 5 – UNSECURED SHORT-TERM AND MEDIUM-TERM FUNDING

€ billion	Jun. 30, 2021	Dec. 31, 2020
Local cooperative banks	60.6	61.6
Commercial paper (institutional investors)	10.4	7.5
Corporate customers, institutional customers	21.4	13.2
Interbank, customer banks, central banks	9.8	6.0

6.1.2 Risk position

Economic liquidity adequacy is assured if none of the four stress scenarios with defined limits exhibit a negative value for the key risk indicator 'minimum liquidity surplus'. Fig. 6 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 one year is at its lowest point.

FIG. 6 – 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, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020
Downgrading	-25.6	-31.1	58.2	58.4	32.6	27.4
Corporate crisis	-28.6	-34.2	46.4	49.6	17.8	15.3
Market crisis	-28.8	-32.8	53.4	53.9	24.6	21.1
Combination crisis	-30.4	-35.8	50.0	53.5	19.6	17.7

The liquidity risk value measured as at June 30, 2021 for the stress scenario with defined limits with the lowest minimum liquidity surplus (squeeze scenario) was €17.8 billion (December 31, 2020: €15.3 billion). The increase in the minimum liquidity surplus was largely due to a decrease in the collateral provided.

The risk value as at June 30, 2021 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 2020.

The minimum liquidity surplus as at June 30, 2021 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.

6.2 Normative internal perspective

6.2.1 Liquidity coverage ratio

The LCR for the DZ BANK banking group calculated in accordance with Commission Delegated Regulation (EU) 2015/61 as at June 30, 2021 is shown in Fig. 7.

FIG. 7 – LIQUIDITY COVERAGE RATIO AND ITS COMPONENTS

	Jun. 30, 2021	Dec. 31, 2020
Total liquidity buffer (€ billion)	115.2	91.4
Total net liquidity outflows (€ billion)	73.3	62.5
LCR (%)	**157.2**	**146.3**

The increase in the LCR from 146.3 percent as at December 31, 2020 to 157.2 percent as at June 30, 2021 was largely attributable to the rise in excess cover at DZ BANK, which was mainly due to the issuance of long-term funding instruments and participation in the ECB's three-year tender (TLTRO III.7). Excess cover is the difference between the liquidity buffer and the net liquidity outflows.

Both the internal threshold value (110.0 percent) and the regulatory external minimum target (100.0 percent) were exceeded as at June 30, 2021. In view of the COVID-19 pandemic, the supervisory authorities will tolerate a value that is temporarily below the external minimum target, but the DZ BANK Group did not need to use this option.

6.2.2 Net stable funding ratio

Since June 28, 2021, when CRR II began to apply, the DZ BANK banking group has been obliged to calculate its NSFR. It manages the NSFR within groupwide liquidity risk management. The NSFR is intended to limit mismatches between the maturity structures of assets-side and liabilities-side business. The ratio is the amount of available stable funding (equity and liabilities) relative to the amount of required stable funding (assets-side business). The funding sources are weighted according to their degree of stability and assets are weighted according to their degree of liquidity based on factors defined by the supervisory authority. The NSFR, which has a longer-term focus, complements the LCR, which has a short-term focus.

Fig. 8 shows the DZ BANK banking group's NSFR and its components.

FIG. 8 – NET STABLE FUNDING RATIO AND ITS COMPONENTS

	Jun. 30, 2021	Dec. 31, 2020
Available stable funding (weighted equity and liabilities; € billion)	283.6	268.2
Required stable funding (weighted assets; € billion)	227.0	219.1
Excess cover/shortfall (€ billion)[1]	56.6	49.2
NSFR (%)	**124.9**	**122.4**

1 Excess cover = positive values, shortfall = negative values.

The increase in the NSFR from 122.4 percent as at December 31, 2020 to 124.9 percent as at June 30, 2021 and the related rise in excess cover were primarily due to the higher amount of available stable funding owing to DZ BANK's drawing down of long-term funding in the context of its participation in the ECB's TLTRO III program. The improved NSFR was also attributable to the greater volume of retail customer deposits at subsidiaries. Excess cover in relation to the NSFR is the difference between the available stable funding and the required stable funding.

As at the reporting date, both the internal threshold for the DZ BANK banking group's NSFR of 105.0 percent and the regulatory external minimum target of 100 percent were exceeded at the level of the DZ BANK banking group and DZ BANK.

7 Capital adequacy

7.1 Economic perspective

The annual recalculation of the **overall solvency requirement** took place as at December 31, 2020 owing to scheduled changes to the parameters for the risk measurement procedures carried out in the second quarter of 2021 for the Insurance sector on the basis of R+V's 2020 consolidated financial statements and the updating of actuarial assumptions. 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, 2020 given in this risk report have been restated accordingly and are not directly comparable with the figures in the 2020 risk report.

The DZ BANK Group's **available internal capital** as at June 30, 2021 stood at €31,457 million. The comparable figure as at December 31, 2020 was €30,020 million. The increase in available internal capital compared with December 31, 2020 was primarily due to the positive financial performance of the Bank sector.

The limit derived from the available internal capital was set at €23,588 million as at June 30, 2021 (December 31, 2020: €23,730 million).

As at June 30, 2021, **aggregate risk** was calculated at €16,947 million. The comparable figure as at December 31, 2020 was €17,482 million. The decrease was primarily driven by lower credit risk and market risk in the Bank sector.

As at June 30, 2021, the **economic capital adequacy ratio** for the DZ BANK Group was calculated at 185.6 percent. The comparable figure as at December 31, 2020 was 171.7 percent. As at the reporting date, 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. The internal threshold value and the external minimum target for 2021 are unchanged compared with those for 2020. The increase in the economic capital adequacy ratio compared with the end of 2020 was due to the higher amount of available internal capital and the reduction in aggregate risk.

Fig. 9 provides an overview of economic capital adequacy and its components.

FIG. 9 – ECONOMIC CAPITAL ADEQUACY OF THE DZ BANK GROUP

	Jun. 30, 2021	Dec. 31, 2020
Available internal capital (€ million)[1]	31,457	30,020
Limit (€ million)	23,588	23,730
Aggregate risk (€ million)[1]	16,947	17,482
Economic capital adequacy (%)[1]	**185.6**	**171.7**

1 Value as at December 31, 2020 after recalculation of R+V's overall solvency requirement. Different values were stated in the 2020 risk report.

In the case of the risk types in the Bank sector and Insurance sector, the risk capital requirement also contains any decentralized capital buffer requirement that has been assigned. To simplify matters, only the terms 'risk capital requirement' and 'overall solvency requirement' will be used in the remainder of this risk report. These include the decentralized capital buffer requirement.

The limits and risk capital requirements for the **Bank sector**, broken down by risk type, are shown in Fig. 10.

FIG. 10 – LIMITS AND RISK CAPITAL REQUIREMENTS IN THE BANK SECTOR

	Limit		Risk capital requirement	
€ million	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020
Credit risk	7,188	6,978	5,295	5,496
Equity investment risk	1,220	1,090	956	936
Market risk	5,725	5,725	3,725	4,310
Technical risk of a home savings and loan company[1]	706	550	610	545
Business risk[2]	750	550	438	382
Operational risk	1,020	1,020	914	844
Total (after diversification)	**15,403**	**14,835**	**11,073**	**11,647**

1 Including business risk and reputational risk of BSH.
2 Apart from that of BSH, reputational risk is contained in the risk capital requirement for business risk.

Fig. 11 sets out the limits and overall solvency requirements for the **Insurance sector**, broken down by risk type, and includes policyholder participation.

FIG. 11 – LIMITS AND OVERALL SOLVENCY REQUIREMENTS IN THE INSURANCE SECTOR

	Limit		Overall solvency requirement	
€ million	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020[1]
Life actuarial risk	1,310	1,400	1,043	1,070
Health actuarial risk	420	700	236	293
Non-life actuarial risk	4,900	4,500	3,952	3,780
Market risk	4,500	5,750	3,417	3,511
Counterparty default risk	260	220	186	178
Operational risk	810	800	733	694
Risks from entities in other financial sectors	140	140	124	126
Total (after diversification)	**7,460**	**8,170**	**5,344**	**5,201**

1 Values after recalculation of the overall solvency requirement. Different values were stated in the 2020 risk report.

In addition to the amounts shown in Fig. 10 and Fig. 11, there was a **centralized capital buffer requirement across all types of risk** of €530 million as at June 30, 2021 (December 31, 2020: €633 million). The corresponding **limit** was €725 million as at the reporting date (December 31, 2020: €725 million). The reduction in the central capital buffer requirement was predominantly due to DVB's business risk being transferred to the decentralized capital buffer requirement.

7.2 Normative internal perspective

7.2.1 Calculation method for the regulatory capital ratios

Until the end of 2020, the internal management of the regulatory capital adequacy of the DZ BANK banking group and thus the DZ BANK financial conglomerate was based on full application of the CRR. At the start of 2021, internal management was switched to the CRR transitional guidance (Regulation (EU) No. 575/2013). As a result, the values in this risk report have been calculated in accordance with the CRR transitional guidance. To ensure the comparability of the key figures shown as at the reporting date with the prior-year figures based on full application of the CRR, the figures as at December 31, 2020 shown in sections 7.2.2 and 7.2.3 are in accordance with the changed calculation method. This means that they differ from the corresponding disclosures in the 2020 risk report.

7.2.2 DZ BANK financial conglomerate

The DZ BANK financial conglomerate comprises the DZ BANK banking group and the R+V Versicherung AG insurance group. The changes in the coverage ratio and in the own funds and solvency requirements of the DZ BANK financial conglomerate are shown in Fig. 12.

FIG. 12 – COMPONENTS OF REGULATORY CAPITAL ADEQUACY OF THE DZ BANK FINANCIAL CONGLOMERATE

	Jun. 30, 2021	Dec. 31, 2020[1]
Own funds (€ million)	34,713	35,805
Solvency requirements (€ million)[2]	24,724	24,516
Coverage ratio (%)	**140.4**	**146.0**

1 Final figures. Preliminary figures were stated in the 2020 risk report.
2 The values for the DZ BANK banking group included in the solvency requirements were determined in accordance with the CRR transitional guidance.

The decrease in the coverage ratio calculated for the DZ BANK financial conglomerate from 146.0 percent as at December 31, 2020 to 140.4 percent as at June 30, 2021 was attributable, in particular, to the reduction in own funds. By contrast, the DZ BANK financial conglomerate's solvency requirements increased. The change in the coverage ratio is attributable to effects in the DZ BANK banking group and in the R+V Versicherung AG insurance group (for details, see section 7.2.3 and section 7.2.4 of this risk report).

The coverage ratio calculated for the financial conglomerate as at June 30, 2021 was higher than both the internal threshold value (110.0 percent) and the external minimum target (100.0 percent). According to current projections, the requirements are also expected to be satisfied in the second half of the year.

7.2.3 DZ BANK banking group

Regulatory capital ratios

The regulatory **own funds** as at June 30, 2021 determined in accordance with the CRR transitional guidance amounted to a total of €27,857 million (December 31, 2020: €28,669 million). This equates to a decline in own funds of €812 million compared with the end of 2020, comprising an increase in common equity Tier 1 capital of €432 million, a decrease in additional Tier 1 capital of €425 million, and a decrease in Tier 2 capital of €819 million.

The increase in **common equity Tier 1 capital** was primarily due to the interim profit of €552 million calculated in accordance with article 26 (2) CRR and the €52 million rise in other reserves. This was partly offset by a €231 million decrease in cumulative other comprehensive income.

Tier 2 capital declined from €3,591 million as at December 31, 2020 to €2,772 million as at June 30, 2021, a decrease of €819 million. This was essentially due to non-CRR-compliant common equity Tier 1 capital instruments of €918 million no longer being eligible, whereas they had been partly included in Tier 2 capital under the CRR transitional guidance until December 31, 2020. The decrease in Tier 2 capital was also attributable to the reduced level of eligibility under CRR rules for own funds instruments in the last five years before their maturity date. This was partly offset by an inflow of capital of €215 million as a result of new Tier 2 instruments being issued.

Risk-weighted assets went up from €147,173 million as at December 31, 2020 to €149,208 million as at June 30, 2021, a rise of €2,035 million that comprised two opposing effects. On the one hand, credit risk increased as a result of the CRR II rules being applied for the first time with effect from June 28, 2021, in particular the new standardized approach to measuring the counterparty risk of derivative financial transactions. Conversely, market risk declined because the market scenarios that materialized in spring 2020 in the context of the COVID-19 pandemic were no longer included in the historical observation period used in the market risk model.

As at June 30, 2021, the **common equity Tier 1 capital ratio** was 15.4 percent and therefore higher than the ratio of 15.3 percent at the end of 2020. The **Tier 1 capital ratio** of 16.8 percent calculated as at the reporting date was lower than the figure of 17.0 percent as at December 31, 2020. The **total capital ratio** also went down, from 19.5 percent as at December 31, 2020 to 18.7 percent as at the reporting date.

Fig. 13 provides an overview of the DZ BANK banking group's regulatory capital ratios.

FIG. 13 – REGULATORY CAPITAL RATIOS[1]

	Jun. 30, 2021	Dec. 31, 2020[2]
Capital		
Common equity Tier 1 capital (€ million)	22,908	22,476
Additional Tier 1 capital (€ million)	2,177	2,602
Tier 1 capital (€ million)	**25,085**	**25,078**
Total Tier 2 capital (€ million)	2,772	3,591
Own funds (€ million)	**27,857**	**28,669**
Risk-weighted assets		
Credit risk including long-term equity investments (€ million)	131,069	128,177
Market risk (€ million)	7,652	8,388
Operational risk (€ million)	10,487	10,608
Total (€ million)	**149,208**	**147,173**
Capital ratios		
Common equity Tier 1 capital ratio (%)	15.4	15.3
Tier 1 capital ratio (%)	16.8	17.0
Total capital ratio (%)	18.7	19.5

1 In accordance with the CRR transitional guidance.
2 In the 2020 risk report, the values stated as at December 31, 2020 were based on full application of the CRR.

Regulatory minimum capital requirements specified by the SREP

The mandatory minimum capital requirements relevant to the DZ BANK banking group, as specified by the requirements of the Supervisory Review and Evaluation Process for Basel Pillar 2 (SREP), and their components are shown in Fig. 14.

FIG. 14 – REGULATORY MINIMUM CAPITAL REQUIREMENTS ACCORDING TO SREP

%	2021	2020
Minimum requirement for common equity Tier 1 capital	4.50	4.50
Additional Pillar 2 capital requirement	0.98	0.98
Capital conservation buffer	2.50	2.50
Countercyclical capital buffer[1]	0.02	0.01
O-SII capital buffer	1.00	1.00
Mandatory minimum requirement for common equity Tier 1 capital	**9.01**	**9.00**
Minimum requirement for additional Tier 1 capital	1.50	1.50
Additional Pillar 2 capital requirement	0.33	0.33
Mandatory minimum requirement for Tier 1 capital	**10.84**	**10.82**
Minimum requirement for Tier 2 capital[2]	2.00	2.00
Additional Pillar 2 capital requirement	0.44	0.44
Mandatory minimum requirement for total capital	**13.27**	**13.26**

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 2021 and 2020 relate solely to the reporting dates of June 30, 2021 and December 31, 2020 respectively.
2 The minimum requirement can also be satisfied with common equity Tier 1 capital.

Relaxation of the minimum capital requirements in response 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 one of the three thresholds for the maximum distributable amount can no longer be met, the rules regarding the limits for distributions continue to apply. Consequently, DZ BANK does not use the aforementioned relief measures and they are not taken into account in Fig. 14.

Because of the COVID-19 pandemic, the supervisory authorities in some countries reduced the capital buffer rates used to calculate the countercyclical capital buffer, which is another part of the mandatory minimum capital requirements. In some cases, the authorities lowered the rates 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). These reduced capital buffer rates for Germany and other countries are factored into the calculation of the institution-specific countercyclical capital buffer rate. DZ BANK is therefore obliged to apply them.

Banks are also temporarily permitted to not comply with the **Pillar 2 capital recommendation** without this having any impact on a possible distribution. DZ BANK does not currently exercise this option.

Compliance with the minimum capital requirements

The **internal threshold values** and **external minimum targets** applicable to the DZ BANK banking group for the common equity Tier 1 capital ratio, the Tier 1 capital ratio, and the total capital ratio were exceeded as at June 30, 2021. According to current projections, this will also be the case at the end of 2021. The internal threshold values are shown in Fig. 3.

Leverage ratio

The leverage ratio of the DZ BANK banking group determined in accordance with the CRR transitional guidance went up by 1.5 percentage points from 5.7 percent as at December 31, 2020 to 7.2 percent as at June 30, 2021.

This increase was mainly the result of applying the CRR II rules for the first time with effect from June 28, 2021. It was primarily attributable to the introduction of the exemption from the total exposure for exposures within the cooperative financial network. This means that domestic loans and advances to members of the protection scheme of the Bundesverband der Deutschen Volksbanken und Raiffeisenbanken (BVR) [National Association of German Cooperative Banks] no longer have to be included. The resulting mitigating effect amounted to €103.1 billion.

At the same time, the exempted amount for balances with central banks rose by €31.3 billion. This exemption had originally applied until June 27, 2021 but was extended by the banking supervisor until March 31, 2022.

The main countervailing effects were increases in DZ BANK's securities financing transaction (SFTs) that are not settled centrally and the growth of on-balance-sheet business.

As at June 30, 2021, the banking supervisor introduced a binding **external minimum target** of 3.0 percent in connection with initial application of CRR II. Because the DZ BANK banking group is applying the aforementioned temporary exemption for balances with central banks, this external minimum target has temporarily increased to 3.26 percent. The higher target ends on March 31, 2022.

Both the **internal threshold value** of 3.5 percent for the leverage ratio and the **external minimum target** of 3.26 percent specified by the banking regulator since June 28, 2021 were exceeded as at June 30, 2021. Based on current projections, it is expected that these minimum requirements will also be satisfied in the second half of the year.

Minimum requirement for own funds and eligible liabilities (MREL)

The **MREL ratio** measured for the DZ BANK banking group was 11.0 percent as at March 31, 2021 (December 31, 2020: 11.9 percent). The latest MREL ratio relates to March 31, 2021 because the figure as at June 30, 2021 was not yet available at the time that the interim group management report was prepared by the Board of Managing Directors. The fall in the ratio compared with the figure at the end of 2020 was attributable to the decrease in own funds and a significant increase in total assets on the back of secured borrowing in the money markets.

As at the reporting date, the MREL ratio was higher than the **internal threshold value** of 8.3 percent and the **external minimum target** of 8.0 percent. Based on current projections, it is expected that these requirements will also be satisfied in the second half of the year.

7.2.4 R+V Versicherung AG insurance group

The R+V Versicherung AG insurance group met the regulatory solvency requirements under Solvency II as at June 30, 2021.

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, 2021.

Bank sector

8 Credit risk

8.1 Lending volume

8.1.1 Asset class structure of the credit portfolio

The reporting to the Board of Managing Directors on concentrations of credit risk includes a presentation of the Bank sector's credit portfolio broken down by asset class. This is done by dividing the credit portfolio into business-related homogeneous segments on the basis of characteristics such as industry code to reflect the sector, product type, and the rating system used to determine the credit rating. The characteristics are selected in such a way that the segments are subject to uniform risk drivers. The presentation of asset classes replaces the sectoral presentation used in this section in the 2020 risk report, which was based solely on sector classification.

Fig. 15 shows the breakdown of the credit portfolio by asset class.

FIG. 15 – BANK SECTOR: LENDING VOLUME, BY ASSET CLASS

€ billion	Jun. 30, 2021	Dec. 31, 2020
Entities within the cooperative financial network	119.1	115.1
Financials	41.5	40.3
Corporates	64.7	65.2
Asset-based lending/project finance	12.6	13.5
Public sector	49.6	51.7
Real estate (commercial and retail customers)	114.9	111.7
Retail business (excluding real estate customers)	16.0	15.8
ABSs and ABCPs	7.3	7.5
Other	2.2	1.7
Total	**427.9**	**422.6**

The total lending volume in the Bank sector increased by 1 percent in the first half of the year, from €422.6 billion as at December 31, 2020 to €427.9 billion as at June 30, 2021. The rise in the lending volume was mainly due to an increase in volume in the specialized service providers within the cooperative sector and real estate asset classes, which went up by €4.0 billion and €3.2 billion respectively compared with the end of 2020. DZ BANK accounted for most of the increase, which was driven by lending business with entities in the cooperative financial network and by liquidity support provided under government financing programs to cushion the consequences of the COVID-19 pandemic (see section 8.2). The increase in the real estate asset class was mainly attributable to real estate finance transactions with retail customers of BSH and DZ HYP.

As at June 30, 2021, a significant proportion (38 percent) of the lending volume was concentrated in the financial sector (December 31, 2020: 37 percent). In addition to the local cooperative banks, the borrowers in this customer segment comprised banks from other sectors 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.

8.1.2 Geographical structure of the credit portfolio

Fig. 16 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.

FIG. 16 – BANK SECTOR: LENDING VOLUME, BY COUNTRY GROUP

€ billion	Jun. 30, 2021	Dec. 31, 2020
Germany	356.8	351.6
Other industrialized countries	56.8	57.4
of which: France	8.3	7.1
of which: USA	8.3	8.7
of which: Netherlands	5.2	5.6
Advanced economies	2.2	2.2
Emerging markets	8.7	8.3
Supranational institutions	3.3	3.0
Total	**427.9**	**422.6**

As at June 30, 2021, 97 percent of the total lending volume was concentrated in Germany and other industrialized countries, which was the same percentage as at December 31, 2020.

8.1.3 Residual maturity structure of the credit portfolio

The breakdown of the credit portfolio by residual maturity as at June 30, 2021 presented in Fig. 17 shows that the lending volume had decreased by €0.9 billion in the short-term maturity band compared with December 31, 2020. This was attributable to BSH, DVB, and DZ HYP. By contrast, there was an increase of €2.6 billion in the medium-term maturity band that was attributable to DZ BANK. BSH and DZ BANK were primarily responsible for the rise of €3.5 billion in the lending volume in the long-term maturity band.

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

€ billion	Jun. 30, 2021	Dec. 31, 2020
≤ 1 year	100.8	101.7
> 1 year to ≤ 5 years	106.4	103.8
> 5 years	220.7	217.2
Total	**427.9**	**422.6**

8.1.4 Rating structure of the credit portfolio

Fig. 18 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 85 percent as at June 30, 2021 (December 31, 2020: 79 percent). Rating classes 3B to 4E (non-investment grade) represented 14 percent of the total lending volume as at the reporting date (December 31, 2020: 19 percent). Defaults, represented by rating classes 5A to 5E, accounted for 1 percent of the total lending volume as at June 30, 2021, which was unchanged compared with the end of 2020.

FIG. 18 – BANK SECTOR: LENDING VOLUME, BY RATING CLASS

€ billion		Jun. 30, 2021	Dec. 31, 2020
Investment grade	1A	37.9	39.8
	1B	7.3	5.3
	1C	130.7	127.2
	1D	14.1	12.7
	1E	14.3	15.9
	2A	16.0	15.3
	2B	24.7	24.2
	2C	24.2	17.6
	2D	30.2	21.1
	2E	37.4	27.5
	3A	25.2	27.3
Non-investment grade	3B	17.6	25.4
	3C	14.6	22.2
	3D	9.6	14.5
	3E	6.5	7.4
	4A	2.8	4.6
	4B	3.4	3.5
	4C	2.2	1.5
	4D	0.7	0.7
	4E	1.9	1.8
Default		3.7	4.4
Not rated		3.0	2.7
Total		**427.9**	**422.6**

The increase in the investment-grade proportion of the lending volume was mainly due to updates to the rating systems at BSH. The methodology change resulted in a reduction in default rates and thus an improvement in the credit ratings in BSH's credit portfolio. There was a countervailing effect as a result of updates to the model used by BSH to determine loss given default (LGD) that led to an increase in the LGD. The two effects largely offset each other at the level of the expected loss.

As at June 30, 2021, the **ten counterparties associated with the largest lending volumes** accounted for 5 percent of the total lending volume (December 31, 2020: 6 percent). These counterparties largely comprised borrowers from the public-sector domiciled in Germany and from the financial sector (including the cooperative banks) with investment-grade ratings.

8.1.5 Collateralized lending volume

Fig. 19 shows the breakdown of the collateralized lending volume at overall portfolio level by type of collateral. The total collateral value had risen to €130.4 billion as at June 30, 2021, compared with €128.0 billion as at December 31, 2020. The collateralization rate of 37.7 percent as at the reporting date was the same as it had been at the end of 2020.

FIG. 19 – BANK SECTOR: COLLATERAL VALUE, BY TYPE OF COLLATERAL

€ billion	Jun. 30, 2021	Dec. 31, 2020
Guarantees, indemnities, risk subparticipation	7.2	7.4
Credit insurance	4.6	4.2
Land charges, mortgages, registered ship and aircraft mortgages	114.0	111.4
Pledged loans and advances, assignments, other pledged assets	2.9	2.8
Financial collateral	1.5	1.9
Other collateral	0.2	0.3
Total collateral	**130.4**	**128.0**
Lending volume	345.9	339.6
Uncollateralized lending volume	**215.5**	**211.6**
Collateralization rate (%)	**37.7**	**37.7**

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.

8.1.6 Securitizations

Within the securitizations business, the entities in the Bank sector act in different capacities, for example as investors in asset-backed security (ABS) portfolios, sponsors of asset-backed commercial paper (ABCP) programs, or sponsors of on-balance-sheet receivables purchasing programs.

The Bank sector's ABS portfolio, in which its entities act as **investors**, is predominantly held by DZ BANK and DZ HYP. This portfolio had a nominal amount of €2,252 million as at the reporting date (December 31, 2020: €2,368 million). The fall in the nominal amount was mainly attributable to redemptions in the wind-down portfolio. The COVID-19 pandemic also led to a lower level of ABS trading. The highest internal rating class 1A accounted for 61 percent of the nominal amount as at June 30, 2021 (December 31, 2020: 60 percent). The investment-grade proportion of the nominal amount of 91 percent was the same as it had been at the end of 2020.

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 €810 million (December 31, 2020: €918 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 ABCP or liquidity lines. The ABCP programs are made available for customers who then securitize their own assets via these companies. As at June 30, 2021, the securitization exposures arising from DZ BANK's activities in which it acts as a sponsor amounted to €1,804 million (December 31, 2020: €1,703 million). The increase in the securitization exposures was due to new business and to fluctuations in the drawdown of liquidity lines.

DZ BANK also sponsors a **program for the purchase of commercial customer receivables**, the aim of which is to generate fee and commission income. The purchased receivables predominantly consist of invoice receivables and receivables arising from agreements for payment by installment. The provisions in the master agreements for this purchase program are designed such that division of the credit risk into two or more tranches is agreed between the seller of the assets and DZ BANK at the time that the assets are purchased. As at June 30, 2021, DZ BANK's securitization exposure arising from the purchase of receivables amounted to €456 million (December 31, 2020: €279 million). The growth of the exposure arose because new business exceeded the settlement of receivables in existing transactions.

8.2 Credit portfolios particularly affected by the COVID-19 pandemic

The following sections describe credit portfolios in which the effects of the COVID-19 pandemic were more noticeable than in the rest of the credit portfolios. However, no significantly heightened risk was as yet evident in connection with the exposures in the affected portfolios as at the reporting date. They are described solely for reasons of transparency. The figures presented below are included in the disclosures for the lending volume as a whole (see section 8.1 of this risk report).

The **automotive sector** is in a state of upheaval and faced with a number of issues, notably low margins and huge capital requirements. The COVID-19 pandemic is amplifying the pressure created by the transformation process. Supply shortages in many plants are currently resulting in production outages. **DZ BANK's** automotive finance portfolio, which is assigned to the corporates segment, is still deemed to be stable with a good credit quality despite pandemic-related rating downgrades for a few counterparties and a comparatively high NPL ratio of 5.8 percent as at June 30, 2021 (DZ BANK as a whole: 0.8 percent). This was also attributable to the stabilization resulting from government support and buyers' incentives for individual segments of the automotive industry and to the general recovery of demand. The volume of lending in the Bank sector's automotive finance portfolio came to €4.7 billion as at June 30, 2021 (December 31, 2020: €4.5 billion).

DZ HYP's lending business with corporates includes financing for **hotels and department stores**. In view of the potential evolution of the pandemic and the measures initiated to contain it, DZ HYP came to the conclusion in the first half of 2021 that there was still heightened uncertainty in relation to the operating activities of these businesses. A gradual return to normal business operations is expected following the easing of containment measures that has been taking place since May 2021. DZ HYP did not identify any notable negative impact on individual exposures as a result of the pandemic as at the reporting date. As at June 30, 2021, the volume of corporate loans extended by DZ HYP amounted to €46.6 billion (December 31, 2020: €46.4 billion). Of this total, €2.6 billion (December 31, 2020: €2.8 billion) related to hotel financing and €0.3 billion (December 31, 2020: €0.6 billion) to department store financing.

The **tourist cruise ship business**, for which **DZ BANK** provides funding, was also significantly impacted by the COVID-19 pandemic. The effects on cruise ship financing operations and on the financing of cruise ship building are described in section 8.3.3.

In the first six months of 2021, the entities in the Bank sector granted existing customers **liquidity support** amounting to approximately €2.5 billion as part of the government support measures introduced to mitigate the consequences of the COVID-19 pandemic for borrowers (2020: approximately €9 billion). The volume declined owing to the improvement in the pandemic situation. These activities mainly concerned DZ BANK, although VR Smart Finanz was also involved to a lesser extent. At DZ BANK, these activities also included the provision of liquidity support under government financing programs; it worked together with the local cooperative banks to pass on this support to their customers.

In the Bank sector, relief measures in the form of **payment deferrals and other credit contract modifications** were again granted to borrowers in the reporting period to help them cope with the consequences of the pandemic. These included voluntary assistance, statutory requirements, and measures put in place by the Verband der Privaten Bausparkassen e.V. [Association of Private Bausparkassen]. The latter had expired in full by the reporting date. The relief measures were mainly introduced by DZ BANK and BSH. The total lending volume involved stood at €2.8 billion as at June 30, 2021 (December 31, 2020: €4.2 billion). Again, the decrease was due to the easing of the COVID-19 pandemic during the first half of the year.

8.3 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 below are included in the above analyses of the lending volume as a whole (see section 8.1 of this risk report).

8.3.1 Loans and advances to borrowers in eurozone periphery countries

As at June 30, 2021, loans and advances to borrowers in the countries directly affected by the **economic divergence in the eurozone** amounted to €6,917 million (December 31, 2020: €7,276 million). This mainly consisted of securities business. The decrease was mainly due to reductions in fair value and to disposals and maturities at DZ HYP.

Fig. 20 shows the borrower structures in the eurozone periphery countries.

FIG. 20 – BANK SECTOR: LOANS AND ADVANCES TO BORROWERS IN EUROZONE PERIPHERY COUNTRIES[1]

€ million	Jun. 30, 2021	Dec. 31, 2020
Portugal	**918**	**1,150**
of which: public sector	829	1,057
of which: non-public sector	89	93
of which: financial sector	-	-
Italy	**3,158**	**3,181**
of which: public sector	2,826	2,929
of which: non-public sector	331	252
of which: financial sector	89	100
Spain	**2,841**	**2,945**
of which: public sector	1,878	2,022
of which: non-public sector	963	922
of which: financial sector	387	321
Total	**6,917**	**7,276**
of which: public sector	5,534	6,008
of which: non-public sector	1,383	1,268
of which: financial sector	476	421

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

8.3.2 Shipping finance

Significance for the Bank sector

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, the finance must 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 cruise ships and cruise ship building (see section 8.3.3).

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**.

As at June 30, 2021, the main segments of the shipping finance business at **DVB** included tankers, bulk carriers, and container ships, which accounted for 51 percent (December 31, 2020: 49 percent), 30 percent (December 31, 2020: 31 percent), and 7 percent (December 31, 2020: 10 percent) of the shipping finance portfolio respectively.

DZ BANK finances ships as part of its joint credit business with the local cooperative banks.

Industry situation

The recovery of the container and bulk carrier segments that emerged in the fourth quarter of 2020 continued in the first six months of this year. Demand currently exceeds supply, especially in the container ship segment, which means that charter rates have risen to record highs. A similar rebound is not evident in the tanker segment or in inland tanker shipping. However, demand for crude oil began to increase in the second quarter, so a recovery is likely in the medium term. Both asset values and customer credit quality remain under pressure to varying degrees, depending on the market segment. Consequently, the sustainability of the positive trends in some areas of the shipping markets will only become clear in the coming months.

Lending volume

As at June 30, 2021, the **Bank sector's** shipping finance portfolio had a total volume of €2,658 million (December 31, 2020: €3,698 million). The breakdown of the lending volume between the two management units as at June 30, 2021 was as follows (corresponding figures as at December 31, 2020 in parentheses):

- **DVB**: €2,090 million (€3,123 million)
- **DZ BANK**: €568 million (€575 million).

DVB's lending volume related to shipping finance amounted to €2,090 million as at June 30, 2021 (December 31, 2020: €3,123 million). Of this amount, €289 million was attributable to closely monitored exposures (December 31, 2020: €507 million). The decrease in the overall volume was due to the continued scaling back of the portfolio, a substantial proportion of which consists of closely monitored exposures.

As at June 30, 2021, the closely monitored portion of DVB's shipping finance portfolio included 48 financed vessels (December 31, 2020: 66 financed vessels). The average exposure as at the reporting date was €16 million (December 31, 2020: €23 million) and the largest single exposure was €40 million (December 31, 2020: €71 million).

The lending volume in **DZ BANK's** entire shipping finance portfolio as at June 30, 2021 amounted to €568 million (December 31, 2020: €575 million). Of this amount, €244 million was attributable to exposures closely monitored on the basis of watch and default lists (December 31, 2020: €253 million). As in 2020, DZ BANK's shipping finance portfolio in the reporting period was mainly concentrated in Germany but broadly diversified by type of vessel, borrower, charterer, and shipping activity.

8.3.3 Finance for cruise ships and cruise ship building

Cruise ship finance is brought together under **DZ BANK** in the Bank sector. Because global cruise ship operations remain at an almost total standstill as a result of the COVID-19 pandemic, borrowers' credit quality continued to deteriorate in the first half of 2021 and their credit ratings were again downgraded. In an industry-wide memorandum, the suspension of loan repayments covered by export credit insurance was extended until March 2022, having originally been due to expire in March 2021. The industry's prospects are now slowly beginning to brighten thanks to the increased containment of the pandemic as a result of vaccination programs. However, the situation remains difficult.

As at June 30, 2021, the volume of cruise ship finance amounted to €1,110 million (December 31, 2020: €1,099 million). Of this total, €652 million was covered by export credit insurance as at June 30, 2021 (December 31, 2020: €645 million). The proportion of the lending volume that was not covered predominantly consisted of working capital facilities and support for an acquisition finance transaction.

A distinction is made between cruise ship finance and the **financing of cruise ship building**. This segment, which likewise only affects **DZ BANK** in the Bank sector, is currently undergoing consolidation. In consultation with the parties ordering cruise ships, the order book has been stretched out, thereby ensuring a basic level of capacity utilization in the next few years. However, the shipyards that build cruise ships face the challenge of significantly reducing their production capacity and workforce capacity. Customers' credit quality is expected to remain under pressure in the coming financial year, which is why the subportfolio is classified as a portfolio with increased risk content. The lending volume related to the financing of cruise ship building stood at €266 million as at June 30, 2021 (December 31, 2020: €410 million). The decrease was due to the fall in traditional lending business.

8.3.4 Offshore finance

Within the Bank sector, only **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.

Despite the increase in the oil price, the situation in the offshore markets has not improved significantly compared with 2020. The main reason for this is that oil extraction companies are only implementing projects with low break-even prices for the time being. Establishing new offshore projects is expensive and necessitates a sustained high level of oil prices, which means that such projects have a relatively high break-even point. A lasting market recovery is not expected in the short term because there is still an excess supply of laid-up ships. Another consequence of this is that the market values of the ships are likely to remain under pressure.

As at June 30, 2021, the lending volume in DVB's offshore finance business amounted to €352 million (December 31, 2020: €594 million). Of this total, €174 million was backed by collateral as at June 30, 2021 (December 31, 2020: €317 million).

8.4 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.

As at June 30, 2021, the volume of non-performing loans in the Bank sector had fallen to €3.7 billion from €4.4 billion as at December 31, 2020, mainly owing to the scaling back of the portfolio at DVB. As a result of this decrease, the NPL ratio went down from 1.0 percent to 0.9 percent.

Fig. 21 shows key figures relating to the volume of non-performing loans.

FIG. 21 – BANK SECTOR: KEY FIGURES FOR THE VOLUME OF NON-PERFORMING LOANS

	Jun. 30, 2021	Dec. 31, 2020
Total lending volume (€ billion)	427.9	422.6
Volume of non-performing loans (€ billion)[1]	3.7	4.4
Balance of loss allowances (€ billion)[2]	1.6	2.0
Coverage ratio (%)[3]	80.0	81.0
NPL ratio (%)[4]	0.9	1.0

1 Volume of non-performing loans excluding collateral.
2 IFRS specific loan loss allowances at stage 3, including provisions.
3 Loss allowances as specified in footnote 2, plus collateral, as a proportion of the volume of non-performing loans.
4 Volume of non-performing loans as a proportion of total lending volume.

8.5 Risk position

8.5.1 Risks in the entire credit portfolio

The risk capital 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, 2021, the risk capital requirement amounted to €5,295 million (December 31, 2020: €5,496 million) with a limit of €7,188 million (December 31, 2020: €6,978 million). The decrease was mainly due to a change in the calculation of the risk capital requirement at BSH and the ongoing reduction of the portfolio at DVB.

Fig. 22 shows the credit value-at-risk together with the average probability of default and expected loss.

FIG. 22 – BANK SECTOR: FACTORS DETERMINING THE CREDIT VALUE-AT-RISK

	Average probability of default (%)		Expected loss (€ million)		Credit value-at-risk[1] (€ million)	
	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020
Traditional lending business	0.5	0.5	436	430	2,416	2,547
Securities business	0.2	0.2	47	48	1,621	1,757
Derivatives and money market business	0.2	0.2	15	14	278	262
Total			**497**	492	**4,315**	4,565
Average	**0.4**	0.4				

1 As it is not possible to show the risk capital requirement including the capital buffer requirement in the analysis of credit-risk-bearing instruments, the risk capital requirement is presented without the capital buffer requirement.

8.5.2 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. 23.

FIG. 23 – BANK SECTOR: CREDIT VALUE-AT-RISK[1] FOR CREDIT PORTFOLIOS WITH INCREASED RISK CONTENT

€ million	Jun. 30, 2021	Dec. 31, 2020
Eurozone periphery countries	1,213	1,255
Shipping finance	164	248
Cruise ship finance	18	15
Finance for cruise ship building	2	2
Offshore finance	7	25

1 Excluding decentralized capital buffer requirement.

The decline in the credit value-at-risk for the Bank sector entities' exposure in the **peripheral countries of the eurozone** was in line with the change in the loans and advances to borrowers in these countries.

As at June 30, 2021, the credit value-at-risk for **shipping finance** amounted to €164 million (December 31, 2020: €248 million) and was mainly attributable to DVB. The decrease compared with the end of 2020 was due to the reduction of the portfolio.

The decline in the credit value-at-risk for **offshore finance** compared with the end of 2020 was caused by the scaling back of this business operated by DVB in line with the strategy.

9 Equity investment risk

The **carrying amounts of long-term equity investments** relevant for the measurement of equity investment risk amounted to €2,906 million as at June 30, 2021 (December 31, 2020: €2,893 million).

The **risk capital requirement** for equity investment risk was calculated to be €956 million as at the reporting date (December 31, 2020: €936 million). The **limit** was €1,220 million (December 31, 2020: €1,090 million).

10 Market risk

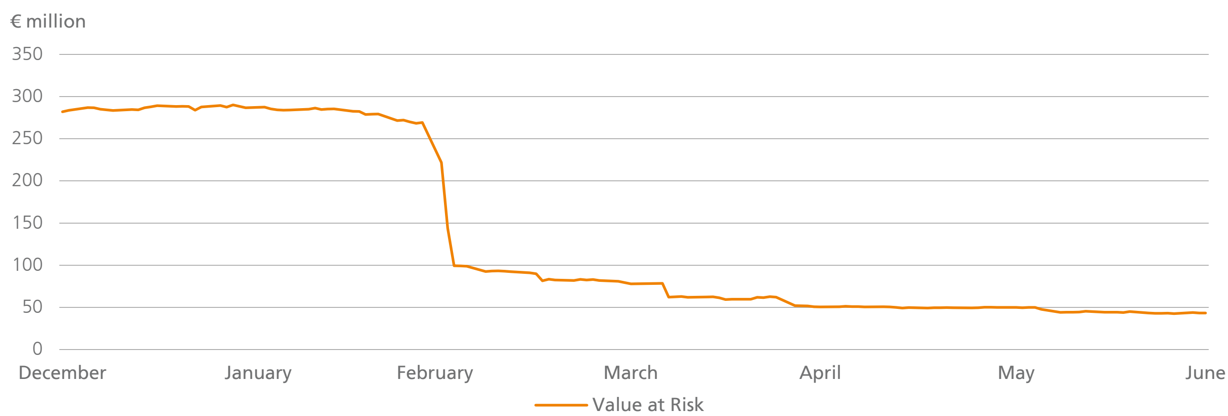
Fig. 24 shows the average, maximum, and minimum **values-at-risk** measured over the first half of the year, including a further breakdown by type of market risk. In addition, Fig. 25 shows the change in market risk by trading day in the reporting period. In both figures, the value-at-risk relates to the trading and banking books for regulatory purposes.

FIG. 24 – BANK SECTOR: CHANGE IN MARKET RISK BY TYPE OF RISK[1, 2, 3]

€ million	Interest-rate risk	Spread risk	Equity risk[4]	Currency risk	Commodity risk	Diversification effect[5]	Total
Jun. 30, 2021	**8**	**46**	**9**	**3**	**2**	**-24**	**43**
Average	13	135	15	3	2	-33	136
Maximum	20	291	32	4	3	-60	290
Minimum	7	45	7	2	2	-20	43
Dec. 31, 2020	**17**	**283**	**29**	**3**	**3**	**-52**	**282**

1 The disclosures relate to general market risk and spread risk. A value-at-risk is not determined for asset-management risk.
2 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.
3 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.
4 Including funds, if not broken down into constituent parts.
5 Total effects of diversification between the types of market risk for all consolidated management units.

FIG. 25 – BANK SECTOR: CHANGE IN MARKET RISK BY TRADING DAY[1]



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.

The value-at-risk for the **interest-rate risk in the banking book for regulatory purposes** amounted to €7 million as at June 30, 2021 (December 31, 2020: €19 million).

As at June 30, 2021, the **risk capital requirement** for market risk amounted to €3,725 million (December 31, 2020: €4,310 million) with a **limit** of €5,725 million that was unchanged compared with the end of 2020.

Market risk declined because the market scenarios that materialized in spring 2020 in the context of the COVID-19 pandemic were no longer included in the historical observation period used in the calculation of risk.

The Bank sector's risk capital requirement encompasses the **asset-management risk** of **UMH**. The asset-management risk of the Bank sector as at June 30, 2021 amounted to €350 million (December 31, 2020: €319 million). The increase in risk was primarily attributable to a change to the calculation of risk.

11 Technical risk of a home savings and loan company

As at June 30, 2021, the **capital requirement** for the technical risk of a home savings and loan company amounted to €610 million (December 31, 2020: €545 million) with a **limit** of €706 million (December 31, 2020: €550 million). The increase in risk and the higher limit were primarily attributable to a change to the calculation of risk.

12 Business risk and reputational risk

12.1 Risk factors

The regulatory background to the business risk factor '**switch in interest-rate benchmarks**' was explained in section 10.3.1 of the 2020 risk report. In addition to that information, the following paragraphs set out the main changes that occurred in the first half of 2021.

The Financial Conduct Authority, which is responsible for regulating interest-rate benchmarks in the United Kingdom, has published the announcement of ICE Benchmark Administration (the administrator engaged by the UK government to manage Libor), according to which the Libor settings in Swiss francs, pound sterling, Japanese yen, and euros will be discontinued at the end of 2021. From this date, the aforementioned Libor settings will no longer be deemed representative by the supervisory authorities. US dollar Libor will be discontinued on June 30, 2023. In the period January 1, 2022 to June 30, 2023, US dollar Libor will continue to be available for existing business.

The extension of the deadline for US dollar Libor offers significant relief to the entities in the Bank sector because they will now have more flexibility regarding timing for the required changeover of the affected contracts to successor interest-rate benchmarks. This reduces the risk that the affected transactions of the entities in the Bank sector will be adversely affected by a late or delayed changeover to an alternative interest-rate benchmark.

12.2 Risk position

As at June 30, 2021, the **risk capital requirement** for business risk (including reputational risk) amounted to €438 million (December 31, 2020: €382 million). The **limit** was €750 million as at the reporting date (December 31, 2020: €550 million). The increase in risk and the higher limit were predominantly due to DVB's risk being transferred from the centralized to the decentralized capital buffer requirement.

13 Operational risk

13.1 Losses

Losses from operational risk do not follow a consistent pattern. 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. Over the course of time, regular fluctuations are evident 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 four quarters and on the basis of the date on which the expense is recognized in the income statement.

Fig. 26 shows the internal net losses from loss events reported in the last four quarters, i.e. in the period from July 1, 2020 to June 30, 2021, classified by operational risk subtype.

FIG. 26 – BANK SECTOR: NET LOSSES[1] BY OPERATIONAL RISK SUBTYPE

Proportion of total net losses (%)	Jul. 1, 2020– Jun. 30, 2021	Long-term mean[2]
Compliance risk	35.3	45.2
Legal risk	43.2	37.3
Information risk including ICT risk	1.8	5.6
Security risk	1.1	1.9
Outsourcing risk	3.1	0.5
Project risk	-	0.3
Other operational risk	15.5	9.1

1 Internal losses.
2 The long-term mean is derived from loss data recorded since 2006.

In the past four quarters, which is the relevant observation period for the analysis of net losses, internal losses were dominated by **compliance risk** and **legal risk**. The internal losses attributable to these risk subtypes had still been significantly below their twelve-month mean as at December 31, 2020. However, the long-term mean determined as at June 30, 2021 was almost reached in the case of compliance risk and slightly exceeded in the case of legal risk. This was primarily due to a provision for the potential reimbursement of fees following a ruling by the German Federal Court of Justice (BGH) on April 27, 2021 concerning the ineffectiveness of clauses in general terms and conditions. Further disclosures on the recognized provisions can be found in note 36 of the notes to the consolidated financial statements under ‘Other provisions’.

The net losses for the other risk subtypes as at June 30, 2021 were on a par with the end of 2020, although the proportion of the total internal net losses attributable to these risk subtypes had declined owing to the increase in losses attributable to compliance risk and legal risk.

13.2 Risk position

The **risk capital requirement** for operational risk was calculated at €914 million as at June 30, 2021 (December 31, 2020: €844 million). At €1,020 million, the **limit** was unchanged compared with the end of 2020.

Insurance sector

14 Actuarial risk

14.1 Claims rate trend in non-life insurance

In **direct non-life insurance**, the claims rate trend was in line with expectations in the first half of 2021. The overall claims rate was below the level of the corresponding prior-year period. Claims expenses for major claims and basic claims have recently fallen. Although June saw an accumulation of natural disaster claims owing to storms, the claims incurred as at the reporting date were still below the expected level of claims for the year as a whole. In view of the severe weather in July, however, the expected level of claims is likely to have been exceeded by the end of the year. Nevertheless, the adverse impact of natural disaster claims will be reduced by reinsurance arrangements.

In the first six months of this year, there was again a mitigating impact on the level of claims from motor vehicle insurance as a result of the fallout from the COVID-19 pandemic.

In the **inward reinsurance business**, the net claims ratio was down by 6.8 percentage points compared with the first half of 2020. The ratios for major and basic claims were below those in the corresponding period of last year. By contrast, the ratio for medium claims went up. In the first half of this year, the overall claims rate was therefore lower than in the prior-year period, which had been more badly affected by the COVID-19 pandemic. By the end of the first half of 2021, major claims of €77 million had arisen in connection with the Texas Freeze winter storm in the United States.

14.2 Risk position

As at June 30, 2021, the **overall solvency requirement for life actuarial risk** amounted to €1,043 million (December 31, 2020: €1,070 million) with a **limit** of €1,310 million (December 31, 2020: €1,400 million).

As at the reporting date, the **overall solvency requirement for health actuarial risk** was measured at €236 million (December 31, 2020: €293 million). The **limit** was set at €420 million (December 31, 2020: €700 million).

As at June 30, 2021, the **overall solvency requirement for non-life actuarial risk** amounted to €3,952 million (December 31, 2020: €3,780 million) with a **limit** of €4,900 million (December 31, 2020: €4,500 million). The increase in risk was mainly due to the regular updating of the sums insured.

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, 2021, the **total lending volume** of R+V had advanced by 1 percent to €104.2 billion (December 31, 2020: €103.0 billion). The volume increase was attributable to the expansion of the investment portfolios in connection with the growth of the insurance business and higher fair values because of the narrowing of spreads.

The volume of lending in the **home finance** business totaled €12.7 billion as at June 30, 2021 (December 31, 2020: €11.9 billion). Of this amount, 86 percent was accounted for by loans for less than 60 percent of the value of the property (December 31, 2020: 88 percent).

The volume of home finance was broken down by finance type as at the reporting date as follows (figures as at December 31, 2020 shown in parentheses):
- Consumer home finance: €11.5 billion (€10.8 billion)
- Commercial home finance: €0.1 billion (€0.1 billion)
- Commercial finance: €1.0 billion (€1.0 billion).

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

The financial sector and the public sector, which are the dominant **asset classes**, together accounted for 68 percent of the total lending volume as at June 30, 2021 (December 31, 2020: 69 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.

The explanation of the asset class concept in the Bank sector (see section 8.1.1) applies analogously to the Insurance sector. Fig. 27 shows the breakdown of the lending volume by asset class.

FIG. 27 – INSURANCE SECTOR: LENDING VOLUME, BY ASSET CLASS

€ billion	Jun. 30, 2021	Dec. 31, 2020
Financials	47.5	47.1
Corporates	16.1	15.7
Public sector	23.1	23.7
Real estate (commercial and retail customers)	15.9	15.1
ABSs and ABCPs	1.5	1.4
Other	0.1	0.1
Total	**104.2**	**103.0**

An analysis of the **geographical breakdown** of lending in Fig. 28 reveals that Germany and other industrialized countries continued to account for the lion's share of the lending volume as at June 30, 2021 – as they also did at December 31, 2020 – with an unchanged share of 91 percent.

FIG. 28 – INSURANCE SECTOR: LENDING VOLUME, BY COUNTRY GROUP

€ billion	Jun. 30, 2021	Dec. 31, 2020
Germany	38.3	37.8
Other industrialized countries	56.3	55.5
of which: France	12.7	12.6
of which: USA	7.3	6.6
of which: Netherlands	5.5	5.3
Advanced economies	1.3	1.3
Emerging markets	5.2	5.1
Supranational institutions	3.1	3.3
Total	**104.2**	**103.0**

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. 29. As at June 30, 2021, 85 percent (December 31, 2020: 84 percent) of the total lending volume had a residual maturity of more than five years. By contrast, 3 percent of the total lending volume was due to mature within one year as at the reporting date (unchanged on the value as at December 31, 2020).

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

€ billion	Jun. 30, 2021	Dec. 31, 2020
≤ 1 year	2.9	2.7
> 1 year to ≤ 5 years	13.1	13.5
> 5 years	88.2	86.8
Total	**104.2**	**103.0**

The **rating structure** of the lending volume in the Insurance sector is shown in Fig. 30. Of the total lending volume as at June 30, 2021, 79 percent was attributable to investment-grade borrowers (December 31, 2020: 80 percent). The lending volume that is not rated, which made up 20 percent of the total lending volume (December 31, 2020: 19 percent), essentially comprised low-risk consumer home finance for which external ratings were not available. The unrated lending volume is deemed to be low-risk because the lending is based on a selective approach and the mortgageable value of the assets is limited.

FIG. 30 – INSURANCE SECTOR: LENDING VOLUME, BY RATING CLASS

€ billion		Jun. 30, 2021	Dec. 31, 2020
Investment grade	1A	27.0	27.4
	1B	12.5	14.8
	1C	-	-
	1D	12.4	10.2
	1E	-	-
	2A	9.8	9.2
	2B	6.4	7.3
	2C	6.8	6.5
	2D	3.6	3.2
	2E	-	-
	3A	3.5	3.7
Non-investment grade	3B	0.3	0.4
	3C	0.6	0.3
	3D	-	-
	3E	0.2	0.4
	4A	0.1	0.1
	4B	0.3	0.3
	4C	0.1	0.1
	4D	-	-
	4E	-	-
Default		-	-
Not rated		20.3	19.1
Total		**104.2**	**103.0**

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 Fig. 20 of the 2020 risk report.

As at the reporting date, the **ten 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 €5,933 million as at June 30, 2021 (December 31, 2020: €6,328 million), which constituted a decrease of 6 percent. There has been a further fall in the total exposure since the start of 2021 owing to reductions in fair value and disposals.

Fig. 31 shows the country breakdown of the exposure.

FIG. 31 – INSURANCE SECTOR: EXPOSURE IN EUROZONE PERIPHERY COUNTRIES

€ million	Jun. 30, 2021	Dec. 31, 2020
Portugal	**46**	**46**
of which: public sector	43	42
of which: non-public sector	4	4
of which: financial sector	3	4
Italy	**2,879**	**3,190**
of which: public sector	1,914	2,104
of which: non-public sector	964	1,086
of which: financial sector	710	826
Spain	**3,007**	**3,092**
of which: public sector	1,577	1,562
of which: non-public sector	1,431	1,529
of which: financial sector	1,189	1,295
Total	**5,933**	**6,328**
of which: public sector	3,534	3,708
of which: non-public sector	2,399	2,620
of which: financial sector	1,902	2,125

15.3 Risk position

As at June 30, 2021, the **overall solvency requirement** for market risk amounted to €3,417 million (December 31, 2020: €3,511 million) with a **limit** of €4,500 million (December 31, 2020: €5,750 million).

Fig. 32 shows the overall solvency requirement for the various types of market risk.

FIG. 32 – INSURANCE SECTOR: OVERALL SOLVENCY REQUIREMENT FOR MARKET RISK

€ million	Jun. 30, 2021	Dec. 31, 2020
Interest-rate risk	1,225	951
Spread risk	1,385	1,622
Equity risk	1,597	1,561
Currency risk	262	277
Real-estate risk	424	442
Total (after diversification)	**3,417**	**3,511**

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. Furthermore, this capital buffer requirement also takes account of the increased market risk that might stem from a further refinement of the method for measuring interest-rate risk as a result of the 2020 review of Solvency II conducted by the European Insurance and Occupational Pensions Authority (EIOPA).

As at June 30, 2021, the capital buffer requirement for market risk totaled €130 million (December 31, 2020: €143 million).

16 Counterparty default risk

As at June 30, 2021, the **overall solvency requirement** for counterparty default risk was €186 million (December 31, 2020: €178 million) with a **limit** of €260 million (December 31, 2020: €220 million).

17 Operational risk

As at June 30, 2021, the **overall solvency requirement** for operational risk amounted to €733 million (December 31, 2020: €694 million). The **limit** was €810 million as at the reporting date (December 31, 2020: €800 million).

18 Risks from entities in other financial sectors

As at June 30, 2021, the **overall solvency requirement** for risks in connection with non-controlling interests in insurance companies and with entities in other financial sectors stood at €124 million (December 31, 2020: €126 million). At €140 million, the **limit** was unchanged compared with the end of 2020.

Interim consolidated financial statements

Income statement for the period January 1 to June 30, 2021

€ million	(Note)	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Net interest income	(5)	1,423	1,505
Interest income		2,230	2,911
Interest income calculated using the effective interest method		2,362	2,581
Interest income not calculated using the effective interest method		-132	330
Current income and expense		31	64
Interest expense		-838	-1,470
Net fee and commission income	(6)	1,596	1,052
Fee and commission income		2,861	2,136
Fee and commission expenses		-1,264	-1,084
Gains and losses on trading activities	(7)	-	539
Gains and losses on investments	(8)	37	-15
Other gains and losses on valuation of financial instruments	(9)	203	-247
Gains and losses from the derecognition of financial assets measured at amortized cost		6	7
Premiums earned	(10)	9,497	9,221
Gains and losses on investments held by insurance companies and other insurance company gains and losses	(11)	2,733	-651
of which interest income calculated using the effective interest method		757	749
Insurance benefit payments	(12)	-10,126	-6,883
Insurance business operating expenses	(13)	-1,582	-1,553
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business		-	-10
Loss allowances	(14)	114	-522
Administrative expenses	(15)	-2,142	-2,016
Other net operating income	(16)	73	130
Profit before taxes		1,832	557
Income taxes	(17)	-524	-185
Net profit		**1,308**	**372**
Attributable to:			
Shareholders of DZ BANK		1,194	331
Non-controlling interests		114	41

Statement of comprehensive income for the period January 1 to June 30, 2021

€ million	(Note)	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Net profit		1,308	372
Other comprehensive income/loss		-272	51
Items that may be reclassified to the income statement		**-552**	**40**
Gains and losses on debt instruments measured at fair value through other comprehensive income	(18)	-717	275
Exchange differences on currency translation of foreign operations	(18)	-23	-9
Gains and losses on hedges of net investments in foreign operations	(18)	4	2
Share of other comprehensive income/loss of joint ventures and associates accounted for using the equity method	(18)	6	-
Income taxes	(19)	178	-228
Items that will not be reclassified to the income statement		**280**	**11**
Gains and losses on equity instruments for which the fair value OCI option has been exercised		224	-227
Gains and losses in relation to financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk		-31	318
Gains and losses arising from remeasurement of defined benefit plans		109	5
Income taxes	(19)	-22	-85
Total comprehensive income		**1,036**	**423**
Attributable to:			
Shareholders of DZ BANK		925	408
Non-controlling interests		111	15

Balance sheet as at June 30, 2021

ASSETS

€ million	(Note)	Jun. 30, 2021	Dec. 31, 2020
Cash and cash equivalents	(20)	97,848	68,354
Loans and advances to banks	(21)	102,419	103,020
Loans and advances to customers	(22)	191,583	190,294
Hedging instruments (positive fair values)	(23)	241	161
Financial assets held for trading	(24)	52,776	42,846
Investments	(25)	57,934	60,232
Investments held by insurance companies	(26)	127,239	121,668
Property, plant and equipment, investment property, and right-of-use assets	(27)	1,804	1,744
Income tax assets		808	879
Other assets	(28)	5,954	5,516
Loss allowances	(29)	-2,113	-2,320
Non-current assets and disposal groups classified as held for sale	(30)	27	199
Fair value changes of the hedged items in portfolio hedges of interest-rate risk		1,350	1,980
Total assets		**637,870**	**594,573**

EQUITY AND LIABILITIES

€ million	(Note)	Jun. 30, 2021	Dec. 31, 2020
Deposits from banks	(31)	197,586	177,852
Deposits from customers	(32)	143,090	133,925
Debt certificates issued including bonds	(33)	76,110	70,500
Hedging instruments (negative fair values)	(34)	1,638	2,638
Financial liabilities held for trading	(35)	55,758	50,404
Provisions	(36)	3,749	4,003
Insurance liabilities	(37)	116,662	111,213
Income tax liabilities		1,285	1,229
Other liabilities	(38)	10,037	10,243
Subordinated capital	(39)	3,209	3,090
Liabilities included in disposal groups classified as held for sale	(30)	-	2
Fair value changes of the hedged items in portfolio hedges of interest-rate risk		243	315
Equity	(40)	28,503	29,159
Shareholders' equity		26,701	26,066
Subscribed capital		4,926	4,926
Capital reserve		5,551	5,551
Retained earnings		10,984	10,553
Reserve from other comprehensive income		1,801	2,212
Additional equity components		2,245	2,245
Unappropriated earnings		1,194	579
Non-controlling interests		1,802	3,093
Total equity and liabilities		**637,870**	**594,573**

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, 2020	4,926	5,551	10,379	1,686	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/loss	**-**	**-**	**334**	**74**	**-**	**408**	**15**	**423**
Capital increase/capital repaid	-	-	-	-	-	-	-10	-10
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**	**10,711**	**1,762**	**2,245**	**25,195**	**2,980**	**28,175**
Equity as at Jan. 1, 2021	4,926	5,551	11,132	2,212	2,245	26,066	3,093	29,159
Net profit	-	-	1,194	-	-	1,194	114	1,308
Other comprehensive income/loss	-	-	83	-352	-	-269	-3	-272
Total comprehensive income/loss	**-**	**-**	**1,277**	**-352**	**-**	**925**	**111**	**1,036**
Capital increase/capital repaid	-	-	-	-	-	-	-1,363	-1,363
Acquisition/disposal of non-controlling interests	-	-	-3	-1	-	-4	3	-1
Reclassifications within equity	-	-	58	-58	-	-	-	-
Dividends paid	-	-	-287	-	-	-287	-41	-328
Equity as at Jun. 30, 2021	**4,926**	**5,551**	**12,177**	**1,801**	**2,245**	**26,700**	**1,803**	**28,503**

In the first half of 2021, a dividend of €0.16 per share was paid for the 2020 financial year (first half of 2020: no dividend payment).

Further information on equity is presented in note 40.

Statement of cash flows

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Net profit	1,308	372
Non-cash items included in net profit	-406	732
Subtotal	902	1,104
Cash changes in assets and liabilities arising from operating activities		
Loans and advances to banks and customers	-935	-12,214
Other assets and liabilities from operating activities	1,060	3,087
Hedging instruments (positive and negative fair values)	276	-1,453
Financial assets and financial liabilities held for trading	-4,594	4,993
Deposits from banks and customers	29,278	39,005
Debt certificates issued including bonds	5,905	-6,358
Interest payments, dividends, and operating lease payments received (net cash flow)	1,484	1,878
Income taxes paid	-310	-203
Cash flows from operating activities	**33,066**	**29,839**
Cash flows from investing activities	**-2,251**	**-6,378**
Cash flows from financing activities	**-1,321**	**-242**

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Cash and cash equivalents as at January 1	68,354	52,545
Cash flows from operating activities	33,066	29,839
Cash flows from investing activities	-2,251	-6,378
Cash flows from financing activities	-1,321	-242
Cash and cash equivalents as at June 30	**97,848**	**75,764**

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 €52 million in the first half of 2021 (first half of 2020: €41 million).

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 2021 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 2020 financial year, unless these policies are subject to the amendments described below.

First-time application in 2021 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 2021 financial year:

- *Interest Rate Benchmark Reform – Phase 2* (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16),
- *Extension of the Temporary Exemption from Applying IFRS 9* (Amendments to IFRS 4 Insurance Contracts).

Interest Rate Benchmark Reform – Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16) follows on from the amendments in 2019 and apply if, because of the reform, a reporting entity replaces an interest-rate benchmark with an alternative, nearly risk-free interest rate. The amendments provide a practical expedient in the event of contract modifications or cash flow modifications that are required as a direct consequence of the IBOR reform and made on an economically equivalent basis. Under these circumstances, the modification required as a result of the IBOR reform has to be accounted for as a modification of a variable interest rate in accordance with IFRS 9.B5.4.5 and not recognized in the modification gain or loss. Instead, application of IFRS 9.B5.4.5 permits subsequent measurement on the basis of the updated effective interest rate and thus recognition of the effect of the economically equivalent modification over the remaining term. For all other modifications made at the same time but not as a direct consequence of the IBOR reform, the effect of derecognizing the modifications has to be analyzed. Derecognition is required in the event of substantial modifications. Where modifications are not substantial, the updated effective interest rate is used to recalculate the carrying amount of the financial instrument.

In addition, temporary relief is offered that enables the continuation of hedge accounting after transition to the new interest-rate benchmarks if the modifications are made solely as a result of the benchmark interest-rate reform. Relief is also offered where there are separately identifiable risk components. The amendments do not offer relief for hedge ineffectiveness caused by the IBOR reform, which has to be recognized in profit or loss in accordance with IFRS 9. Furthermore, the amendments contain minor changes to IFRS 16 and IFRS 4 and additional disclosure requirements in accordance with IFRS 7.

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. Libor is expected to be replaced with effect from January 1, 2022, although major USD Libor tenors (overnight, 1-month, 3-month, 6-month, and 12-month) are not likely to be replaced until June 2023. Further disclosures on the IBOR reform are presented in note 45.

The amendments must be applied retrospectively to financial years beginning on or after January 1, 2021. A hedge has to be reinstated if it was discontinued solely due to changes required by the interest-rate benchmark reform and would not have been discontinued if the phase 2 amendments had been applied at that time. There is no material impact on the interim consolidated financial statements.

The objective of *Extension of the Temporary Exemption from Applying IFRS 9* (Amendments to IFRS 4 Insurance Contracts) is to address temporary accounting consequences that arise because of the different effective dates of IFRS 9 Financial Instruments and the forthcoming IFRS 17 Insurance Contracts.

According to the EU regulation specifying adoption for financial years beginning on or after January 1, 2021, entities that predominantly undertake insurance activities – including the insurance divisions of financial conglomerates – can opt to be exempt from IFRS 9 until January 1, 2023. The insurance companies in the DZ BANK Group are not exercising this option.

Changes in presentation

As a consequence of the changes for fully consolidated special funds of the personal insurance providers, presented in note 2 (Accounting policies and estimates) of the consolidated financial statements as at December 31, 2020, amounts have been restated in the statement of changes in equity and in note 40.

In accordance with the provisions of IAS 8.41 et seq., the nominal amounts of the hedging instruments and weighted average maturity (years) have been restated in note 45 in the table showing the Libor-related risk attaching to the hedges.

In note 48, the amounts within the breakdown of loan commitments by product type have been restated in order to provide reliable and more relevant information.

Sources of estimation uncertainty

It is sometimes 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 right-of-use assets, 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 additional 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 customers, investments, investments held by insurance companies, and financial liabilities held for trading and to calculate loss allowances and provisions. The impact of COVID-19 on the calculation of loss allowances and on the assumptions and estimates used in this calculation is described in note 46.

>> 03 Scope of consolidation

The main change to the scope of consolidation as at June 30, 2021 compared with the scope of consolidation as at December 31, 2020 was the derecognition of the entities that had been established in order to increase own funds in accordance with section 10a of the German Banking Act (KWG). The bonds issued by DZ BANK Perpetual Funding Issuer (Jersey) Limited, St. Helier, Jersey, and the non-cumulative trust preferred securities issued by DZ BANK Capital Funding Trust I, DZ BANK Capital Funding Trust II, and DZ BANK Capital Funding Trust III, all Delaware, USA, were called on January 12, 2021 and repaid in full during the reporting period. On the date on which the issued bonds and issued non-cumulative trust preferred securities were repaid in full, the aforementioned companies and the associated companies DZ BANK Capital Funding LLC I, DZ BANK Capital Funding LLC II, and DZ BANK Capital Funding LLC III, all Wilmington, Delaware, and DZ BANK Perpetual Funding (Jersey) Limited, St. Helier, Jersey, were deconsolidated.

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, 2021

€ million	BSH	R+V	TeamBank	UMH	
Net interest income	293	-	241	4	
Net fee and commission income	1	-	-1	1,264	
Gains and losses on trading activities	-	-	-	-	
Gains and losses on investments	13	-	-	-1	
Other gains and losses on valuation of financial instruments	-	-	1	74	
Gains and losses from the derecognition of financial assets measured at amortized cost	4	-	-	-	
Premiums earned	-	9,497	-	-	
Gains and losses on investments held by insurance companies and other insurance company gains and losses	-	2,759	-	-	
Insurance benefit payments	-	-10,126	-	-	
Insurance business operating expenses	-	-1,645	-	-	
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business	-	-	-	-	
Loss allowances	-19	-	-22	-	
Administrative expenses	-257	-	-138	-503	
Other net operating income	18	-2	4	-14	
Profit/loss before taxes	**54**	**482**	**84**	**825**	
Cost/income ratio (%)	78.1	-	56.3	37.9	
Regulatory RORAC (%)	8.3	9.5	29.9	>100.0	
Average own funds/solvency requirement	1,295	10,194	565	516	
Total assets/total equity and liabilities as at Jun. 30, 2021	82,286	134,924	9,566	3,744	

	DZ BANK – CICB	DZ HYP	DZ PRIVAT-BANK	VR Smart Finanz	DVB	DZ BANK – holding function	Other/ Consolidation	**Total**
	501	364	28	64	-12	-20	-40	1,423
	258	4	103	-15	8	-	-26	1,596
	-8	-4	11	-	-1	-	2	-
	24	-	-	-	-	-	1	37
	31	70	1	-	24	-	2	203
	3	-	-	-	-	-	-1	6
	-	-	-	-	-	-	-	9,497
	-	-	-	-	-	-	-26	2,733
	-	-	-	-	-	-	-	-10,126
	-	-	-	-	-	-	63	-1,582
	-	-	-	-	-	-	-	-
	78	1	-	-5	80	-	1	114
	-664	-157	-125	-41	-68	-119	-70	-2,142
	-5	8	1	-3	39	-	27	73
	218	**287**	**19**	**-**	**70**	**-139**	**-68**	**1,832**
	82.6	35.5	86.8	89.1	>100.0	-	-	55.5
	8.2	39.9	11.4	0.3	>100.0	-	-	18.4
	5,299	1,441	331	185	103	-	-	19,929
	348,170	91,758	22,679	3,479	8,570	20,446	-87,752	637,870

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 Dec. 31, 2020	81,673	130,027	9,285	3,561

	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
	314,612	94,486	17,691	3,684	10,247	21,297	-91,990	594,573

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. DZ BANK is broken down into the central institution and corporate bank (DZ BANK – CICB) and the group management function (DZ BANK – holding function) in line with the internal financial reporting structure. 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. 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. 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 predominantly 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. It reflects 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, 2021	Jan. 1– Jun. 30, 2020
INTEREST INCOME AND CURRENT INCOME AND EXPENSE	**2,261**	**2,975**
Interest income from	**2,230**	**2,911**
Lending and money market business	2,228	2,730
Bonds and other fixed-income securities	194	321
Portfolio hedges of interest-rate risk	-56	-65
Financial assets with a negative effective interest rate	-136	-71
Other assets	-	-4
Current income and expense from	**31**	**64**
Shares and other variable-yield securities	11	13
of which income from other shareholdings	9	12
Investments in subsidiaries	2	2
Investments in associates	1	-
Operating leases	-	1
Entities accounted for using the equity method	15	47
of which relating to investments in joint ventures	22	39
of which relating to investments in associates	-7	8
Income from profit-pooling, profit-transfer and partial profit-transfer agreements	2	1
INTEREST EXPENSE ON	**-838**	**-1,470**
Deposits from banks and customers	-1,076	-1,281
Debt certificates issued including bonds	-97	-328
Subordinated capital	-39	-24
Portfolio hedges of interest-rate risk	26	20
Financial liabilities with a positive effective interest rate	351	146
Provisions and other liabilities	-3	-3
Total	**1,423**	**1,505**

The interest expense on provisions and other liabilities included interest expense on lease liabilities of €2 million (first half of 2020: €2 million).

>> 06 Net fee and commission income

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Fee and commission income	**2,861**	**2,136**
Securities business	2,312	1,667
Asset management	197	126
Payments processing including card processing	147	153
Lending business and trust activities	60	54
Financial guarantee contracts and loan commitments	34	32
International business	5	6
Building society operations	22	19
Other	84	79
Fee and commission expenses	**-1,264**	**-1,084**
Securities business	-865	-748
Asset management	-144	-81
Payments processing including card processing	-69	-69
Lending business	-41	-47
Financial guarantee contracts and loan commitments	-5	-5
Building society operations	-37	-35
Other	-104	-99
Total	**1,596**	**1,052**

In the reporting period, fee and commission income included revenue from contracts with customers pursuant to IFRS 15 in an amount of €2,856 million (first half of 2020: €2,131 million); see note 51.

>> 07 Gains and losses on trading activities

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Gains and losses on non-derivative financial instruments and embedded derivatives	-488	1,309
Gains and losses on derivatives	425	-767
Gains and losses on exchange differences	63	-3
Total	**-**	**539**

>> 08 Gains and losses on investments

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Gains and losses on the disposal of bonds and other fixed-income securities	**32**	16
Gains and losses on the disposal of shares and other variable-yield securities	**-1**	-4
Gains and losses on the disposal of investments in subsidiaries	**-**	6
Gains and losses on investments in joint ventures	**-**	-33
Impairment losses	-	-33
Gains and losses on investments in associates	**6**	-
Disposals	6	-
Total	**37**	**-15**

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

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Gains and losses from fair value hedge accounting	**15**	9
Gains and losses on derivatives used for purposes other than trading	**76**	-114
Gains and losses on financial instruments designated as at fair value through profit or loss	**86**	-141
Gains and losses on non-derivative financial instruments and embedded derivatives	247	-87
Gains and losses on derivatives	-161	-54
Gains and losses on financial assets mandatorily measured at fair value through profit or loss	**26**	-1
Total	**203**	**-247**

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, 2021	Jan. 1– Jun. 30, 2020
Net premiums written	**10,434**	10,113
Gross premiums written	10,559	10,193
Reinsurance premiums ceded	-125	-80
Change in provision for unearned premiums	**-937**	-892
Gross premiums	-955	-908
Reinsurers' share	17	16
Total	**9,497**	**9,221**

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

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Income from investments held by insurance companies	**4,465**	**4,324**
Interest income and current income	1,134	1,149
Income from reversals of impairment losses and reversals of loss allowances, and unrealized gains	575	212
Gains on valuation through profit or loss of investments held by insurance companies	2,431	2,296
Gains on disposals	326	667
Expenses in connection with investments held by insurance companies	**-1,667**	**-5,270**
Administrative expenses	-120	-113
Depreciation/amortization expense, additions to loss allowances, and impairment losses and unrealized losses	-283	-459
Losses on valuation through profit or loss of investments held by insurance companies	-936	-3,768
Losses on disposals	-327	-930
Other gains and losses of insurance companies	**-65**	**295**
Other insurance gains and losses	175	138
Other non-insurance gains and losses	-241	157
Total	**2,733**	**-651**

Income from and expenses in connection with investments held by insurance companies included additions to loss allowances of €53 million (first half of 2020: €45 million) and reversals of loss allowances of €51 million (first half of 2020: €4 million).

Around €15 million of the income from the reversal of loss allowances (first half of 2020: addition of €29 million) arose because the anticipated macroeconomic conditions were included in the calculation in connection with the COVID-19 pandemic, in particular by adjusting the model-based default probability profiles (referred to as shift factors), and thus taken into account when determining the 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 reversal of loss allowances required because of the pandemic would increase by approximately 5 percent and reduce by approximately 17 percent respectively.

>> 12 Insurance benefit payments

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Expenses for claims	**-5,765**	**-5,588**
Gross expenses for claims	-5,779	-5,608
Reinsurers' share	15	20
Changes in the benefit reserve and in other insurance liabilities	**-3,806**	**-1,171**
Expenses for premium refunds	**-556**	**-124**
Gross expenses for premium refunds	-202	-307
Expenses for deferred premium refunds	-354	183
Total	**-10,126**	**-6,883**

>> 13 Insurance business operating expenses

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Gross expenses	-1,608	-1,563
Reinsurers' share	25	10
Total	**-1,582**	**-1,553**

>> 14 Loss allowances

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Loss allowances for cash and cash equivalents	**-**	**-2**
Additions	-	-3
Reversals	-	1
Loss allowances for loans and advances to banks	**20**	**-10**
Additions	-14	-17
Reversals	14	7
Recoveries on loans and advances to banks previously impaired	20	-
Loss allowances for loans and advances to customers	**69**	**-454**
Additions	-921	-1,237
Reversals	963	760
Directly recognized impairment losses	-19	-21
Recoveries on loans and advances to customers previously impaired	34	34
Other	12	10
Loss allowances for investments	**15**	**-17**
Additions	-8	-26
Reversals	23	9
Loss allowances for other assets	**1**	**-1**
Directly recognized impairment losses	-	-1
Recoveries on other assets previously impaired	1	-
Other loss allowances for loans and advances	**9**	**-38**
Additions to and reversals of provisions for loan commitments	-4	-24
Additions to and reversals of provisions for financial guarantee contracts	12	-4
Additions to and reversals of other provisions for loans and advances	1	-10
Total	**114**	**-522**

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.

Within the loss allowances for loans and advances to customers, there was an addition of €19 million owing to changes to the estimates for the risk parameters for measuring the probability of default and the loss given default in respect of loans in building society operations.

Of the net reversals of loss allowances for loans and advances to banks and customers, investments, and other lending business of €114 million (first half of 2020: net addition of €522 million), €9 million (first half of 2020: addition of €165 million) arose because the anticipated macroeconomic conditions were included in the calculation in connection with the COVID-19 pandemic, in particular by adjusting the model-based default probability profiles (referred to as shift factors), and thus taken into account when determining the 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 reversal of loss allowances required because of the pandemic would increase by approximately 2 percent and reduce by approximately 8 percent respectively.

>> 15 Administrative expenses

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Staff expenses	-966	-924
General and administrative expenses	-1,039	-954
Depreciation and amortization	-138	-138
Total	**-2,143**	**-2,016**

>> 16 Other net operating income

€ million	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Gains and losses on non-current assets and disposal groups classified as held for sale	52	56
Income from the reversal of provisions and accruals	37	52
Restructuring expenses	-23	-1
Expenses for other taxes	-13	-5
Residual other net operating income	20	28
Total	**73**	**130**

>> 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, 2021	Jan. 1–Jun. 30, 2020
Gains and losses on debt instruments measured at fair value through other comprehensive income	**-717**	275
Gains (+)/losses (-) arising during the reporting period	-601	482
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-116	-207
Exchange differences on currency translation of foreign operations	**-23**	-9
Gains (+)/losses (-) arising during the reporting period	8	-9
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-31	-
Gains and losses on hedges of net investments in foreign operations	**4**	2
Gains (+)/losses (-) arising during the reporting period	-	2
Gains (-)/losses (+) reclassified to the income statement during the reporting period	4	-
Share of other comprehensive income/loss of joint ventures and associates accounted for using the equity method	**6**	-
Gains (+)/losses (-) arising during the reporting period	6	-

>> 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:

€ million	Jan. 1–Jun. 30, 2021			Jan. 1–Jun. 30, 2020		
	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	**-730**	**178**	**-552**	268	-228	40
Gains and losses on debt instruments measured at fair value through other comprehensive income	-717	179	-538	275	-227	48
Exchange differences on currency translation of foreign operations	-23	-1	-24	-9	-	-9
Gains and losses on hedges of net investments in foreign operations	4	-	4	2	-1	1
Share of other comprehensive income/loss of joint ventures and associates accounted for using the equity method	6	-	6	-	-	-
Items that will not be reclassified to the income statement	**302**	**-22**	**280**	96	-85	11
Gains and losses on equity instruments for which the fair value OCI option has been exercised	224	-9	215	-227	16	-211
Gains and losses in relation to financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk	-31	10	-21	318	-99	219
Gains and losses arising from remeasurement of defined benefit plans	109	-23	86	5	-2	3
Total	**-428**	**156**	**-272**	**364**	**-313**	**51**

C Balance sheet disclosures

>> 20 Cash and cash equivalents

€ million	Jun. 30, 2021	Dec. 31, 2020
Cash on hand	242	206
Balances with central banks	97,607	68,148
Total	**97,848**	**68,354**

>> 21 Loans and advances to banks

€ million	Repayable on demand		Other loans and advances		Total	
	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020
Domestic banks	**2,313**	**4,488**	**92,615**	**89,789**	**94,928**	**94,277**
Affiliated banks	888	1,667	87,595	84,711	88,483	86,378
Other banks	1,425	2,821	5,020	5,078	6,445	7,899
Foreign banks	**4,218**	**5,290**	**3,273**	**3,453**	**7,491**	**8,743**
Total	**6,531**	**9,778**	**95,888**	**93,242**	**102,419**	**103,020**

>> 22 Loans and advances to customers

€ million	Jun. 30, 2021	Dec. 31, 2020
Loans and advances to domestic customers	165,778	164,071
Loans and advances to foreign customers	25,805	26,223
Total	**191,583**	**190,294**

>> 23 Hedging instruments (positive fair values)

Hedging instruments (positive fair values) amounted to €241 million (December 31, 2020: €161 million) and resulted solely from derivatives used as fair value hedges.

>> 24 Financial assets held for trading

€ million	Jun. 30, 2021	Dec. 31, 2020
DERIVATIVES (POSITIVE FAIR VALUES)	**18,203**	**22,303**
Interest-linked contracts	15,740	19,488
Currency-linked contracts	1,285	1,758
Share-/index-linked contracts	793	719
Other contracts	2	1
Credit derivatives	383	337
BONDS AND OTHER FIXED-INCOME SECURITIES	**12,994**	**10,488**
Money market instruments	706	373
Bonds	12,288	10,115
SHARES AND OTHER VARIABLE-YIELD SECURITIES	**1,709**	**1,444**
Shares	1,708	1,444
Investment fund units	1	-
RECEIVABLES	**19,870**	**8,611**
of which from affiliated banks	63	152
of which from other banks	18,874	7,821
Money market placements	**18,846**	**7,412**
with banks	18,353	7,197
with customers	493	215
Promissory notes and registered bonds	**1,024**	**1,199**
from banks	584	776
from customers	440	423
Total	**52,776**	**42,846**

>> 25 Investments

€ million	Jun. 30, 2021	Dec. 31, 2020
Bonds and other fixed-income securities	**55,201**	**57,423**
Money market instruments	464	519
Bonds	54,737	56,904
Shares and other variable-yield securities	**1,965**	**2,071**
Shares and other shareholdings	326	324
Investment fund units	1,626	1,735
Other variable-yield securities	13	12
Investments in subsidiaries	**307**	**297**
Investments in joint ventures	**346**	**329**
Investments in associates	**115**	**112**
Total	**57,934**	**60,232**

The carrying amount of investments in joint ventures accounted for using the equity method totaled €346 million (December 31, 2020: €329 million). €111 million of the investments in associates has been accounted for using the equity method (December 31, 2020: €112 million).

>> 26 Investments held by insurance companies

€ million	Jun. 30, 2021	Dec. 31, 2020
Investment property	3,818	3,835
Investments in subsidiaries	869	831
Investments in joint ventures	21	19
Mortgage loans	12,825	10,882
Promissory notes and loans	7,478	7,050
Registered bonds	9,106	9,081
Other loans	908	863
Variable-yield securities	13,171	11,639
Fixed-income securities	61,292	61,540
Derivatives (positive fair values)	345	553
Loss allowances	-	-23
Deposits with ceding insurers and other investments	575	578
Assets related to unit-linked contracts	16,832	14,820
Total	**127,239**	**121,668**

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

€ million	Jun. 30, 2021	Dec. 31, 2020
Land and buildings	893	884
Office furniture and equipment	172	179
Investment property	233	235
Right-of-use assets	506	446
Total	**1,804**	**1,744**

>> 28 Other assets

€ million	Jun. 30, 2021	Dec. 31, 2020
Other assets held by insurance companies	3,424	3,416
Goodwill	140	140
Other intangible assets	545	546
of which software	442	442
of which acquired customer relationships	63	65
Other loans and advances	737	360
Residual other assets	1,108	1,054
Total	**5,954**	**5,516**

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

€ million	Jun. 30, 2021	Dec. 31, 2020
Intangible assets	155	157
Reinsurers' share of insurance liabilities	156	149
Receivables	1,638	1,604
Credit balances with banks, checks and cash on hand	8	357
Residual other assets	1,469	1,151
Loss allowances	-1	-2
Total	**3,424**	**3,416**

Residual other assets included right-of-use assets amounting to €67 million (December 31, 2020: €66 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 equivalents	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, 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**
Balance as at Jan. 1, 2021	-	14	3	6	246	336	1,661	7
Additions	-	14	-	-	122	332	462	5
Utilizations	-	-	-	-	-	-1	-199	-
Reversals	-	-12	-2	-	-203	-193	-560	-6
Other changes	-	-	-	-	90	-117	75	1
Balance as at Jun. 30, 2021	**-**	**16**	**1**	**6**	**255**	**357**	**1,439**	**7**

	Investments			Other assets	Total
€ million	Stage 1	Stage 2	Stage 3	Stage 1	
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**
Balance as at Jan. 1, 2021	6	22	17	2	2,320
Additions	4	1	-	-	940
Utilizations	-	-	-	-	-200
Reversals	-19	-2	-	-	-997
Other changes	17	-16	-	-	50
Balance as at Jun. 30, 2021	**8**	**5**	**17**	**2**	**2,113**

>> 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, the vast majority of the aviation finance business, which had constituted a disposal group not qualifying as a discontinued operation as at December 31, 2020, was sold in the first half of the year. Its remeasurement and subsequent disposal gave rise to a net gain of €38 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. As at June 30, 2021, assets of €17 million were still recognized in this disposal group. The disposal of the remaining assets is expected to take place in the second half of 2021.

The disposal group not qualifying as a discontinued operation, which had been classified as such as at December 31, 2020 and consisted of associates, joint ventures, and fully consolidated subsidiaries of the DVB subgroup, was sold in the first half of 2021. The disposal gave rise to a net gain of €15 million, which was recognized under other net operating income.

Furthermore, a receivable that had been recognized as an individual asset classified as held for sale in the DVB subgroup as at December 31, 2020 was sold. The gain on disposal of €6 million was reported under other net operating income.

In addition to the aforementioned disposals in the DVB subgroup, there were also disposals of long-term equity investments and investment property in the DZ BANK Group in the first half of 2021. The net gain on the disposal of investment property of €3 million was recognized under other net operating income. The share of the reserve from other comprehensive income attributable to the long-term equity investments, which amounted to €10 million, was reclassified to retained earnings.

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 investment property.

>> 31 Deposits from banks

	Repayable on demand		With agreed maturity or notice period		Total	
€ million	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020
Domestic banks	**58,404**	59,958	**127,191**	109,573	**185,595**	169,531
Affiliated banks	54,322	56,001	20,585	21,285	74,907	77,286
Other banks	4,082	3,957	106,606	88,288	110,688	92,245
Foreign banks	**5,243**	2,974	**6,748**	5,347	**11,991**	8,321
Total	**63,647**	62,932	**133,939**	114,920	**197,586**	177,852

>> 32 Deposits from customers

	Repayable on demand		With agreed maturity or notice period		Total	
€ million	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020	Jun. 30, 2021	Dec. 31, 2020
Domestic customers	22,566	21,522	91,564	94,680	114,130	116,202
Foreign customers	23,034	11,563	5,925	6,160	28,959	17,723
Total	**45,600**	33,085	**97,489**	100,840	**143,089**	133,925

>> 33 Debt certificates issued including bonds

€ million	Jun. 30, 2021	Dec. 31, 2020
Bonds issued	**65,746**	**62,838**
Mortgage Pfandbriefe	26,909	25,364
Public-sector Pfandbriefe	1,670	1,764
Other bonds	37,167	35,710
Other debt certificates issued	**10,364**	**7,662**
Total	**76,110**	**70,500**

All other debt certificates issued are commercial paper.

>> 34 Hedging instruments (negative fair values)

Hedging instruments (negative fair values) amounted to €1,638 million (December 31, 2020: €2,638 million) and resulted solely from derivatives used as fair value hedges.

>> 35 Financial liabilities held for trading

€ million	Jun. 30, 2021	Dec. 31, 2020
DERIVATIVES (NEGATIVE FAIR VALUES)	**16,803**	**20,138**
Interest-linked contracts	13,826	16,501
Currency-linked contracts	1,342	1,805
Share-/index-linked contracts	1,433	1,550
Other contracts	125	188
Credit derivatives	77	94
SHORT POSITIONS	**2,698**	**604**
BONDS ISSUED	**23,356**	**22,224**
DEPOSITS	**12,901**	**7,438**
of which from affiliated banks	4,000	3,660
of which from other banks	8,702	3,516
Money market deposits	**12,744**	**7,279**
from banks	12,598	7,078
from customers	146	201
Promissory notes and registered bonds issued	**157**	**159**
to banks	104	98
to customers	53	61
Total	**55,758**	**50,404**

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

>> 36 Provisions

€ million	Jun. 30, 2021	Dec. 31, 2020
Provisions for employee benefits	**1,691**	**1,835**
Provisions for defined benefit plans	1,232	1,321
Provisions for other long-term employee benefits	171	186
of which for semi-retirement schemes	43	43
Provisions for termination benefits	268	295
of which for early retirement schemes	20	19
of which for restructuring	200	224
Provisions for short-term employee benefits	20	33
Provisions for share-based payment transactions	**34**	**46**
Other provisions	**2,024**	**2,122**
Provisions for onerous contracts	10	10
Provisions for restructuring	28	14
Provisions for loan commitments	110	107
Provisions for financial guarantee contracts	95	123
Other provisions for loans and advances	36	37
Provisions relating to building society operations	1,403	1,444
Residual provisions	342	387
Total	**3,749**	**4,003**

The actuarial gains from the change in financial assumptions mainly resulted from the increase in the underlying discount rate from 0.75 percent as at December 31, 2020 to 1.10 percent. Since the reporting date of June 30, 2021, the discount rate used to measure the defined benefit obligation has been rounded to 10 basis points instead of 25 basis points as was previously the case. If the discount rate was 1.0 percent, the provision would be approximately €50.8 million higher. Furthermore, a number of entities adjusted the annuity trend from 1.60 percent as at December 31, 2020 to 1.80 percent as at June 30, 2021.

>> 37 Insurance liabilities

€ million	Jun. 30, 2021	Dec. 31, 2020
Provision for unearned premiums	2,150	1,194
Benefit reserve	72,356	70,470
Provision for claims outstanding	15,587	14,627
Provision for premium refunds	12,399	12,569
Other insurance liabilities	75	50
Reserve for unit-linked insurance contracts	14,095	12,303
Total	**116,662**	**111,213**

The provision recognized in connection with the COVID-19 pandemic for claims in respect of the direct insurance companies in the non-life insurance division and in respect of inward reinsurance business, which amounted to €525 million as at December 31, 2020, remained sufficient as at June 30, 2021. COVID-19 continued to have 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, 2021	Dec. 31, 2020
Other liabilities of insurance companies	7,432	7,472
Accruals	937	1,279
Other payables	207	226
Lease liabilities	515	454
Residual other liabilities	946	812
Total	**10,037**	**10,243**

The table below gives a breakdown of insurance companies' other liabilities:

€ million	Jun. 30, 2021	Dec. 31, 2020
Other provisions	419	436
Payables and residual other liabilities	7,013	7,036
Total	**7,432**	**7,472**

Payables and residual other liabilities included lease liabilities of €71 million (December 31, 2020: €68 million).

>> 39 Subordinated capital

€ million	Jun. 30, 2021	Dec. 31, 2020
Subordinated liabilities	3,197	3,077
Share capital repayable on demand	12	13
Total	**3,209**	**3,090**

>> 40 Equity

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

€ million	Items not reclassified to the income statement: Reserve from equity instruments for which the fair value OCI option has been exercised	Items not reclassified to the income statement: Reserve from gains and losses on financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk	Items reclassified to the income statement: Reserve from debt instruments measured at fair value through other comprehensive income	Items reclassified to the income statement: Currency translation reserve
Equity as at Jan. 1, 2020	463	-42	1,180	85
Other comprehensive income/loss	-187	217	46	-2
Total comprehensive income/loss	**-187**	**217**	**46**	**-2**
Reclassifications within equity	-5	7	-	-
Equity as at Jun. 30, 2020	**271**	**182**	**1,226**	**83**
Equity as at Jan. 1, 2021	340	-76	1,889	59
Other comprehensive income/loss	189	-21	-503	-17
Total comprehensive income/loss	**189**	**-21**	**-503**	**-17**
Acquisition/disposal of non-controlling interests	-	-	-	-1
Reclassifications within equity	-51	-7	-	-
Equity as at Jun. 30, 2021	**478**	**-104**	**1,386**	**41**

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, 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**
Balance as at Jan. 1, 2021	2	-	8	-	24
Additions	-	-	3	-	-
Reversals	-1	-	-2	-	-
Other changes	-	-	-	-	-
Balance as at Jun. 30, 2021	**1**	**-**	**9**	**-**	**24**

	Investments held by insurance companies			Total
€ million	Stage 1	Stage 2	Stage 3	
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**
Balance as at Jan. 1, 2021	10	2	-	46
Additions	44	2	-	49
Reversals	-19	-	-	-22
Other changes	-3	-1	1	-3
Balance as at Jun. 30, 2021	**32**	**3**	**1**	**70**

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, 2021 Carrying amount	Jun. 30, 2021 Fair value	Dec. 31, 2020 Carrying amount	Dec. 31, 2020 Fair value
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**226,172**	**226,172**	**196,505**	**196,505**
Financial assets measured at fair value through profit or loss	**92,502**	**92,502**	**83,473**	**83,473**
Financial assets mandatorily measured at fair value through profit or loss	***83,526***	***83,526***	***74,003***	***74,003***
Loans and advances to customers	218	218	241	241
Hedging instruments (positive fair values)	241	241	161	161
Financial assets held for trading	52,776	52,776	42,846	42,846
Investments	2,656	2,656	2,720	2,720
Investments held by insurance companies	27,635	27,635	28,035	28,035
Financial assets designated as at fair value through profit or loss	***8,976***	***8,976***	***9,470***	***9,470***
Loans and advances to banks	1,890	1,890	1,967	1,967
Loans and advances to customers	1,115	1,115	1,213	1,213
Investments	5,971	5,971	6,290	6,290
Financial assets measured at fair value through other comprehensive income	**133,648**	**133,648**	**112,857**	**112,857**
Financial assets mandatorily measured at fair value through other comprehensive income	***127,200***	***127,200***	***106,935***	***106,935***
Loans and advances to banks	95	95	116	116
Loans and advances to customers	2,977	2,977	3,436	3,436
Investments	35,054	35,054	35,450	35,450
Investments held by insurance companies	89,074	89,074	67,933	67,933
Financial assets designated as at fair value through other comprehensive income	***6,448***	***6,448***	***5,922***	***5,922***
Investments	403	403	393	393
Investments held by insurance companies	6,045	6,045	5,529	5,529
Non-current assets and disposal groups classified as held for sale	**22**	**22**	**175**	**175**
FINANCIAL ASSETS MEASURED AT AMORTIZED COST	**398,640**	**404,030**	**385,370**	**394,481**
Cash and cash equivalents	97,607	97,606	68,148	68,148
Loans and advances to banks	100,411	103,143	100,913	104,646
Loans and advances to customers	184,327	187,567	182,079	185,968
Investments	13,363	14,126	14,894	15,838
Investments held by insurance companies	93	99	15,757	18,282
Other assets	1,489	1,489	1,595	1,595
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	1,350		1,980	
Non-current assets and disposal groups classified as held for sale	-	-	4	4
FINANCE LEASES	**889**	**895**	**1,076**	**1,091**
Loans and advances to banks	1	1	-	-
Loans and advances to customers	888	894	1,076	1,091

€ million	Jun. 30, 2021 Carrying amount	Jun. 30, 2021 Fair value	Dec. 31, 2020 Carrying amount	Dec. 31, 2020 Fair value
FINANCIAL LIABILITIES MEASURED AT FAIR VALUE	**88,801**	**88,801**	**84,968**	**84,968**
Financial liabilities mandatorily measured at fair value through profit or loss	**57,445**	**57,445**	**53,065**	**53,065**
Hedging instruments (negative fair values)	1,638	1,638	2,638	2,638
Financial liabilities held for trading	55,758	55,758	50,404	50,404
Other liabilities	49	49	23	23
Financial liabilities designated as at fair value through profit or loss	**31,356**	**31,356**	**31,903**	**31,903**
Deposits from banks	4,237	4,237	4,564	4,564
Deposits from customers	9,004	9,004	9,511	9,511
Debt certificates issued including bonds	17,980	17,980	17,589	17,589
Subordinated capital	135	135	239	239
FINANCIAL LIABILITIES MEASURED AT AMORTIZED COST	**390,778**	**396,258**	**355,644**	**363,304**
Deposits from banks	193,349	196,553	173,288	177,515
Deposits from customers	134,086	135,743	124,413	126,803
Debt certificates issued including bonds	58,130	58,881	52,911	54,117
Other liabilities	1,896	1,898	1,865	1,867
Subordinated capital	3,074	3,183	2,851	3,001
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	243		315	
Liabilities included in disposal groups classified as held for sale	-	-	1	1
LEASES	**587**	**587**	**522**	**522**
Other liabilities	587	587	522	522
FINANCIAL GUARANTEE CONTRACTS AND LOAN COMMITMENTS	**205**	**205**	**230**	**230**
Financial guarantee contracts	**95**	**95**	**123**	**123**
Provisions	95	95	123	123
Loan commitments	**110**	**110**	**107**	**107**
Provisions	110	110	107	107

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 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 €57 million (December 31, 2020: €16,505 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, 2021**	Dec. 31, 2020	**Jun. 30, 2021**	Dec. 31, 2020	**Jun. 30, 2021**	Dec. 31, 2020
Assets	**91,585**	**89,438**	**111,447**	**97,616**	**23,140**	**9,451**
Loans and advances to banks	-	-	1,984	2,083	-	-
Loans and advances to customers	-	-	3,492	4,029	818	861
Hedging instruments (positive fair values)	-	-	241	161	-	-
Financial assets held for trading	2,330	2,032	50,016	40,045	430	769
Investments	19,726	20,421	22,603	22,726	1,756	1,705
Investments held by insurance companies	69,530	66,935	33,105	28,532	20,119	6,030
Non-current assets and disposal groups classified as held for sale	-	50	5	39	17	86
of which non-recurring measurement	-	50	-	-	17	2
Liabilities	**4,436**	**4,451**	**100,376**	**94,466**	**720**	**774**
Deposits from banks	-	-	4,237	4,564	-	-
Deposits from customers	-	-	9,004	9,511	-	-
Debt certificates issued including bonds	3,366	3,416	14,157	13,691	457	482
Hedging instruments (negative fair values)	-	-	1,638	2,638	-	-
Financial liabilities held for trading	1,069	1,032	54,445	49,101	244	271
Financial liabilities arising from unit-linked insurance products	-	-	16,731	14,722	-	-
Other liabilities	1	3	48	20	-	-
Subordinated capital	-	-	115	219	20	20

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, 2021	Jan. 1– Jun. 30, 2020	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Financial assets measured at fair value	**402**	103	**876**	1,069
Investments held by insurance companies	402	103	876	1,069

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, 2021.

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Loans and advances to customers	Loans	539	DCF method	BVAL price adjustment	-4.0 to 5.3
		86	DCF method	Credit spread	0.1 to 8.3
	Profit-participation certificates	28	DCF method	Internal credit ratings	3.9 to 23.9
	Shareholders' loans	106	DCF method	Internal credit ratings	3.9 to 23.9
	Receivables arising from silent partnerships	59	DCF method	Internal credit ratings	3.9 to 23.9
Financial assets held for trading	ABSs	4	DCF method	Credit spread	6.6
	Equity/commodity basket products	3	Local volatility model	Correlation of the risk factors considered	0.0 to 100.0
	Loans and advances to issuers in default	3	DCF method	Recovery rate	-
	Collateralized loan obligations	166	Gaussian copula model	Liquidity spread	1.4 to 3.9
	Bearer securities	123	DCF method	BVAL price adjustment	-0.5 to 0.4
	Registered securities	130	DCF method	BVAL price adjustment	-4.0 to 5.3
	Option in connection with acquisition of long-term equity investments	1	Black-Scholes model	Earnings indicators	-
Investments	ABSs	77	DCF method	Credit spread	0.3 to 7.0
	Other variable-yield securities	9	DCF method	Assumptions for measurement of risk parameters	12.2 to 14.3
	Investments in associates	3	Income capitalization approach	Future income	-
	Investments in subsidiaries	68	DCF method	Assumptions for measurement of risk parameters	12.2 to 14.3
		237	Income capitalization approach, net asset value method	Future income	-
	Collateralized loan obligations	3	Gaussian copula model	Liquidity spread	1.5 to 2.1
	Loans and advances to issuers in default	6	DCF method	Recovery rate	-
	Bearer securities	257	DCF method	BVAL price adjustment	-0.5 to 136.8
	Investment fund units	13	Net asset value	-	-
	Mortgage-backed securities	263	DCF method	Duration	-
		37	DCF method	Recovery rate	0.0 to 94.0
	Other shareholdings	85	DCF method	Capitalization rate, growth factor	1.0 to 10.6
		241	Income capitalization approach, net asset value method	Future income	-
	VR Circle	457	DCF method	Multiple-year default probabilities	0.0 to 100.0

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Investments held by insurance companies	ABSs	1,541	Third-party pricing information	-	-
	Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments	3,317	Net asset value	-	-
	Investments in subsidiaries, associates, and joint ventures, other long-term equity investments, and shares in cooperatives	305	Income capitalization approach	Future income	6.8 to 9.4
	Fixed-income securities, convertible bonds, shares, investment fund units, and shares in cooperatives	715	Third-party pricing information	-	-
	Profit-participation certificates and promissory notes	14,229	DCF method	Credit spread	0.6 to 12.1
	Other shareholdings	12	Approximation	-	-
Non-current assets and disposal groups classified as held for sale	Loans	17	DCF method	Credit spread	0.1 to 8.3
Debt certificates issued including bonds	VR Circle	457	DCF method	Multiple-year default probabilities	0.0 to 100.0
Financial liabilities held for trading	Equity/commodity basket products	227	Local volatility model	Correlation of the risk factors considered	0.0 to 100.0
	Products with commodity volatility derived from comparable instruments	17	Local volatility model	Volatility	7.0 to 66.5
Subordinated capital	Loans	20	DCF method	Credit spread	0.3 to 0.9

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, 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	580	DCF method	BVAL price adjustment	-4.0 to 4.9
		79	DCF method	Credit spread	0.1 to 8.3
	Profit-participation certificates	28	DCF method	Internal credit ratings	4.0 to 24.2
	Shareholders' loans	112	DCF method	Internal credit ratings	4.0 to 24.2
	Receivables arising from silent partnerships	62	DCF method	Internal credit ratings	4.0 to 24.2
Financial assets held for trading	ABSs	4	DCF method	Credit spread	7.7
	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	121	Gaussian copula model	Liquidity spread	1.6 to 3.3
	Bearer securities	235	DCF method	BVAL price adjustment	0.2 to 2.6
	Registered securities	400	DCF method	BVAL price adjustment	-4.0 to 4.9
Investments	ABSs	93	DCF method	Credit spread	0.6 to 7.0
	Other variable-yield securities	10	DCF method	Assumptions for measurement of risk parameters	11.4 to 14.5
	Investments in subsidiaries	66	DCF method	Assumptions for measurement of risk parameters	11.4 to 14.5
		231	Income capitalization approach, net asset value method	Future income	-
	Collateralized loan obligations	3	Gaussian copula model	Liquidity spread	0.0 to 2.1
	Loans and advances to issuers in default	6	DCF method	Recovery rate	-
	Bearer securities	164	DCF method	BVAL price adjustment	0.2 to 132.7
	Investment fund units	13	Net asset value	-	-
	Mortgage-backed securities	276	DCF method	Duration	-
		37	DCF method	Recovery rate	0.0 to 94.3
	Other shareholdings	88	DCF method	Capitalization rate, growth factor	1.0 to 10.3
		235	Income capitalization approach, net asset value method	Future income	-
	VR Circle	483	DCF method	Multiple-year default probabilities	0.0 to 100.0

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Investments held by insurance companies	ABSs	1,379	Third-party pricing information	-	-
	Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments	2,923	Net asset value	-	-
	Investments in subsidiaries, associates, and joint ventures, other long-term equity investments, and shares in cooperatives	309	Income capitalization approach	Future income	6.5 to 9.4
	Fixed-income securities, convertible bonds, shares, investment fund units, and shares in cooperatives	959	Third-party pricing information	-	-
	Profit-participation certificates and promissory notes	451	DCF method	Credit spread	5.0 to 6.8
	Other shareholdings	9	Approximation	-	-
Non-current assets and disposal groups classified as held for sale	Investments in corporations	29	Income capitalization approach	Future income	0.0 to 10.8
	Loans	57	DCF method	Credit spread	0.1 to 8.3
Debt certificates issued including bonds	VR Circle	482	DCF method	Multiple-year default probabilities	0.0 to 100.0
Financial liabilities held for trading	Equity/commodity basket products	254	Local volatility model	Correlation of the risk factors considered	9.9 to 85.3
	Products with commodity volatility derived from comparable instruments	17	Local volatility model	Volatility	7.0 to 72.1
Subordinated capital	Loans	20	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, 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**
Balance as at Jan. 1, 2021	861	769	1,705	6,030	86
Additions (purchases)	37	190	33	1,993	-
Transfers	-	84	77	-205	-
from Level 3 to Levels 1 and 2	-	-61	-100	-230	-
from Levels 1 and 2 to Level 3	-	145	177	25	-
Disposals (sales)	-66	-604	-97	-996	-108
Changes resulting from measurement at fair value	-9	-8	23	-559	38
through profit or loss	-6	-8	15	64	38
through other comprehensive income	-3	-	8	-623	-
Other changes	-5	-1	15	13,856	1
Balance as at Jun. 30, 2021	**818**	**430**	**1,756**	**20,119**	**17**

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, 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**
Balance as at Jan. 1, 2021	482	271	-	20
Additions (issues)	-	29	-	-
Transfers	-	-21	-	-
from Level 3 to Level 2	-	-61	-	-
from Level 2 to Level 3	-	40	-	-
Disposals (settlements)	-26	-39	-	-4
Changes resulting from measurement at fair value	-	3	-	4
through profit or loss	-	3	-	5
through other comprehensive income	-	-	-	-1
Balance as at Jun. 30, 2021	**457**	**244**	**-**	**20**

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 net gain of €149 million during the reporting period (first half of 2020: net loss of €44 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 €34 million loss in the income statement (December 31, 2020: loss of €37 million) and a loss of €1,396 million under other comprehensive income/loss (December 31, 2020: loss of €1 million). The changes within investments held by insurance companies compared with the end of 2020 are due to reclassification of financial assets and a related rise in the fair values reported within Level 3.

In the case of the fair values of loans and advances to customers, a worsening in the credit rating or a rise in the interest rate of 1 percent would lead to the recognition of an €8 million loss in the income statement (December 31, 2020: loss of €11 million). For the fair values of investments, there would be a €25 million loss under other comprehensive income/loss (December 31, 2020: loss of €19 million) and a €25 million loss in the income statement (December 31, 2020: loss of €20 million).

The fair values of bonds without liquid markets that are reported within financial assets 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 €14 million loss in the income statement (December 31, 2020: loss of €24 million) and a loss of €14 million under other comprehensive income/loss (December 31, 2020: loss of €16 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 in the spread of 1 percent would not lead to any material change in fair value. As at December 31, 2020, there would have been a €1 million increase in fair value that would have been recognized in the income statement.

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 €1 million loss in the income statement (December 31, 2020: loss of €1 million) and a loss of €1 million under other comprehensive income/loss (December 31, 2020: loss of €2 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 €3 million decrease in the fair values of these financial assets that would be recognized in the income statement (December 31, 2020: decrease of €4 million).

Sensitivity analysis is used to calculate the aforementioned changes in the fair value measurements. Non-performing exposures, strategically held investments in subsidiaries and other shareholdings, and long-term equity investments in real estate funds whose fair values are calculated using an income capitalization approach or the net asset value 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 Reclassification

On January 1, 2021, financial assets categorized as 'financial assets measured at amortized cost' and 'financial assets measured at fair value through profit or loss' were reclassified prospectively as 'financial assets measured at fair value through other comprehensive income' due to a change to the business model.

The change to the business model was attributable to the R+V-wide strategic program known as 'Wachstum durch Wandel' (growth through change), the key pillars of which include profitable growth. To achieve this objective, R+V decided to realign and optimize its strategic asset allocation, resulting in a comprehensive change to the management of its investments. Under the changes that have been introduced, the strategy and management used for the investment of financial instruments have been realigned, which means that they will be assigned to the 'hold to collect and sell' business model in future and no longer to the 'hold to collect' and 'other' business models.

When the financial assets measured at amortized cost of €15,606 million were reclassified, hidden reserves of €2,524 million were identified for the first time and recognized in the reserve from debt instruments measured at fair value through other comprehensive income. The loss allowances of €23 million previously recognized for these holdings were also reclassified to this reserve.

Furthermore, assets of €3,139 million that were previously categorized as 'measured at fair value through profit or loss' were reclassified to 'financial assets measured at fair value through other comprehensive income'. Loss allowances of €26 million were recognized for the affected assets for the first time. At the time of reclassification, the reclassified assets had an average effective interest rate of 2.25 percent. As at June 30, 2021, the fair value of the reclassified assets still held was €2,432 million. In the first half of 2021, interest income of €55 million and changes in fair value amounting to a net loss of €77 million were attributable to these assets and were recognized in the reserve from debt instruments measured at fair value through other comprehensive income.

>> 44 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, 2021	Jan. 1– Jun. 30, 2020
Gains and losses on fair value hedges	**-5**	-3
Gains and losses on hedging instruments	55	-103
Gains and losses on hedged items	-60	100
Gains and losses on portfolio fair value hedges	**20**	12
Gains and losses on hedging instruments	728	-1,087
Gains and losses on hedged items	-708	1,099
Total	**15**	**9**

>> 45 Reform of interest-rate benchmarks

The German and European banking industry is currently working on the replacement of the existing interest-rate benchmarks with virtually risk-free interest-rate benchmarks in implementation of the EU Benchmark Regulation and in view of international market developments. As it did in 2020, the DZ BANK Group is applying the temporary exceptions in relation to the accounting treatment of hedges in the context of phase 1 of the IBOR reform. The projects carried out included an assessment of the extent to which fair value hedges of financial instruments are subject to uncertainties as a result of the IBOR reform. Hedges may be exposed to ineffectiveness that is attributable to market participants' expectations when the transition from the existing IBOR interest-rate benchmark to an alternative interest-rate benchmark takes place. This transition takes place unilaterally for the hedging instrument and not for the fixed-rate hedged item, which may result in hedge ineffectiveness.

Some of the hedging instruments in the DZ BANK Group continue to be linked to Libor. They are due to mature after the likely date on which Libor will cease to apply. The current assumption is that the change of interest-rate benchmark will not lead to dedesignation of existing hedges.

The Libor-related risk attaching to the hedges can be seen from the nominal amounts of the hedging instruments shown below:

AS AT JUNE 30, 2021

	CHF Libor 3M	CHF Libor 6M	USD Libor 3M	USD Libor 6M	GBP Libor 3M	GBP Libor 6M
Nominal amount (€ million)	91	10	2,123	18	12	649
Weighted average maturity (years)	1.0	7.0	6.5	3.3	8.7	11.0

AS AT DECEMBER 31, 2020

	CHF Libor 3M	CHF Libor 6M	USD Libor 3M	USD Libor 6M	GBP Libor 3M	GBP Libor 6M
Nominal amount (€ million)	93	10	2,841	19	-	-
Weighted average maturity (years)	1.5	7.0	4.5	3.8	-	-

Alongside the exceptions for phase 1, Interest Rate Benchmark Reform – Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16) will be applied from 2021 onward. In the DZ BANK Group, the switch of the EONIA and Libor interest-rate benchmarks is particularly significant. The transition phase before these interest-rate benchmarks are switched involves numerous uncertainties and risks, primarily concerning new market practices – some of which are still to be developed – and the establishment of the interest-rate benchmarks in the markets.

If the bilateral negotiations with counterparties do not reach a successful conclusion before the current interest-rate benchmarks are discontinued, interest-rate basis risk may arise. There may be uncertainties about the interest-rate benchmark to be used that were not foreseeable at the time that the contracts were entered into. Litigation risk may occur if no agreement is reached on implementing the IBOR reform in existing contracts. This may potentially lead to litigation and legal disputes.

The IT systems are currently being prepared in order to facilitate the full transition to alternative interest-rate benchmarks on time. If IT system upgrades and the changeover of the relevant contracts to the successor interest-rate benchmarks are not completed by the specified deadlines, there is a risk that the available courses of action in respect of the transactions concerned may be restricted. This could give rise to business risks (such as withdrawal from profitable areas of business), legal risks (such as compensation claims), and reputational risks.

Further risks could arise if the transition to alternative interest-rate benchmarks for certain contracts does not permit application of the exemptions introduced in phase 2. This could result in the discontinuation of hedges and thus lead to increased earnings volatility.

In order to manage the scope and complexity of the transition and the resulting risks, the DZ BANK Group undertook projects involving collaboration between different divisions in which the technical and process-related foundations were laid and the specific business changes were planned and implemented. These projects are following a risk-based approach so that any risks arising can be identified and resolved as quickly as possible. This is done, for example, by testing the affected IT systems, closely monitoring implementation progress, and rigorously applying mitigation strategies. All relevant stakeholders are kept up to date on progress.

The strategies for minimizing interest-rate basis risk and litigation risk are the early initiation of contact with counterparties and achieving a fair balance between the interests of issuers and lenders in the course of the transition (based on the market standards that are becoming established). External legal support and efforts to reach agreement on contractual amendments in line with the phase 2 rules should also help to reduce the aforementioned risks. The extension of the deadline for USD Libor until June 30, 2023 reduces the risk that the existing affected contracts cannot be switched in time.

The DZ BANK Group is represented in currency-area-specific working groups so that it can support an orderly transition by the relevant deadlines. The group also applies the ISDA 2020 IBOR Fallbacks Protocol and the German Master Agreement for Financial Futures of the Bundesverband deutscher Banken (BdB) [Association of German Banks].

The progress made with switching to alternative interest-rate benchmarks as at the reporting date varied within the DZ BANK Group depending on the extent of the impact of the switch and on the staggered deadlines for replacing the current interest-rate benchmarks. For example, activities to implement the USD Libor switch are still at an early stage, whereas the switch to the interest-rate benchmarks scheduled for replacement in 2021 is on track, which means that the transition can take place on time.

The table below shows the carrying amounts of the non-derivative financial instruments and the nominal amounts of the derivatives for which the switch to alternative interest-rate benchmarks had not yet taken place as at the reporting date. Financial instruments that will expire before any potential transition are not included.

AS AT JUNE 30, 2021

€ million	Non-derivative financial assets	Non-derivative financial liabilities	Derivatives
EONIA	-	-	31,735
USD Libor	6,265	661	80,266
GBP Libor	1,207	-	13,937
CHF Libor	7	-	7,420
EUR Libor	10	-	494
Other Libor	62	-	76

>> 46 Nature and extent of risks arising from financial instruments and insurance contracts

With the exception of the qualitative and quantitative disclosures pursuant to IFRS 7.35F(a)-36(b), the 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 risk report within the interim group management report. The disclosures pursuant to IFRS 7.35F(a)-36(b) 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 by transferring these inputs to shift factors for determining the default probability. 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 shift factors. On the basis of consultation with relevant experts, the shift factors determined using statistical methods were overridden in the case of portfolio segments affected by the pandemic. This was due to the unchanged macroeconomic uncertainties, which have not been seen on this scale before, and because of the extensive government support measures. 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.

The expected macroeconomic conditions are thus taken into account, primarily by adjusting the model-based default probability profiles used in economic and regulatory risk management (known as shift factors). The shift factors are 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 the determination of loss allowances. These shift factors are derived from macroeconomic inputs for various levels of default probability using stress test models that already existed or that were developed for IFRS 9. The basis for the shift factors applied as at the balance sheet date are the macroeconomic forecasts provided by the internal Economic Roundtable in April 2021. As at the balance sheet date, two macroeconomic scenarios (baseline scenario and risk scenario) were taken into account with a weighting of 80 percent (baseline scenario) and 20 percent (risk scenario).

The baseline scenario is based on the assumption of an increasingly rapid recovery from mid-2021 onward. This presupposed that the available vaccines remain effective and are rolled out quickly on a broad basis. The resulting rebound of consumer spending, capital expenditure, and foreign trade will continue to fuel strong growth in 2022, after which it is assumed that national economies will return to their trend growth rates.

The risk scenario is based on the assumption that significant problems arise with the vaccines that have been developed, thus casting doubt on their effectiveness. Such problems might include unforeseen side-effects from the vaccines or new mutations of the virus against which the available vaccines are not effective. This will result in a 'disappointment shock' for the economy and consumers in 2021 and will significantly hold back the recovery of the economy as a whole. In this scenario, sharp rises in unemployment and huge falls in income make it unlikely that the economy will bounce back in 2021 and 2022. Instead, the economy will probably recover gradually over a period of several years. This scenario will also see further sharp rises in indebtedness.

The main macroeconomic forecasts for 2021 to 2025 used to calculate the expected loss as at the balance sheet date were as follows.

		2021		2022		2023		2024		2025	
		Baseline	Risk	Baseline	Risk	Baseline	Risk	Baseline	Risk	Baseline	Risk
DAX 30, Germany	Index	14,680	11,660	15,560	13,410	16,340	13,810	17,150	14,230	17,840	14,660
EURO STOXX 50, EU	Index	3,800	3,020	3,990	3,470	4,150	3,570	4,315	3,680	4,445	3,790
Unemployment rate, Germany	%	5.75	7.40	5.25	7.20	5.00	6.30	4.75	5.90	4.50	5.70
Harmonized unemployment rates, EU	%	8.00	9.20	7.25	9.30	6.75	8.50	6.75	8.10	6.50	7.90
Real GDP growth, Germany (seasonally and calendar-adjusted)	Compared with prior year (%)	3.00	0.00	4.50	3.00	1.75	2.50	1.25	2.00	1.00	1.50
Real GDP growth, EU (seasonally and calendar-adjusted)	Compared with prior year (%)	3.50	0.00	4.75	3.00	2.25	3.00	1.50	2.50	1.25	2.00

The need to override the shift factors was evaluated in consultation with experts. Different group entities are responsible for this task depending on the shift segment, which constitutes the aggregation of the rating segments. The need to override the shift factors for the shift segments particularly affected by the COVID-19 pandemic was ascertained in groupwide consultation because the models cannot fully take account of government support measures or the current market situation.

The methodology for the process of overriding the model shift factors at group level was unchanged compared with December 31, 2020.

To mitigate the impact of COVID-19, borrowers and the entities in the DZ BANK Group have been agreeing on individual support measures since the start of the pandemic, including the temporary deferral of capital repayments. Besides these individual measures, other measures were taken in the context of legislative and non-legislative moratoria on repayments. These measures in the context of moratoria on repayments had largely expired as at the balance sheet date, with the exception of the legislative moratoria in Hungary, which were extended by a further three months until September 30, 2021. In accordance with the EBA Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis in the event of financial difficulties on the part of borrowers, the general legislative and non-legislative moratoria were, as a rule, not classified as forbearance measures and therefore did not lead to a forbearance-related transfer between stages within the impairment model. A transfer between stages still took place if other transfer criteria were met.

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. The COVID-19 pandemic is particularly affecting real estate in the hotel sector and the non-food segment of the retail sector (e.g. department stores) because they have been hit disproportionately hard by the pandemic (e.g. as a result of having to close during the lockdowns). The impact of the pandemic on the value of the real estate held as collateral can currently be offset by, for example, low interest rates, low vacancy rates, and a conservative finance structure. Any potential write-down of the value of real estate held as collateral by the DZ BANK Group is monitored on an ongoing basis, taking account of how the pandemic continues to unfold. By contrast, the pandemic has a direct impact on the collateral held in connection with the financing of aircraft and certain types of ship. The value of these types of collateral was validated using stress data and market data so that, if necessary, any write-down caused by the pandemic could be determined. These updated collateral values were incorporated into the calculation of loss allowances for expected losses in the reporting period.

As was also the case in 2020, the COVID-19 pandemic is resulting 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 the result of taking account of expected macroeconomic conditions, primarily by adjusting the model-based default probability profiles.

The reversal of loss allowances in 2021 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 connection with the COVID-19 pandemic is the result of taking account of expected macroeconomic conditions, primarily by adjusting the model-based default probability profiles. This updating has a direct effect on the probability of default of the financial instruments, which affects both the transfer between stages and the reversal of loss allowances within the stages. In 2020, taking account of expected macroeconomic conditions in connection with the COVID-19 pandemic had resulted in an addition to loss allowances.

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, 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**
Balance as at Jan. 1, 2021	19	106,216	3	701	24	18
Addition/increase in loan drawdowns	34	34,294	1	133	-	15
Change to financial assets due to transfer between stages	2	97	-2	-100	-	3
Transfer from stage 1	-	-340	-	338	-	2
Transfer from stage 2	2	437	-2	-438	-	1
Derecognitions and repayments	-1	-9,856	-	-77	-	-5
Changes to models/risk parameters	-7	-	1	-	-	-
Additions	14	-	1	-	-	-
Reversals	-21	-	-	-	-	-
Amortization, fair value changes, and other changes in measurement	-	-4,300	-	9	-	-1
Exchange differences and other changes	-	52	-	1	-	-
Deferred taxes	-5	-	-	-	-	-
Balance as at Jun. 30, 2021	**42**	**126,503**	**3**	**667**	**24**	**30**

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	POCI assets Loss allowances	POCI assets Gross carrying amount
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**
Balance as at Jan. 1, 2021	286	367,677	359	14,217	1,672	3,747	7	69
Addition/increase in loan drawdowns	77	6,000,787	41	13,882	305	979	1	38
Change to financial assets due to transfer between stages	103	876	-131	-1,077	30	201	-	-
Transfer from stage 1	-23	-3,488	22	3,436	1	52	-	-
Transfer from stage 2	119	4,304	-169	-4,621	50	317	-	-
Transfer from stage 3	7	60	16	108	-21	-168	-	-
Use of loss allowances/directly recognized impairment losses	-	-	-1	-	-199	-17	-	-2
Derecognitions and repayments	-102	-5,988,757	-74	-13,952	-376	-1,617	-4	-53
Changes to models/risk parameters	-87	-	165	-	-30	-	1	-
Additions	61	-	287	-	150	-	4	-
Reversals	-148	-	-122	-	-180	-	-3	-
Modifications	-	1	-	-2	-	-	-	-
Modification gains	-	2	-	-	-	-	-	-
Modification losses	-	-1	-	-2	-	-	-	-
Amortization, fair value changes, and other changes in measurement	-	2,068	-	26	-	-80	-	-
Positive change in fair value of POCI assets								12
Exchange differences and other changes	1	251	-	-13	49	18	1	1
Changes in the scope of consolidation	-	-	-	103	-	-	-	-
Addition of subsidiaries	-	-	-	103	-	-	-	-
Balance as at Jun. 30, 2021	**278**	**382,903**	**359**	**13,184**	**1,451**	**3,231**	**6**	**65**

The undiscounted expected credit losses on purchased or originated credit-impaired assets that were recognized for the first time during the reporting period totaled €94 million (first half of 2020: €69 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, 2020	-	194	-	-	3	7
Addition/increase in loan drawdowns	-	23	-	-	-	-
Derecognitions and repayments	-	-215	-	-	-	-
Balance as at Jun. 30, 2020	**-**	**2**	**-**	**-**	**3**	**7**
Balance as at Jan. 1, 2021	-	4	-	-	-	-
Derecognitions and repayments	-	-4	-	-	-	-
Balance as at Jun. 30, 2021	**-**	**-**	**-**	**-**	**-**	**-**

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, 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**
Balance as at Jan. 1, 2021	2	802	6	261	12	34
Addition/increase in loan drawdowns	1	55	4	3	8	1
Change to finance leases due to transfer between stages	2	-	-	-11	-4	11
Transfer from stage 1	-	-94	-	91	-	3
Transfer from stage 2	1	91	-2	-108	1	17
Transfer from stage 3	1	3	2	6	-5	-9
Derecognitions and repayments	-3	-180	-5	-52	-4	-16
Balance as at Jun. 30, 2021	**2**	**677**	**5**	**201**	**12**	**30**

Financial guarantee contracts and loan commitments

€ million	Stage 1 Loss allowances	Stage 1 Nominal amount	Stage 2 Loss allowances	Stage 2 Nominal amount	Stage 3 Loss allowances	Stage 3 Nominal amount	POCI assets Loss allowances	POCI assets Nominal amount
Balance as at Jan. 1, 2020	45	64,937	10	575	140	282	-	-
Addition/increase in loan drawdowns	43	35,581	13	861	18	214	4	20
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**	**142**	**256**	**4**	**20**
Balance as at Jan. 1, 2021	62	74,559	38	2,445	129	260	1	9
Addition/increase in loan drawdowns	63	42,493	36	1,768	19	63	1	56
Change to financial guarantee contracts and loan commitments due to transfer between stages	11	-817	-12	791	1	26	-	-
Transfer from stage 1	-3	-1,140	3	1,139	-	1	-	-
Transfer from stage 2	14	323	-15	-354	1	31	-	-
Transfer from stage 3	-	-	-	6	-	-6	-	-
Derecognitions and repayments	-45	-39,023	-30	-1,921	-39	-164	-2	-10
Changes to models/risk parameters	-23	-	12	-	1	-	-	-
Additions	21	-	31	-	25	-	1	-
Reversals	-44	-	-19	-	-24	-	-1	-
Amortization, fair value changes, and other changes in measurement	-	76	-	3	-	1	-	-
Exchange differences and other changes	-	-55	-	29	-18	-	-	-
Balance as at Jun. 30, 2021	**68**	**77,233**	**44**	**3,115**	**93**	**186**	**-**	**55**

>> 47 Issuance activity

During the reporting period, there were new issues with a volume of €23 billion in connection with issuance activity for unregistered commercial paper, bonds issued including share certificates, index-linked certificates, and other debt certificates, and subordinated liabilities (first half of 2020: €37 billion). In the same period, there were early repurchases of €2 billion (first half of 2020: €3 billion) and repayments upon maturity of €15 billion (first half of 2020: €42 billion).

E Other disclosures

>> 48 Contingent liabilities

€ million	Jun. 30, 2021	Dec. 31, 2020
Contingent liabilities from placement and underwriting obligations	-	41
Contingent liabilities arising from contributions to the resolution fund for CRR credit institutions	111	88
Contingent liabilities in respect of litigation risk	29	39
Total	**140**	**168**

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 in the direct health business of the R+V subgroup essentially relate to the not improbable risk of an outflow of resources embodying economic benefits as a result of certain premium adjustments potentially being ineffective. In addition, 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.

The underwriting obligations disclosed as at December 31, 2020 in relation to an undertaking by DZ BANK AG in connection with its involvement in the funding of a power plant project as part of an initiative to support economic growth in less developed regions of Saudi Arabia have expired, so there were no longer any contingent liabilities from placement and underwriting obligations as at June 30, 2021.

>> 49 Financial guarantee contracts and loan commitments

€ million	Jun. 30, 2021	Dec. 31, 2020
Financial guarantee contracts	**9,012**	**8,497**
Loan guarantees	4,753	4,681
Letters of credit	894	636
Other guarantees and warranties	3,365	3,180
Loan commitments	**71,576**	**68,775**
Credit facilities to banks	25,185	23,695
Credit facilities to customers	35,781	34,042
Guarantee credits	1,372	1,538
Letters of credit	129	145
Global limits	9,109	9,356
Total	**80,588**	**77,272**

The amounts shown for financial guarantee contracts and loan commitments are the nominal values of the commitment in each case.

>> 50 Trust activities

Trust assets and trust liabilities amounted to €2,272 million as at June 30, 2021 (December 31, 2020: €2,094 million).

>> 51 Disclosures on revenue from contracts with customers

Disclosures on revenue from contracts with customers, broken down by operating segment

JANUARY 1 TO JUNE 30, 2021

€ 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	22	-	-	
Other fee and commission income	37	-	69	
Fee and commission income in gains and losses on investments held by insurance companies and other insurance company gains and losses	-	21	-	
Other income in gains and losses on investments held by insurance companies and other insurance company gains and losses	-	32	-	
Other operating income	-	-	5	
Total	**59**	**53**	**76**	
Main geographical markets				
Germany	54	53	76	
Rest of Europe	5	-	-	
Rest of World	-	-	-	
Total	**59**	**53**	**76**	
Type of revenue recognition				
At a point in time	59	2	76	
Over a period of time	-	51	-	
Total	**59**	**53**	**76**	

	UMH	DZ BANK – CICB	DZ HYP	DZ PRIVAT-BANK	VR Smart Finanz	DVB	Other/ Consolidation	**Total**
	1,979	262	-	111	-	-	-40	2,312
	7	-	-	193	-	-	-2	197
	-	123	-	1	-	-	23	147
	-	38	4	-	-	9	8	60
	-	32	4	-	-	-	-2	34
	-	5	-	-	-	-	-	5
	-	-	-	-	-	-	-	22
	-	32	5	-	2	1	-67	79
	-	-	-	-	-	-	-	21
	-	-	-	-	-	-	-	32
	4	-	-	-	-	-	19	27
	1,990	**491**	**12**	**305**	**2**	**10**	**-61**	**2,937**
	1,543	491	12	86	2	1	-69	2,249
	447	-	-	218	-	9	7	686
	-	-	-	1	-	-	-	1
	1,990	**491**	**12**	**305**	**2**	**10**	**-61**	**2,937**
	263	177	10	106	2	1	-98	598
	1,727	315	2	199	-	9	36	2,339
	1,990	**491**	**12**	**305**	**2**	**10**	**-61**	**2,937**

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**

>> 52 Government grants

The ECB made additional liquidity available under the TLTRO III program in order to support lending to households and companies during the COVID-19 pandemic. The DZ BANK Group participated in the program with a total drawdown amount of €32,514 million (December 31, 2020: €17,837 million). The bidder group originally comprising DZ BANK AG and TeamBank was extended to include DZ HYP with effect from February 18, 2021. This extension applies to new business from tranche 7 onward of the TLTRO III program and also retrospectively with regard to checking compliance with the net lending volume required for receipt of the interest-rate advantage. The extended bidder group's total volume of €32,514 million was recognized under deposits from banks on the balance sheet. The term for each tranche is a maximum of 3 years. Early, voluntary partial or full repayment is possible at quarterly intervals from 12 months after disbursement, but not before September 2021.

In accordance with the rules of the TLTRO III program, the interest on the liquidity provided depends on the net lending volume in the specified comparative periods. The basic interest rate in the reporting-relevant months of 2021 was minus 0.5 percent. It was accounted for in accordance with IFRS 9 and was recognized pro rata in net interest income in an amount of €67 million. A 0.5 percentage point lower interest rate was achieved in the period June 24, 2020 to June 23, 2021 because the net lending volume of the extended bidder group's eligible loans (loans to the non-financial sector in the eurozone, excluding consumer home finance) was positive in the period March 1, 2020 to March 31, 2021 and was thus higher than the required reference volume. Because this condition was met, the interest rate for this period was minus 1.0 percent. The interest-rate advantage achieved was 0.5 percentage points below the market interest rate for the DZ BANK Group and was therefore accounted for as a government grant in accordance with IAS 20. As a result, additional income of €97 million was recognized in net interest income in the period under review. Of this sum, €35 million was attributable to the period June 24, 2020 to December 31, 2020 because there had not yet been reasonable assurance as at December 31, 2020 that the condition would be met and thus that the government grant could be recognized in profit or loss.

In accordance with the ECB's decision on December 10, 2020, the additional interest-rate advantage will also be granted in the period June 24, 2021 to June 23, 2022 if the net lending volume in respect of the eligible loans is not negative in the period October 1, 2020 to December 31, 2021. Under IAS 20, however, the potential interest-rate advantage cannot be recognized until there is reasonable assurance that the extended bidder group will comply with the condition attaching to it regarding the net lending volume. Based on the information available as at June 30, 2021, there was not reasonable assurance that the extended bidder group would meet this condition. Consequently, government grants were not recognized for the period June 24, 2021 to June 30, 2021. The basic interest rate of minus 0.5 percent, which is not contingent on fulfillment of the aforementioned condition, was recognized pro rata in net interest income from June 24, 2021.

In addition to the TLTRO III program, government grants of €23 million were deducted from the carrying amount of investment property held by insurance companies (December 31, 2020: €17 million). The grants are non-interest-bearing, low-interest or forgivable loans.

>> 53 Employees

Average number of employees by employee group:

	Jan. 1– Jun. 30, 2021	Jan. 1– Jun. 30, 2020
Female employees	**14,699**	**14,168**
Full-time employees	9,130	8,592
Part-time employees	5,569	5,576
Male employees	**17,521**	**16,994**
Full-time employees	16,344	15,813
Part-time employees	1,177	1,181
Total	**32,220**	**31,162**

>> 54 Events after the balance sheet date

The severe weather event that occurred in mid-July 2021, given the name Bernd, was a loss event that involved particularly significant losses as a result of local flooding. These claims, combined with other natural disaster loss events occurring up to this point in relation to the first half of 2021 and based on the claims received up to the time of preparation of the balance sheet, meant that the natural disaster claim costs included in the planning for 2021 were exceeded. However, among other things, there is reinsurance cover for natural disasters that takes effect once a defined claims volume is exceeded and therefore limits the adverse impact. At the current point in time, it is therefore still assumed that the business performance of the insurance business will be in line with the planning.

>> 55 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

>> 56 Supervisory Board

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(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
until May 19, 2021)
Chief Executive Officer
Dortmunder Volksbank eG

Ingo Stockhausen
(Deputy Chairman of the Supervisory Board
since May 19, 2021)
Chief Executive Officer
Volksbank Oberberg eG

Uwe Barth
Spokesman of the Board of Managing Directors
Volksbank Freiburg eG
(Member of the Supervisory Board since May 19, 2021)

Heiner Beckmann
Senior manager
R+V Allgemeine Versicherung AG

Timm Häberle
Chief Executive Officer
VR-Bank Neckar-Enz eG

Dr. Peter Hanker
Spokesman of the Board of Managing Directors
Volksbank Mittelhessen eG

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Bausparkasse Schwäbisch Hall AG

Pilar Herrero Lerma
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

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Head of the Economic Policy Division
ver.di Bundesverwaltung

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Volksbank Allgäu-Oberschwaben eG
(Member of the Supervisory Board since May 19, 2021)

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Bundesverband der Deutschen Volksbanken
und Raiffeisenbanken e.V. (BVR)

Renate Mack
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Deutsche Zentral-Genossenschaftsbank

Rainer Mangels
Employee
R+V Rechtsschutz-Schadenregulierungs-GmbH

Sascha Monschauer
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Rolf Dieter Pogacar
Employee
R+V Allgemeine Versicherung AG

Stephan Schack
Chief Executive Officer
Volksbank Raiffeisenbank eG, Itzehoe

Gregor Scheller
Chief Executive Officer
VR Bank Bamberg-Forchheim eG
(Member of the Supervisory Board until May 19, 2021)

Uwe Spitzbarth
Departmental coordinator
ver.di Bundesverwaltung

Sigrid Stenzel
Labor union secretary
Social security department
ver.di Niedersachsen-Bremen

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Chief Executive Officer
VR Bank Rhein-Neckar eG
(Member of the Supervisory Board until May 19, 2021)

Dr. Gerhard Walther
Chief Executive Officer
VR-Bank Mittelfranken West eG
(Member of the Supervisory Board since May 19, 2021)

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 24, 2021

DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

The Board of Managing Directors

Fröhlich	Dr. Riese	Berghaus	Dr. Brauckmann
Brouzi	Köhler	Speth	Ullrich

Review Report[i]

To DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main

We have reviewed the condensed consolidated interim financial statements – comprising the 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 1 January to 30 June 2021 which are part of the half-year financial report pursuant to § (Article) 115 WpHG ("Wertpapierhandelsgesetz": German Securities Trading Act). The preparation of the condensed consolidated interim financial statements in accordance with the IFRS applicable to interim financial reporting as adopted by the EU and of the interim group management report in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports is the responsibility of the parent Company's management. Our responsibility is to issue a review report on the condensed consolidated interim financial statements and on the interim group management report based on our review.

We conducted our review of the condensed consolidated interim 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 so that we can preclude through critical evaluation, with moderate assurance, that the condensed consolidated interim financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU and that the interim group management report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports. A review is limited primarily to inquiries of company personnel and analytical procedures and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot express an audit opinion.

Based on our review, no matters have come to our attention that cause us to presume that the condensed consolidated interim financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU nor that the interim group management report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports.

Frankfurt am Main, 24 August 2021

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

sgd. Ralf Schmitz
Wirtschaftsprüfer
(German Public Auditor)

sgd. Peter Kleinschmidt
Wirtschaftsprüfer
(German Public Auditor)

[i] Translation of the auditor's review report issued in German language on the condensed consolidated interim financial statements prepared in German language by the management of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main. The German review report is authoritative.

Editorial information

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