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:

	Jan. 1–Jun. 30, 2021			Jan. 1–Jun. 30, 2020		
€ million	Amount before taxes	Income taxes	Amount after taxes	Amount before taxes	Income taxes	Amount after taxes
Items that may be reclassified to the income statement	**-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

	Repayable on demand		Other loans and advances		Total	
€ million	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:

	Items not reclassified to the income statement		Items reclassified to the income statement	
€ million	Reserve from equity instruments for which the fair value OCI option has been exercised	Reserve from gains and losses on financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk	Reserve from debt instruments measured at fair value through other comprehen-sive income	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

	Stage 1		Stage 2		Stage 3	
€ million	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount	Loss allowances	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

	Stage 1		Stage 2		Stage 3	
€ million	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount	Loss allowances	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

	Stage 1		Stage 2		Stage 3		POCI assets	
€ million	Loss allowances	Nominal amount	Loss allowances	Nominal amount	Loss allowances	Nominal amount	Loss allowances	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

Henning Deneke-Jöhrens
(Chairman of the Supervisory Board)
Chief Executive Officer
Volksbank eG Hildesheim-Lehrte-Pattensen

Ulrich Birkenstock
(Deputy Chairman of the Supervisory Board)
Employee
R+V Allgemeine Versicherung AG

Martin Eul
(Deputy Chairman of the Supervisory Board
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

Andrea Hartmann
Employee
Bausparkasse Schwäbisch Hall AG

Pilar Herrero Lerma
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

Dr. Dierk Hirschel
Head of the Economic Policy Division
ver.di Bundesverwaltung

Josef Hodrus
Spokesman of the Board of Managing Directors
Volksbank Allgäu-Oberschwaben eG
(Member of the Supervisory Board since May 19, 2021)

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

Renate Mack
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

Rainer Mangels
Employee
R+V Rechtsschutz-Schadenregulierungs-GmbH

Sascha Monschauer
Chief Executive Officer
Volksbank RheinAhrEifel eG

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

Dr. Wolfgang Thomasberger
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)