Volksbanken Raiffeisenbanken
cooperative financial network

2019 Half-Year Financial Report

DZ BANK Group

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

Dear Shareholders,

Last year, we set the course for the future with our 'Verbund First 4.0' strategic program. We made good progress with this initiative in the first half of 2019, both at DZ BANK AG and in the group. It is gratifying that our results confirm that we are on the right track.

We are pleased to report that, despite the generally challenging environment, our earnings exceeded expectations in the first half of this year. The DZ BANK Group generated profit before taxes of €1.46 billion, substantially surpassing the result of the corresponding prior-year period. This achievement was attributable to the good operating performance of all entities, coupled with an inconspicuous risk situation.

One-off items were also a contributing factor, including reporting-date-related valuation effects at R+V Versicherung and DZ HYP as a result of the situation in the capital markets. The disposal of foreign companies of Bausparkasse Schwäbisch Hall and Union Investment also had a positive impact, as did sales transactions at DVB Bank. These are examples of how we are systematically translating strategy into entrepreneurial action.

The key results in detail: Net interest income amounted to €1.28 billion in the DZ BANK Group. The decrease was due to additions to provisions relating to building-society operations at Bausparkasse Schwäbisch Hall. Net fee and commission income held steady at €958 million, reflecting the sales strength of our organization.

Gains and losses on trading activities came to a net gain of €141 million. This was lower than the figure for the prior-year period, which had been influenced by effects arising from the valuation of own issues and by proceeds from the sale of securities. A much higher net gain was recognized under other gains and losses on valuation of financial instruments in the reporting period, partly due to the positive performance of DZ HYP's government bond portfolios. A market-related improvement in R+V Versicherung's gains and losses on investments held by insurance companies resulted in net income from insurance business of €761 million, which was substantially higher than in the prior-year period.

Following the net reversals in the first half of 2018, loss allowances were inconspicuous at €105 million in the reporting period. Excluding consolidation effects (i.e. including VR Payment) and higher contributions to the protection scheme, administrative expenses were on a par with the first half of last year thanks to disciplined management of costs.

The DZ BANK Group's capital adequacy continued to strengthen thanks to proactive management of risk-weighted assets. Applying the provisions of the Capital Requirements Regulation (CRR) in full, the common equity Tier 1 capital ratio of the DZ BANK Group as at June 30, 2019 was 14.3 percent (December 31, 2018: 13.7 percent).

These satisfying results reflect the significant commitment of our employees. On behalf of the Board of Managing Directors, we would like to express our appreciation and thanks to them.

As a major financial intermediary, the DZ BANK Group is highly dependent on the capital markets and thus prone to earnings volatility. The business outlook for the second half of the year must therefore be viewed with caution.

At geopolitical level, the main risk factors are a disorderly Brexit, escalation of the trade disputes, and crises in the Middle East. The economic conditions have already turned gloomier, and profit warnings are being issued in key industries. The phenomenon of low and negative interest rates is here to stay. Nevertheless, further potential in the equity markets remains limited.

Such an environment does not make it easier to generate income. Against this backdrop and taking account of the further capital expenditure that is needed for the ongoing evolution of the DZ BANK Group, we now anticipate moderate earnings growth in the second half of the year and therefore a profit before taxes in the middle to the upper end of the long-term target range of €1.5 billion to €2.0 billion.

Despite all these challenges, our current position allows us to be optimistic and to have confidence in our abilities. We are fully focused on our customers and on the strategic development of our organization.

Kind regards,

Uwe Fröhlich
Co-Chief Executive Officer

Dr. Cornelius Riese
Co-Chief Executive Officer

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Note

DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK), as the parent company in the DZ BANK Group, implements the transparency requirements as specified in sections 115 and 117 of the German Securities Trading Act (WpHG) and section 315 of the German Commercial Code (HGB) in conjunction with the relevant German accounting standard (GAS 16 Interim Financial Reporting) with the publication of this interim group management report. The opportunity and risk report also satisfies the applicable international requirements of International Accounting Standard (IAS) 34 (Interim Financial Reporting) with respect to risk-related disclosure requirements.

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

I DZ BANK Group fundamentals

1 Business model and strategic focus

The business model and strategic focus of the DZ BANK Group are described in detail on page 10 onward of the 2018 Annual Report. Those disclosures are also applicable to the first half of 2019.

2 Management of the DZ BANK Group

The management of the DZ BANK Group is described in detail on page 16 onward of the 2018 Annual Report. Those disclosures are also applicable to the first half of 2019.

II Business report

1 Economic conditions

The German economy stabilized in the first six months of 2019, having weakened in the second half of 2018. Adjusted for inflation, average overall economic output in the first half of this year was 0.5 percent higher than in the second half of 2018. It had only risen by 0.2 percent in the half-year period prior to that. The growth rate is therefore below the average for recent years.

German economic output in the first quarter of 2019 was up by 0.4 percent compared with the preceding quarter. In the second quarter of this year, however, it contracted by 0.1 percent. It had grown by 0.2 percent in the fourth quarter of 2018.

The main reason for the German economy's slight revival in the reporting period compared with the prior-year period was the increase in consumer spending on the back of a lower inflation rate. The still robust labor market and the upward income trend, combined with the low level of interest rates, fueled both household spending and demand for private house-building. Against this backdrop, construction investment again accounted for a considerable proportion of the increase in German economic output. Companies' spending on capital equipment also bolstered the growth of the economy as a whole.

Growth in the eurozone economy also remained fairly weak in the first six months of 2019. Following a 0.5 percent rise in gross domestic product (GDP) in the second half of 2018 compared with the first half of 2018, the eurozone economy saw slightly stronger growth of 0.7 percent in the period under review. The rate of growth in the first quarter of 2019 was 0.4 percent. In the second quarter, the economy grew by 0.2 percent compared with the previous quarter.

The US economy was much more buoyant than its European counterpart in the first half of 2019. However, consumer spending increased at a below-average rate. The robust pace of economic growth was due in large part to the marked rise in capital spending on plant and equipment and a foreign trade surplus.

Chinese economic growth continued to lose a little of its momentum, not least because of the trade dispute with the United States. However, growth rates are still at a high level. Economic difficulties persisted in some of the other emerging economies during the reporting period. These were often attributable to structural problems and political uncertainty. Brazil's and Russia's economic growth is showing only tentative signs of strengthening, for example. However, India's growth rate is surging.

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

The elections for the European Parliament on May 26, 2019 were the main event at European Union (EU) level during the reporting period. The focus was on efforts to further stabilize economic conditions in the eurozone and to bring about a shift toward joint European economic policy following the recent return in some countries of a trend toward economic policy driven first and foremost by national interests.

The policy of 'America first' introduced by the US government in 2018 with the imposition of customs duties on products from China, Canada, Mexico, and even the EU was ratcheted up in the first half of the reporting year, with Chinese goods bearing the brunt of the punitive tariffs. The US government changed its stance toward Mexico and Canada in May 2019, when it abolished the special tariffs that it had introduced in 2018. In April 2019, the US President raised the prospect of tariffs of up to 25 percent being imposed on car imports from the EU and Japan. The European Commission responded by publishing a list of US products worth around €20.0 billion on which the EU itself could impose special tariffs. On May 17, 2019, the US President postponed the decision on whether to introduce tariffs on car imports by 180 days.

These developments in the trade disputes being driven by the United States are erratic and creating uncertainty for global trade. The Bundesverband der Industrie (BDI) [Federation of German Industries] is of the view that the international disputes are unsettling companies and may have an adverse impact on the German economy with its heavy focus on foreign trade. These uncertainties are not only taking their toll on the real economy but also affecting the financial markets.

The European People's Party (EPP) and the Socialists and Democrats (S&D) suffered losses in the European

elections on May 26, 2019, although the EPP is still the strongest group in the new parliament. S&D is the second-biggest parliamentary group. However, liberal, green, and also anti-EU and right-wing conservative parties all made gains. Nevertheless, the elections had no direct impact on the government bond markets of the countries in the eurozone. The Green Party's strong showing in the elections indicates that environmental issues will move even further up the political agenda in the medium to long term.

The United Kingdom's arrangements for leaving the EU are still unknown. At the EU27 summit meeting with the UK's Prime Minister May in Brussels on April 10, 2019, the proposal to give the UK until October 31, 2019 to accept the negotiated deal was approved. If no agreement is reached by October 31, 2019, however, there could be a disorderly Brexit. Theresa May resigned as her party's leader in spring 2019, with Boris Johnson emerging as the winner in the subsequent ballot for a new leader. On July 24, May stepped down as prime minister of the UK and Johnson took over from her. Since then, he has been trying to get the European Commission to restart negotiations on the agreement. For now, however, the Commission is standing firmly by the deal originally negotiated.

Not least in view of past crises in the eurozone, the developments described above highlight the need for an overhaul and strengthening of European Monetary Union (EMU). French President Emmanuel Macron's appeal to Europe, 'For European Renewal', on March 4, 2019 received a muted response from German politicians. The German government's reaction to Macron's proposals shows that there is still much to be discussed among the nation states within the EMU about the fundamental direction of the political agenda.

However, significant progress has been made on some key aspects of European Monetary Union. For example, an agreement on strengthening the European Stability Mechanism (ESM) has been reached, in particular with regard to the backstop for the European Single Resolution Fund (SRF). This new structure is intended to take the form of a revolving credit line provided by the ESM for the SRF in an amount of approximately €60.0 billion to come into force no later than 2024. At the same time, the agreed strengthening of the ESM specifies that, in the event of asymmetric shocks (such as possible negative effects on Ireland from Brexit), ESM precautionary credit lines can, for the most part, be utilized by EU countries whose economic conditions are generally still sound only if all debt criteria are satisfied, no excessive debt procedures (EDPs) have been instigated against these countries, and the countries concerned are not showing evidence of any excessive macroeconomic imbalances.

At their meeting on June 13, 2019, the eurozone's finance ministers discussed not only the ESM reforms, which will come into force in 2020 at the earliest, once the ratification process has been completed, but also two other matters: the eurozone budget, which will become part of medium-term EU budget planning from 2021, and the European deposit insurance scheme (Edis). While the finance ministers did reach agreement on the outline of the budget, there was no consensus on the scope and funding of this instrument. These macroeconomic measures alone are insufficient to increase the stability of the eurozone and it is imperative that structural reforms are also implemented. Such reforms are the responsibility of the individual EU countries and, above all, mean that they need to reduce their levels of government debt.

On the whole, only very limited progress was made in reducing new and total borrowing in the eurozone. These efforts were significantly supported by the ongoing phase of low interest rates. There is little possibility for lowering the total borrowing rate in view of current economic conditions in the eurozone. In the reporting half-year, the eurozone's economic output increased by 1.1 percent compared with the prior-year period, which was lower than the growth rate of 2.4 percent achieved in the first half of 2018.

At the end of the first quarter of 2019, the total borrowing of the 19 eurozone countries equated to 85.9 percent of their GDP, a year-on-year decrease of 1.2 percentage points compared with the figure of 87.1 percent as at March 31, 2018.

Greece's public debt as a percentage of GDP stood at 181.9 percent in the first quarter of 2019 (first quarter of 2018: 177.9 percent) but the country continued on its path of economic recovery in the first half of 2019 compared with the prior year. However, if Greece is to make any noticeable impact in reducing its high level of indebtedness, it must sustain economic growth, continue with its reform agenda and maintain stringent budgetary discipline. In the country's parliamentary elections in July 2019, the conservative Nea Dimokratia (ND) party secured an absolute majority. The ND's agenda includes increased privatization and tax cuts. Initial small-scale tax breaks were approved by the parliament at the end of July. Concessions from the

European Commission and the Eurogroup would be needed to create more room to maneuver. Although Greece ceased to be an ESM program country in June 2018, it is still subject to various obligations. In the years ahead, for example, it is required to maintain large primary surpluses of up to 3.5 percent in order to bring down its high government debt.

Italy remained beset with economic and fiscal challenges in the first half of 2019. Although the proportion of non-performing loans on the balance sheets of Italy's banks has fallen, they are still running at a high volume and are thus weighing down the banking sector. Banca Carige, for example, has a capital shortfall and the European Central Bank (ECB) appointed temporary administrators for the Italian bank at the start of this year. The government is already discussing the possibility of nationalization. Italy's public debt as a percentage of GDP stood at 134.0 percent in the first quarter of 2019 (first quarter of 2018: 133.0 percent), which is the highest in the eurozone after that of Greece. It reflects a serious structural crisis, requiring sweeping reforms. Italy's economy continues to underperform those of the other member states. Although the country slipped into recession in the second half of last year, its economic output rose by 0.1 percent in the first quarter of 2019 compared with the previous quarter. In the second quarter of 2019, economic growth was 0.0 percent but positive.

Portugal's public debt as a percentage of GDP stood at 123.0 percent in the first quarter of 2019 (first quarter of 2018: 125.4 percent) and the country made further progress on stabilizing its economy during the first half of the year. The Portuguese economy was boosted in particular by steady consumer demand and a fall in unemployment. Although the banking sector continues to have significant legacy issues in the form of non-performing loans, their volume has recently declined slightly.

Spain's public debt as a percentage of GDP stood at 98.7 percent in the first quarter of 2019 (first quarter of 2018: 98.7 percent) and its economy continued to enjoy an encouraging rate of growth in the first six months of the year. The minority government headed up by the socialist Prime Minister Pedro Sánchez collapsed after just eight months as a result of the budget dispute. In February 2019, a snap election was called for April 28, 2019, in which the PSOE, the socialist workers' party, won the most seats. The sitting Prime Minister, Pedro Sánchez, has now failed in two attempts to form a government. He has until September 23, 2019 to decide whether there will be a third attempt. Otherwise, Spain will face a fresh election. This political instability continues to hamper the necessary reform of the labor market and pension systems.

France's public debt as a percentage of GDP stood at 99.7 percent in the first quarter of 2019 (first quarter of 2018: 99.4 percent). The French President Emmanuel Macron is pursuing a generally pro-business agenda and has already pushed through a law designed to make the labor market more flexible. The key aspects of unemployment insurance reforms were recently unveiled and included a longer period of work before people can claim unemployment benefits and lower benefit payments for high earners. Although the 'yellow vest' movement's public demonstrations against government policy are continuing, they have diminished. Despite these protests, consumer spending remains one of the main growth drivers. Nonetheless, the high deficit, combined with a slowing economy, is hindering efforts to reduce government debt.

The trends in the eurozone described above show that the ECB with its policy of quantitative easing has 'bought' the necessary time for the EU countries burdened with significant debt to reduce their fundamental budget deficits. Nonetheless, the countries specified above have for the most part made only limited efforts to reduce their high levels of indebtedness and bring in the necessary structural reforms.

It is clear that the current low level of interest rates has also had the effect of decreasing various EMU countries' efforts to implement austerity measures because the availability of low interest rates is noticeably reducing the debt burden anyway.

One of the main reasons why politicians are generally reluctant to introduce the necessary structural improvement measures to reduce public debt is that various EU countries are still seeing strong political movements that oppose the jointly agreed stabilization efforts of the single currency area. Aside from the UK's decision to leave the EU, the strong showing of anti-EU parties in the European elections in countries such as France, Italy, Poland, and Hungary demonstrate that anti-EU forces are increasingly gathering momentum. Right-wing conservatives have secured greater influence in the EU overall, but the pro-EU parties still have a clear majority.

A key reason for the European Commission's reluctance to strictly implement the stability criteria under the Fiscal Compact agreed by the EU member states at the beginning of 2012 is most probably also the widespread return to a more nationalistic focus apparent within the eurozone. In the Fiscal Compact, the signatory countries committed to reducing their debt (as a proportion of GDP) each year by one twentieth of the difference between the debt level and the Maastricht limit of 60 percent of GDP. The European Commission did briefly decide to initiate an excessive deficit procedure for Italy, but this decision has since been revoked. However, the discussion could be put back on the agenda in October 2019, when the 2020 budget negotiations are due to be held.

The ECB's current policy of zero and negative interest rates is making it harder for savers to build up sufficient capital and, in particular, to ensure they have adequate provision for old age. Although the weakness of the euro resulting from low interest rates is boosting companies' exports, it is also diminishing their efforts to lower costs and improve productivity. The ECB's policy of maintaining extremely low interest rates boosts the risk of misallocations and even the formation of bubbles in real estate and equities markets, which could jeopardize the stability of financial markets.

The problem for the ECB is that it will find itself with insufficient leeway in the event of an economic downturn and an accompanying fall in inflation, because key interest rates will still be close to zero.

At its meeting on June 6, 2019, the ECB released details of the third program of targeted longer-term refinancing operations. The corporate banks taking out these two-year loans from the ECB will benefit from a more favorable interest rate if they meet certain lending targets. In the best case, the interest rate could be as low as the average deposit rate plus 10 basis points. In addition, the ECB has decided to postpone the date of a possible first interest-rate hike from the end of 2019 until the end of June 2020 at the earliest, so as to bring inflation sustainably closer to the target of below, but close to, 2 percent. The main refinancing rate thus remains the same at 0.00 percent, while the rate for the deposit facility for banks is also unchanged at minus 0.40 percent.

On July 31, 2019, the US Federal Reserve announced a rate cut of 25 basis points, which means that the Fed Funds Rate is in the range of 2.00 to 2.25 percent.

3 Financial performance

3.1 Financial performance at a glance

Despite extremely low interest rates and thus challenging market conditions, the DZ BANK Group was able to increase its net profit year on year and thereby consolidate its position in the period under review.

The year-on-year changes in the key figures that make up the net profit generated by the DZ BANK Group compared with the first half of 2018 were as described below.

FIG. 1 – INCOME STATEMENT

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018	Change (%)
Net interest income	**1,279**	1,420[1]	-9.9
of which: net income from long-term equity investments[2]	28	46	-39.1
Net fee and commission income	**958**	958	-
Gains and losses on trading activities	**141**	206	-31.6
Gains and losses on investments	**130**	46[1]	>100.0
Other gains and losses on valuation of financial instruments	**179**	-48	>100.0
Gains and losses from the derecognition of financial assets measured at amortized cost	**15**	54[1]	-72.2
Net income from insurance business	**761**	299	>100.0
Loss allowances	**-105**	44	>100.0
Administrative expenses	**-2,046**	-2,018	1.4
Staff expenses	-923	-906	1.9
Other administrative expenses[3]	-1,123	-1,112	1.0
Other net operating income	**152**	73	>100.0
Profit before taxes	**1,464**	1,034	41.6
Income taxes	**-430**	-303	41.9
Net profit	**1,034**	731	41.5

1 Amount restated (see note 2 in the notes to the interim consolidated financial statements).
2 Total of current income and expense from income from other shareholdings, current income and expense from investments in subsidiaries, current income and expense from investments in associates, income/loss from using the equity method, and income from profit-pooling, profit-transfer, and partial profit-transfer agreements; see note 10 in the notes to the interim consolidated financial statements.
3 General and administrative expenses plus depreciation/amortization expense.

Operating income in the DZ BANK Group amounted to €3,615 million (first half of 2018: €3,008 million). This figure comprises net interest income, net fee and commission income, gains and losses on trading activities, gains and losses on investments, other gains and losses on valuation of financial instruments, gains and losses from the derecognition of financial assets measured at amortized cost, net income from insurance business, and other net operating income.

Net interest income (including net income from long-term equity investments) in the

DZ BANK Group declined by 9.9 percent year on year to €1,279 million (first half of 2018: €1,420 million). Net interest income (excluding net income from long-term equity investments) went down by €6 million at DZ BANK. It decreased by €168 million at BSH, in particular because of the increase, described in the details for the BSH operating segment, in provisions relating to building society operations. It fell by €26 million at DZ HYP. At DVB and TeamBank, however, net interest income increased by €22 million and €18 million respectively.

Net income from long-term equity investments in the DZ BANK Group fell by €18 million to €28 million (first half of 2018: €46 million).

Net fee and commission income in the DZ BANK Group was unchanged at €958 million (first half of 2018: €958 million).

The DZ BANK Group's **gains and losses on trading activities** came to a net gain of €141 million, compared with a net gain of €206 million in the first half of 2018. This was largely attributable to the gains and losses on trading activities at DZ BANK amounting to a net gain of €130 million (first half of 2018: net gain of €195 million).

Gains and losses on investments advanced by €84 million to a net gain of €130 million (first half of 2018: net gain of €46 million).

Most of this change was attributable to the DZ BANK and BSH operating segments. Whereas gains and losses on investments fell by €31 million at DZ BANK, they rose by €117 million at BSH.

Other gains and losses on valuation of financial instruments in the DZ BANK Group climbed by €227 million to a net gain of €179 million in the reporting half-year (first half of 2018: net loss of €48 million).

This change was predominantly due to improvements in other gains and losses on valuation of financial instruments in the DVB, DZ HYP, and UMH operating segments of €71 million, €93 million, and €42 million respectively.

Gains and losses from the derecognition of financial assets measured at amortized cost declined by €39 million to a net gain of €15 million (first half of 2018: net gain of €54 million).

The DZ BANK Group's **net income from insurance business** comprises premiums earned, gains and losses on investments held by insurance companies and other insurance company gains and losses, insurance benefit payments, gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business, and insurance business operating expenses. In the first half of 2019, net income from insurance business went up by €462 million to €761 million (first half of 2018: €299 million).

This year-on-year change was primarily attributable to the increase, described in the details for the R+V operating segment, in gains and losses on investments held by insurance companies and other insurance company gains and losses.

Loss allowances amounted to a net addition of €105 million (first half of 2018: net reversal of €44 million).

Further disclosures on the nature and extent of risks arising from financial instruments and insurance contracts can be found in note 49 in the notes to the interim consolidated financial statements.

Administrative expenses in the DZ BANK Group rose by €28 million year on year to €2,046 million (first half of 2018: €2,018 million). Of this increase, €27 million was attributable to the first-time consolidation of VR Payment GmbH, Frankfurt am Main (until January 3, 2019: CardProcess GmbH, Karlsruhe). Staff expenses went up by €17 million to €923 million (first half of 2018: €906 million) and other administrative expenses by €11 million to €1,123 million (first half of 2018: €1,112 million).

The DZ BANK Group's **other net operating income** came to €152 million (first half of 2018: €73 million).

The main reasons for the year-on-year change in other net operating income were the factors described in the details for the operating segments DZ BANK, BSH, DVB, UMH, and VR Smart Finanz (until July 9, 2019: VR LEASING).

Profit before taxes for the first half of 2019 stood at €1,464 million, compared with €1,034 million in the first half of 2018.

The DZ BANK Group's **cost/income ratio** (i.e. the ratio of administrative expenses to operating income)

for the reporting half-year came to 56.6 percent (first half of 2018: 67.1 percent).

The DZ BANK Group's **income taxes** amounted to €430 million in the period under review (first half of 2018: €303 million).

Net profit for the first half of 2019 was €1,034 million, compared with €731 million in the first half of 2018.

3.2 Financial performance in detail

Figure 2 below shows the details of the financial performance of the DZ BANK Group's operating segments in the first half of 2019 compared with the corresponding period of 2018.

FIG. 2 – SEGMENT INFORMATION

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

€ million	DZ BANK	BSH	DVB
Net interest income	582	217	102
Net fee and commission income	198	-15	27
Gains and losses on trading activities	130	-	-4
Gains and losses on investments	-2	120	2
Other gains and losses on valuation of financial instruments	24	17	-16
Gains and losses from the derecognition of financial assets measured at amortized cost	11	15	-
Premiums earned	-	-	-
Gains and losses on investments held by insurance companies and other insurance	-	-	-
Insurance benefit payments	-	-	-
Insurance business operating expenses	-	-	-
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business	-	-	-
Loss allowances	1	6	-50
Administrative expenses	-748	-249	-109
Other net operating income	13	38	-19
Profit/loss before taxes	**209**	**149**	**-67**
Cost/income ratio (%)	78.2	63.5	>100.0
Regulatory RORAC (%)	3.1	26.2	-42.7
Average own funds/solvency requirement	4,928	1,139	289
Total assets/total equity and liabilities as at Jun. 30, 2019	297,253	74,896	18,508

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR Smart Finanz	Other/ Consolidation	**Total**
	256	30	-	239	9	75	-231	1,279
	1	85	-	-11	706	-1	-32	958
	1	4	-	-	-	-	10	141
	10	-	-	-	-	-	-	130
	123	5	-	-	20	-	6	179
	-	-	-	-	-	-	-11	15
	-	-	8,328	-	-	-	-	8,328
	-	-	3,551	-	-	-	-35	3,516
	-	-	-9,634	-	-	-	-	-9,634
	-	-	-1,524	-	-	-	81	-1,443
	-	-	-6	-	-	-	-	-6
	4	-	-	-54	-	-12	-	-105
	-139	-114	-	-114	-436	-70	-67	-2,046
	12	3	-4	3	85	9	12	152
	268	**13**	**711**	**63**	**384**	**1**	**-267**	**1,464**
	34.5	89.8	-	49.4	53.2	84.3	-	56.6
	35.8	8.4	18.0	26.3	>100.0	0.7	-	17.0
	1,505	308	7,923	482	339	305	-	17,218
	89,588	21,774	117,806	8,982	2,463	4,092	-74,579	560,783

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2018

€ million	DZ BANK	BSH	DVB
Net interest income[1]	591	385	80
Net fee and commission income	185	-12	42
Gains and losses on trading activities	195	-	-4
Gains and losses on investments[1]	29	3	11
Other gains and losses on valuation of financial instruments	19	3	-87
Gains and losses from the derecognition of financial assets measured at amortized cost[1]	45	10	-
Premiums earned	-	-	-
Gains and losses on investments held by insurance companies and other insurance	-	-	-
Insurance benefit payments	-	-	-
Insurance business operating expenses	-	-	-
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business[1]	-	-	-
Loss allowances	96	-2	-20
Administrative expenses	-756	-237	-97
Other net operating income	33	22	4
Profit/loss before taxes	**437**	**172**	**-71**
Cost/income ratio (%)	68.9	57.7	>100.0
Regulatory RORAC (%)	12.4	31.7	-34.1
Average own funds/solvency requirement	4,699	1,081	378
Total assets/total equity and liabilities as at Dec. 31, 2018	271,189	71,667	20,566

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

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR Smart Finanz	Other/ Consolidation	**Total**
	282	33	-	221	6	76	-254	1,420
	1	94	-	-5	705	5	-57	958
	-	5	-	-	-	-	10	206
	4	-	-	-	-7	7	-1	46
	30	-2	-	-	-22	-	11	-48
	-	-	-	-	-	-	-1	54
	-	-	8,115	-	-	-	-	8,115
	-	-	1,266	-	-	-	-47	1,219
	-	-	-7,709	-	-	-	-	-7,709
	-	-	-1,406	-	-	-	84	-1,322
	-	-	3	-	-	-	-7	-4
	4	-	-	-32	-	-2	-	44
	-162	-115	-	-112	-425	-70	-44	-2,018
	5	-7	5	4	16	-15	6	73
	164	**8**	**274**	**76**	**273**	**1**	**-300**	**1,034**
	50.3	93.5	-	50.9	60.9	95.9	-	67.1
	22.8	4.6	7.3	34.2	>100.0	0.6	-	12.5
	1,444	349	7,508	444	351	333	-	16,587
	85,882	18,322	107,351	8,536	2,559	4,768	-72,107	518,733

3.2.1 DZ BANK

Net interest income (excluding net income from long-term equity investments) is primarily attributable to the lending business portfolios (Corporate Banking business line and a separately managed real estate lending portfolio) and the portfolios from the capital markets business. Net interest income also includes the interest expense and income relating to issued subordinated bonds and those purchased by group entities. The net interest income from these portfolios declined by 2.0 percent to €301 million (first half of 2018: €307 million).

At DZ BANK, the Corporate Banking business line comprises the four regional corporate customer divisions that focus on corporate banking in Germany (Northern and Eastern Germany, West/Central, Baden-Württemberg, and Bavaria) plus the Central Corporate Banking division, the Investment Promotion division, and the Structured Finance division covering business with German corporate customers and foreign customers with links to Germany.

In the Corporate Banking business line, net interest income went up by 4.2 percent to €225 million (first half of 2018: €216 million).

The net interest income in the four regional corporate customer divisions plus Central Corporate Banking rose by 8.5 percent to €127 million (first half of 2018: €117 million). With the margin remaining essentially unchanged, this increase was predominantly attributable to the lending volume in corporate banking.

In accordance with the cooperative principle of decentralization, the distribution of responsibilities in the Volksbanken Raiffeisenbanken cooperative financial network, and the focus on the needs of companies, customer relationship management for corporate customers is provided by the local cooperative bank in conjunction with DZ BANK, or directly by DZ BANK.

The expansion of market share in the corporate customer lending business underlines the success of the cooperative financial network in this business line. The network's market share rose to 22.0 percent in the first quarter of 2019 as a result of the lending volume rising more quickly than the rate of growth in the market as a whole (around 6.0 percent). DZ BANK has also increased its volume of lending to corporate customers, thanks in large part to new customer business. The volume of lending grew by 12.1 percent year on year to reach €38.2 billion. Despite fierce competition, margins held steady.

Net interest income in the Structured Finance and Investment Promotion divisions amounted to €98 million, a fall of 1.0 percent compared with the prior-year period (first half of 2018: €99 million).

Net interest income from the separately managed real estate lending portfolio was up slightly year on year at €20 million (first half of 2018: €19 million).

Net interest income from the capital markets business went down by 25.0 percent to €75 million (first half of 2018: €100 million), mainly in connection with a contraction in the portfolio of bonds and other fixed-income securities in the first half of 2018 but also due to a greater positive effect from hedge accounting on earnings in the prior-year period.

The adverse impact of subordinated capital (balance of subordinated own issues and subordinated securities purchased by group entities) on net interest income declined by 32.1 percent to €19 million in the first half of 2019 (first half of 2018: €28 million) as a consequence of a contraction in the liability portfolios.

Net fee and commission income rose by 7.0 percent to €198 million (first half of 2018: €185 million).

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

In the Corporate Banking business line, net fee and commission income was up by €1 million year on year at €48 million. While there was a €2 million increase attributable to guarantees/indemnities, commission on loans decreased by €3 million. Moreover, income from other banking services rose by €3 million.

In the Capital Markets business line, the contribution to net fee and commission income rose by 9.8 percent to €90 million (first half of 2018: €82 million). This

increase was mainly attributable to changed timing for the recognition of sales commission received in respect of funds compared with the prior-year period. This effect will have been eliminated by the end of the year. Income from bond issues business also went up.

In the Transaction Banking business line, net fee and commission income amounted to €61 million, which equated to a year-on-year increase of €6 million or 10.9 percent. This growth was primarily accounted for by the securities safe custody business and by higher gains from the currency service business.

As part of service procurement arrangements, DZ BANK has transferred processing services in the corporate customer lending business to Schwäbisch Hall Kreditservice, in the payments processing business to equensWorldline, and in transaction banking to Deutsche WertpapierService Bank. The expenses arising in connection with obtaining services from the above external processing companies amounted to a total of €84 million (first half of 2018: €86 million) and are reported under net fee and commission income for the individual Corporate Banking (€5 million) and Transaction Banking (€79 million) business lines.

Aside from the aforementioned business lines, net fee and commission income from other financial services decreased to a net expense of €1 million in the reporting period (first half of 2018: net income of €1 million). This deterioration was largely due to higher fee and commission expenses for credit rating information in connection with services for cooperative banks.

Gains and losses on trading activities fell by 33.3 percent to a net gain of €130 million (first half of 2018: €195 million).

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

Conditions in the capital markets business were shaped by the ECB’s ongoing policy of low and negative interest rates, a weakening economy, uncertainty created by international trade disputes, and the continued risk of a hard Brexit. In this environment, the achievable margins remained under pressure.

Nevertheless, gains and losses on capital markets trading business amounted to a net gain of €196 million, a year-on-year rise of 10.7 percent (first half of 2018: net gain of €177 million). This was attributable to good operational customer business across all asset classes.

Adjustment of the valuation curves to market conditions results in unrealized gains and losses. The assets and liabilities recognized at fair value in the fair value PL category and in the financial assets and liabilities designated as at fair value through profit or loss (fair value option) category gave rise to a negative effect on earnings of €4 million in 2019 (first half of 2018: gain of €80 million).

The contribution to earnings from money market business entered into for trading purposes (mainly repurchase agreements) came to €4 million in the reporting half-year (first half of 2018: €5 million).

Further factors influencing the gains and losses on trading activities in the first half of 2019 included interest-rate-related changes in the fair value of cross-currency basis swaps used for the hedging of financial instruments denominated in foreign currency in the banking book amounting to a loss of €3 million (first half of 2018: loss of €18 million).

Derivative hedging transactions in the fair value PL category that are used to hedge interest-rate risk for portfolios in the fair value option category and the portfolios in the financial assets and liabilities measured at amortized cost (AC) category and in the financial assets measured at fair value through other comprehensive income (fair value OCI) category gave rise to a total loss of €17 million (fair value option portfolios: loss of €7 million; AC and fair value OCI portfolios: loss of €10 million).

Gains and losses on investments deteriorated by €31 million to a net loss of €2 million (first half of 2018: net gain of €29 million). This was because the figure for the prior-year period had included gains from the disposal of securities in the liquidity pool in an amount of €47 million, some of which had been offset by losses of €26 million arising from the termination of hedges measured at fair value through OCI as part of portfolio fair value hedge accounting.

Other gains and losses on valuation of financial instruments went up by 26.3 percent to a net gain of €24 million (first half of 2018: net gain of €19 million). This was due to the change in the fair value measurement of the long-term equity investment in Visa Inc., which grew by €8 million to €17 million. There was a countervailing decrease of €3 million in the net gain from ineffectiveness in hedge accounting, which stood at €6 million.

Gains and losses from the derecognition of financial assets measured at amortized cost declined by 75.6 percent to a net gain of €11 million (first half of 2018: net gain of €45 million). Within this figure, the gains on the derecognition of securities fell by €26 million to €19 million. The reversal of adjustments to carrying amounts (hedge adjustments) in the context of hedge accounting gave rise to losses of €8 million.

Loss allowances amounted to a net reversal of €1 million (first half of 2018: net reversal of €96 million). The net reversal in the prior-year period was mainly due to improvements in borrowers' credit ratings and the successful restructuring of loans (€84 million). There were also recoveries on loans and advances previously impaired (€12 million). In the first half of 2019, the net additions in the lending business (€8 million) were offset by recoveries on loans and advances previously impaired of €9 million.

Administrative expenses decreased by 1.1 percent to €748 million (first half of 2018: €756 million).

At €323 million, staff expenses were on a par with the prior-year period (first half of 2018: €324 million). Other administrative expenses went down by 1.6 percent to €425 million (first half of 2018: €432 million). The consultancy expenses within this figure were €25 million lower than in the first 6 months of 2018. However, expenses for the BVR deposit protection scheme were up by €11 million to €45 million in the first half of 2019 (first half of 2018: €34 million) and expenses for the bank levy were €4 million higher at €40 million (first half of 2018: €36 million).

Other net operating income amounted to €13 million (first half of 2018: €33 million) and, in the period under review, mainly consisted of income from the reversal of provisions and accruals of €18 million (first half of 2018: €30 million).

Other net operating income also included gains of €8 million on the disposal of DZ BANK's long-term equity investment in WÜRTT. GENO-HAUS GmbH & Co. KG, Stuttgart. These gains were outweighed by start-up costs of €10 million for the cross-bank payment system paydirekt (first half of 2018: €2 million).

Profit before taxes amounted to €209 million in the period under review, which was €228 million lower than the figure of €437 million reported for the first half of 2018.

DZ BANK's **cost/income ratio** came to 78.2 percent in the first half of 2019 (first half of 2018: 68.9 percent).

The **regulatory return on risk-adjusted capital (RORAC)** was 3.1 percent (first half of 2018: 12.4 percent).

3.2.2 BSH

At BSH, **net interest income** contracted by 43.6 percent to €217 million (first half of 2018: €385 million).

The main reason for this decrease was the persistently low level of interest rates. The 10-year swap rate was 0.18 percent at the end of the reporting period, having been 0.85 percent at the end of the comparative period of 2018. Interest income arising on investments declined by €20 million to €260 million (first half of 2018: €280 million) because capital market rates for investments remained low.

In the case of loans issued under advance or interim financing arrangements, BSH managed to increase its income from non-collective business in the first half of 2019, by €19 million to €467 million on the back of the expansion in business over the last few years and despite a fall in average returns (first half of 2018: €448 million). This rise outweighed the decrease in income from home savings loans and other building loans, which declined by €2 million to €35 million (first half of 2018: €37 million).

Under interest cost, the decrease in net income associated with the growth in the volume of home savings deposits was largely offset by the higher proportion of low-interest-rate tariffs. The volume of home savings deposits grew by €1.9 billion to €63.5 billion as at June 30, 2019 (December 31, 2018: €61.6 billion). This expanding volume of home savings deposits reflects the unique financing function of

home savings, which enables customers to lock in the favorable interest rates for as long a period as possible irrespective of volatility in the capital markets.

Interest cost also included an additional expense of €153 million resulting from the increase in provisions relating to building society operations. This largely reflected discounted future obligations of Bausparkasse Schwäbisch Hall to make payments in the form of loyalty bonuses or premiums to those home savings customers who decline to take up the contractually agreed loans.

Net fee and commission income fell by €3 million to a net expense of €15 million (first half of 2018: net expense of €12 million).

This deterioration was due to the rise in fees and commissions not directly attributable to the conclusion of a home savings contract.

In the home savings business, Bausparkasse Schwäbisch Hall signed approximately 289 thousand new home savings contracts, generating a home savings volume that, at €15.6 billion, was down slightly on the figure for the first half of 2018 of €16.0 billion.

In the home finance business, the realized volume of new business advanced by €0.2 billion to €6.9 billion (first half of 2018: €6.7 billion). This figure does not include home savings loan contracts and bridging loans from Bausparkasse Schwäbisch Hall or other referrals totaling €1.0 billion (first half of 2018: €1.0 billion).

The growth in home savings and home finance reflects a marked preference among German citizens for personal pension arrangements based on home ownership. At a time of persistently low interest rates, more than half of the populace (and therefore twice as many as before the financial crisis in 2008) believes that home ownership is the best type of asset investment.

With economic conditions remaining stable in the half-year under review, demand for housing remained brisk. However, despite the very high level of capacity utilization in the building industry, construction activity was still unable to keep up with this demand. This is particularly the case in urban centers due to the growing urbanization trend.

For building society operations, there is also substantial potential for the future as a result, above all, of the considerable need to modernize existing real estate, especially in relation to climate targets, which are now at the forefront of political debate. Energy-related modernization work in housing plays a big part in improving energy efficiency and reducing harmful emissions.

Age-appropriate housing is another key area for future growth, and there is likely to be an increase in the refurbishment of existing housing stock because currently only a minority of the households made up of older people are in a property with barrier-free access.

By cross-selling supplementary products, Bausparkasse Schwäbisch Hall field sales staff also sold cooperative bank pension products, Union Investment Group investment funds, and R+V insurance policies.

The **gains and losses on investments** amounting to a net gain of €120 million (first half of 2018: net gain of €3 million) were primarily attributable to the disposal of the shares in the Czech building society Českomoravská stavební spořitelna ČMSS (net gain of €99 million).

Other gains and losses on valuation of financial instruments climbed by €14 million to a net gain of €17 million in the reporting half-year (first half of 2018: net gain of €3 million) and was due to the early termination of interest-rate swaps.

Gains and losses from the derecognition of financial assets measured at amortized cost amounted to a net gain of €15 million (first half of 2018: net gain of €10 million) and largely resulted from the sale of registered securities.

Loss allowances amounted to a net reversal totaling €6 million in the half-year under review (first half of 2018: net addition of €2 million). This change was attributable to the regular validation of credit risk parameters and an adjustment of the loss allowances to reflect loan commitments.

Administrative expenses increased by €12 million to €249 million (first half of 2018: €237 million). Within this total, staff expenses rose by €2 million to €113 million (first half of 2018: €111 million). Other administrative expenses advanced by €10 million to €136 million (first half of 2018: €126 million) due to increased contributions and fees and, above all, higher expenses resulting from a rise in IT costs in strategic

projects and measures to enhance the home savings and home finance core businesses.

Other net operating income rose to €38 million (first half of 2018: €22 million) as a result of the reversal of provisions.

Profit before taxes decreased by €23 million to €149 million in the reporting period (first half of 2018: €172 million) as a consequence of the changes described above.

The **cost/income ratio** in the period under review came to 63.5 percent (first half of 2018: 57.7 percent).

Regulatory RORAC was 26.2 percent (first half of 2018: 31.7 percent).

3.2.3 DVB

Net interest income in the DVB subgroup went up by 27.5 percent to €102 million (first half of 2018: €80 million).

The increase in net interest income can be explained by the €28.6 million fall in interest cost to €342.9 million (first half of 2018: €371.5 million) on the back of the contraction of the portfolio of debt certificates issued including bonds and by the €15.3 million improvement in the net interest income from operating leases/spot market (first half of 2018: net interest expense of €5.5 million).

The international transport industry again experienced overcapacity within some segments of the international maritime shipping market in the reporting period. There was also downward pressure on freight rates and ship prices.

The volume of customer loans in the DVB subgroup stood at €13.2 billion as at June 30, 2019 (December 31, 2018: €16.6 billion). DVB continues to maintain international branches in Amsterdam, London, Oslo, and Singapore.

At €27 million, **net fee and commission income** was down by €15 million year on year (first half of 2018: €42 million). This decrease was largely due to the absence of income following the sale of shares in LogPay Financial Services GmbH (first half of 2018: income of €6.9 million) and an €8.6 million reduction in income in connection with the scaling back of new lending business (first half of 2018: income of €42.6 million).

Gains and losses on investments went down by €9 million to a net gain of €2 million (first half of 2018: net gain of €11 million) owing to non-recurring items in the prior-year period. The net gain in the first half of 2018 had included non-recurring proceeds of €7 million from the sale of a long-term equity investment and non-recurring proceeds of €4 million from the disposal of an aircraft by an equity-accounted long-term equity investment.

Other gains and losses on valuation of financial instruments improved by €71 million to a net loss of €16 million (first half of 2018: net loss of €87 million). In this regard, IFRS-related measurement effects, particularly from hedge accounting, and interest-rate-related measurements of cross-currency swaps led to a smaller loss.

Loss allowances increased by €30 million to €50 million (first half of 2018: €20 million). The change compared with the first half of last year was due, in particular, to the increased need for loss allowances in the shipping business.

Administrative expenses amounted to €109 million (first half of 2018: €97 million). Within this figure, staff expenses fell by €4 million to €50 million as a result of the reduction in headcount (first half of 2018: €54 million). Other administrative expenses went up by €16 million to €59 million, primarily because of the increased use of legal and consultancy services (first half of 2018: €43 million).

Other net operating income fell by €23 million to a net expense of €19 million (first half of 2018: net income of €4 million). This figure predominantly consisted of the net gain of €29 million on the sale of LogPay Financial Services GmbH, the net gain of €9 million on the sale of the land transport finance business, the loss allowances of €9 million for the aviation finance business, which is classified as a disposal group not qualifying as a discontinued operation, and expenses of €50 million for restructuring.

The **loss before taxes** for the half-year under review amounted to €67 million. The improvement of €4 million compared with the loss of €71 million reported for the first 6 months of 2018 was mainly a consequence of the factors described above.

The **cost/income ratio** in the period under review was greater than 100.0 percent (first half of 2018: greater than 100.0 percent).

Regulatory RORAC was minus 42.7 percent (first half of 2018: minus 34.1 percent).

3.2.4 DZ HYP

At €256 million, the **net interest income** of DZ HYP was €26 million below the level of the prior-year period (first half of 2018: €282 million).

In the half-year under review, net interest income resulting from the volume of business did actually improve, with DZ HYP's new business holding steady across its four divisions, Commercial Real Estate Investors, Housing Sector, Retail Customers/Private Investors, and Public Sector. Unlike in the prior-year period, this improvement in net interest income was outweighed by negative effects from early redemptions of loans and advances and other assets-side business.

Demand for commercial real estate in the German investment market remained high in the first half of 2019. The volume of transactions involving commercial real estate (excluding commercial investment in housing) came to €24.1 billion in the first 6 months of 2019 (first half of 2018: €25.6 billion). The transaction volume in the market for commercial investments in housing amounted to €8.1 billion (first half of 2018: €11.3 billion). This decrease was due much more to a shortage of supply than to a fall in demand. Interest in German commercial real estate is high because economic conditions are still robust and funding conditions are still favorable, with interest rates remaining at a low level.

As before, there is also significant demand for housing. The supply of homes is not expected to meet annual demand until 2022. In the public-sector market, higher tax receipts in 2018 put local authorities in clear positive territory and they achieved a budget surplus totaling €9.8 billion.

The existing regional network of cooperative banks and the very close cooperation between DZ HYP and the local cooperative banks over many years provide the basis that will enable DZ HYP to successfully implement its enhanced corporate strategy.

The local presence ensures not only that DZ HYP has access to the regional market and the necessary proximity to customers, but also that it can benefit from local market knowledge. At the same time, the real estate finance know-how of DZ HYP complements the local cooperative banks' expertise. Supported by its six regional centers in major German cities and a further six regional offices, DZ HYP is a partner for the cooperative banks throughout the country. Its decentralized market presence also creates an advantage in terms of the allocation of risk because greater differentiation between credit portfolios based on region, sector, and customer group is possible.

In the first half of 2019, DZ HYP delivered a business performance that was consistent with the prior-year period overall. It generated a new business volume of €5,070 million (first half of 2018: €5,082 million) across its Commercial Real Estate Investors, Housing Sector, Retail Customers/Private Investors, and Public Sector divisions.

DZ HYP increased the volume of new business with commercial real estate investors to €3,514 million in the reporting period (first half of 2018: €2,955 million). Jointly generated new lending business was further expanded thanks to effective mutual support and greater information-sharing with the local cooperative banks in connection with commercial real estate finance. The volume of new lending business in the half-year under review amounted to €2,277 million (first half of 2018: €1,554 million).

In the business with the German housing sector, the commitment volume in the first half of 2019 amounted to €340 million (first half of 2018: €464 million). A significant area of focus in this business was the provision of long-term finance for new construction and renovation investment projects.

In its business with retail customers and private investors, DZ HYP generated a volume of new commitments of €924 million (first half of 2018: €1,289 million). Demand for long-term fixed interest rates continued to be supported by the sustained low level of interest rates. As part of the cooperative financial network, DZ HYP also works closely with local cooperative banks in this division. The volume of new commitments brokered by local cooperative banks with retail customers came to €708 million in the reporting period (first half of 2018: €896 million). In the business with private investors, DZ HYP's new commitment volume stood at €216 million (first half of 2018: €393 million).

Within the Volksbanken Raiffeisenbanken cooperative financial network, DZ HYP helps the local cooperative banks to develop their business with local authorities in Germany and with their legally dependent enterprises. These relationships are managed nationwide. In the

reporting period, DZ HYP generated new business with public-sector customers in a volume of €292 million (first half of 2018: €374 million). Of this amount, €231 million (first half of 2018: €270 million) was attributable to business brokered through the local cooperative banks and €61 million to direct business (first half of 2018: €104 million). More than 83 percent of all deals resulted from the brokering activities of the local cooperative banks.

Gains and losses on investments amounted to a net gain of €10 million that was predominantly due to the disposal of Spanish government bonds (first half of 2018: net gain of €4 million).

Other gains and losses on valuation of financial instruments improved by €93 million to a net gain of €123 million in the reporting period (first half of 2018: net gain of €30 million). This increase was mainly attributable to the narrowing of credit spreads for bonds from the peripheral countries of the eurozone, particularly Italian government bonds.

Loss allowances amounted to a net reversal of €4 million in the reporting half-year, which was the same as the net reversal of €4 million in the first half of 2018.

Administrative expenses fell by €23 million to €139 million (first half of 2018: €162 million), primarily because of the €15 million reduction in the bank levy to €10 million (first half of 2018: €25 million) and lower consultancy expenses in connection with the merger and regulatory projects.

Other net operating income increased by €7 million to €12 million (first half of 2018: €5 million). This was predominantly due to the reversal of provisions for administration fees and early redemption payments.

Profit before taxes for the half-year under review amounted to €268 million. The rise of €104 million compared with the profit before taxes of €164 million reported for the first 6 months of 2018 was mainly a consequence of the factors described above.

The **cost/income ratio** came to 34.5 percent in the first half of 2019 (first half of 2018: 50.3 percent).

Regulatory RORAC was 35.8 percent (first half of 2018: 22.8 percent).

3.2.5 DZ PRIVATBANK

Net interest income at DZ PRIVATBANK declined by €3 million to €30 million (first half of 2018: €33 million).

The main reasons for this decrease in the reporting half-year were the persistently low level of interest rates, the continuation of a risk-conscious investment strategy, and the expiry of securities exposures bearing higher rates of return.

DZ PRIVATBANK acts as the competence center for foreign-currency lending and investing in the interest-earning business. In the first 6 months of 2019, the average volume of guaranteed LuxCredit loans was €4.6 billion (first half of 2018: €4.4 billion).

Net fee and commission income fell by 9.6 percent to €85 million (first half of 2018: €94 million). This reduction was mainly attributable to the smaller contributions to income from private banking and the fund services business.

As at June 30, 2019, the value of funds under management amounted to €111.0 billion (December 31, 2018: €101.6 billion). The number of fund-related mandates as at June 30, 2019 was 561 (December 31, 2018: 565).

At the end of the period under review, the volume of assets under management relating to high-net-worth clients amounted to €18.3 billion (December 31, 2018: €16.7 billion). The assets under management comprise the volume of securities, derivatives, and deposits of customers in the private banking business.

The decentralized collaboration with the cooperative banks in Germany is coordinated through the branches of DZ PRIVATBANK in Berlin, Düsseldorf, Frankfurt, Hamburg, Hannover, Leipzig, Munich, Nuremberg, Oldenburg, and Stuttgart.

Other gains and losses on valuation of financial instruments climbed by €7 million to a net gain of €5 million (first half of 2018: net loss of €2 million) as a result of market conditions.

The fall in **administrative expenses** of €1 million to €114 million (first half of 2018: €115 million) was a consequence of the €1 million reduction in other administrative expenses to €50 million (first half of 2018: €51 million) resulting from disciplined management of processes and costs.

Other net operating income stood at €3 million (first half of 2018: net expense of €7 million). In contrast with the prior-year period, there were no impairment losses in respect of customer relationships in the first half of 2019 because the customer relationships were written off completely as at December 31, 2018. In the first half of 2018, a scheduled amortization expense of €8 million had been recognized in respect of the customer relationships.

In view of the factors described above, **profit before taxes** rose by €5 million to €13 million (first half of 2018: €8 million).

The **cost/income ratio** for DZ PRIVATBANK in the period under review came to 89.8 percent (first half of 2018: 93.5 percent).

Regulatory RORAC was 8.4 percent (first half of 2018: 4.6 percent).

3.2.6 R+V

Premiums earned went up by €213 million to €8,328 million (first half of 2018: €8,115 million), thanks to the tight integration of the R+V subgroup into the cooperative financial network. This exceeded the level of premiums earned in the first half of 2018 by 2.6 percent.

Premium income in the life insurance and health insurance business fell year on year by a total of 4.2 percent to €3,890 million.

Premiums earned from the life insurance business contracted by 4.9 percent to €3,581 million. The ‘ new guarantees’ business segment remained strong, although it did falter slightly owing to product adjustments. Premium income also fell in the unit-linked business and in the bAV (occupational pensions) product group. By contrast, premium income from classic products increased year on year, as did premium income in the credit insurance policy business.

In the health insurance business, net premiums earned rose by 5.1 percent to €309 million. All business segments generated year-on-year increases, most notably private long-term care insurance and full health insurance.

In the non-life insurance business, premium income went up by 6.4 percent to €3,106 million, with most of this growth being generated from vehicle insurance and corporate liability insurance business.

Premium income from the inward reinsurance business rose by 17.0 percent to €1,332 million. Business performed well in all regions, with Europe remaining the largest market. Nearly all divisions achieved double-digit growth; only the motor vehicle product group registered a small decrease.

Gains and losses on investments held by insurance companies and other insurance company gains and losses advanced by €2,285 million to a net gain of €3,551 million (first half of 2018: net gain of €1,266 million).

At the end of the period under review, the level of long-term interest rates was below the corresponding level at the end of the comparative period. At the same time, the narrowing of spreads on interest-bearing securities had a positive impact on this item at the end of June 2019. Equities markets relevant to R+V fared better during the first 6 months of 2019 than they had in the first half of last year. The EURO STOXX 50, for example, stood at 3,474 points at the end of the reporting period, an increase of 473 points or 15.8 percent compared with its position at the start of 2019. In the first half of 2018, the index’s performance had been much worse, falling by 3.1 percent. On the whole, the euro performed less well against various currencies in the first 6 months of 2019 than it had in the first half of 2018.

Overall, these trends in the reporting period essentially resulted in a €2,504 million improvement in unrealized gains and losses to a net gain of €2,308 million (first half of 2018: net loss of €196 million), an €11 million rise in the contribution to earnings from the derecognition of investments to a gain of €100 million (first half of 2018: gain of €89 million), and an increase of €12 million in current income and expense to an income of €1,204 million (first half of 2018: income of €1,192 million). On the other hand, foreign exchange gains and losses fell by €83 million to a net gain of €39 million (first half of 2018: net gain of €122 million) and the balance of depreciation, amortization, impairment losses, and reversals of impairment losses deteriorated by €15 million to a net expense of €38 million (first half of 2018: net expense of €23 million).

Owing to the inclusion of provisions for premium refunds (particularly in the life insurance and health

insurance business) and claims by policyholders in the fund-linked life insurance business, the change in the level of gains and losses on investments held by insurance companies also affected the 'insurance benefit payments' line item presented below.

Insurance benefit payments increased by 25.0 percent from €7,709 million in the first half of 2018 to €9,634 million in the reporting period.

At the companies offering personal insurance, the changes in insurance benefit payments were in line with the change in premium income and in gains and losses on investments held by insurance companies and other insurance company gains and losses. There was a reversal of €76 million from the supplementary change-in-discount-rate reserve (first half of 2018: addition of €534 million). The 'corridor method' for calculating the supplementary change-in-discount-rate reserve was introduced in accordance with the German Regulation for Amending the Regulation on the Principles Underlying the Calculation of the Premium Reserve (DeckRV), which came into force on October 23, 2018. This method changed the procedure for determining the reference discount rate in order to restrict excessive changes under the previous rules.

The non-life insurance business benefited from the lower level of claims incurred compared with the prior-year period, and the overall claims rate was down significantly year on year. The multi-year claims rate – comprising a claims rate for major claims, natural disaster claims, and basic claims – was considerably lower than in the comparative period owing, in particular, to the reduction in claims expenses for natural disasters. At the same time, however, there were increases in the losses in connection with major claims and with the level of basic claims in the motor insurance business.

In the inward reinsurance business, the net claims ratio was up by 5.4 percentage points compared with the prior-year period. The ratios for major and medium claims were below those in the first half of 2018. On July 15, 2019, the UK Ministry of Justice announced that it would raise the discount rate for calculating compensation payments for personal injury claims (known as the Ogden rate) from minus 0.75 percent to minus 0.25 percent. This change was taken into account in the current period. This led to a negative impact of €64 million.

Insurance business operating expenses went up by 8.4 percent to €1,524 million (first half of 2018: €1,406 million) in the course of ordinary business activities in all divisions, with a particularly sharp rise in the non-life insurance and inward reinsurance segments.

Given the factors described above, **profit before taxes** for the half-year under review improved by €437 million to €711 million (first half of 2018: €274 million).

Regulatory RORAC was 18.0 percent (first half of 2018: 7.3 percent).

3.2.7 TeamBank

Net interest income at TeamBank amounted to €239 million, a rise of 8.1 percent compared with the figure of €221 million in the first 6 months of 2018. This increase was the consequence of growth in the portfolio of existing contracts in the easyCredit business with a portfolio interest margin that remained virtually unchanged year on year.

TeamBank is the center of excellence for modern liquidity management within the Volksbanken Raiffeisenbanken cooperative financial network. The bank's business is benefiting from the still significant consumer propensity to buy goods and services and take on finance, fueled by a robust German economy and supported by persistently low interest rates and rising real wages.

During the first half of 2019, TeamBank continued to face the challenges posed by advancing digitalization and the associated far-reaching structural transformation in the consumer finance market, changes that are accompanied by fierce competition. A large number of new providers, primarily fintechs, tech giants, and web portals, have identified consumer finance as an attractive area of business and are stepping up their efforts to position themselves in this market. TeamBank, as the center of excellence for modern liquidity management, focused at an early stage on aligning its business activities with market requirements in respect of the new technological challenges and on systematically ensuring that all changes are conceived from the customer perspective.

The integration of all customer touchpoints – mobile, online, and offline – in an ecosystem for liquidity management gives customers easy and innovative access to liquidity and services wherever and whenever

they want. In these activities, a business policy committed to the cooperative values of fairness and transparency, which has been put into practice now for many years, remains an inalienable guiding principle for TeamBank.

Having introduced the seamless cross-media payment process 'ratenkauf by easyCredit', which is an important element of this ecosystem, TeamBank offers a simple and uniformly designed installment purchase function, both in e-commerce and at the point of sale.

Moreover, a piloted app called 'fymio', an innovative personal finance management facility, gives customers a projection of their future liquidity based on intelligent analysis of the transactions across all of their accounts that are linked to the app.

TeamBank's 'easyCredit-Finanzreserve' product gives customers an additional cash reserve of up to €15,000. As at June 30, 2019, around 201,000 customers had either signed up for the 'easyCredit-Finanzreserve' or were already using this flexible means of borrowing. As a result, some 16.6 percent of new business was already being generated through 'easyCredit-Finanzreserve' in the first half of 2019.

The advisory concept known as 'easyCredit-Liquiditätsberater', which includes a financial compass created individually for each customer, provides both the customer and the advisor with transparency about the credit decision reached. More than 62,000 members of cooperative banks benefited from advice in the first half of this year, of whom around 9,400 were new to the cooperative financial network.

This provided the basis for the creation of an innovative consumer finance business model that enabled TeamBank to increase loans and advances to customers by 5.5 percent to €8,850 million as at June 30, 2019 (December 31, 2018: €8,390 million). The number of customers rose again, by 41,000, to reach 918,000.

TeamBank works with 763 of Germany's 870 cooperative banks and currently with 129 partner banks in Austria. It systematically focuses on customer needs and the associated process of continuous improvement, to which TeamBank attaches huge importance as one of its unique selling propositions, especially at a time of increasingly fierce competition.

Net fee and commission income declined by €6 million to a net expense of €11 million (first half of 2018: net expense of €5 million). This change was primarily due to higher commission payments to partner banks.

Loss allowances were higher than in the prior-year period at €54 million (first half of 2018: €32 million). Among other reasons, this was due to the growth of the portfolio as a result of new business, an increase in the probability of default, and credit risk premiums for recently opened accounts affected by changes in the sales process.

As expected, **administrative expenses** increased by around €2 million to €114 million (first half of 2018: €112 million). However, staff expenses held steady at €45 million (first half of 2018: €45 million).

Other net operating income went down by €1 million to €3 million (first half of 2018: €4 million).

Profit before taxes for the half-year under review amounted to €63 million. The decrease of €13 million compared with the figure of €76 million reported for the first half of 2018 was a consequence of the factors described above.

TeamBank's **cost/income ratio** in the period under review came to 49.4 percent (first half of 2018: 50.9 percent).

Regulatory RORAC was 26.3 percent (first half of 2018: 34.2 percent).

3.2.8 UMH

Net fee and commission income at UMH rose by €1 million to €706 million (first half of 2018: €705 million).

The change in net fee and commission income was predominantly due to the following factors: Because of the rise in the average assets under management of the Union Investment Group, which climbed by €10.8 billion to €339.7 billion (first half of 2018: €328.9 billion) due to the generation of new business, the volume-related contribution to net fee and commission income rose compared with the prior-year period. This volume-related contribution amounted to €637 million (first half of 2018: €631 million).

The assets under management of the Union Investment Group comprise the assets and securities

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

In the first half of 2019, income from performance-related management fees went down by €6 million to €2 million (first half of 2018: €8 million). Income from real estate fund transaction fees decreased by €7 million to €11 million during the reporting period (first half of 2018: €18 million).

Following the fall in prices at the end of last year, the capital markets mostly staged a strong recovery in the first half of 2019. The major central banks played a significant part in this, announcing that they would reverse the direction of monetary policy and would probably cut their key interest rates again as early as the second half of the year. These changes were prompted by the persistence of weak global growth rates and the escalation of the trade dispute between the United States and China.

Against this backdrop, Union Investment managed to generate net inflows from its retail business of €4.1 billion in the first 6 months of 2019 (first half of 2018: €4.7 billion).

The long-standing sales partnership with the local cooperative banks plays an exceptionally important role in this regard, thanks to their business model of maintaining a close working relationship with their customers.

In an environment of persistently low interest rates, Union Investment offers its customers investment solutions that supplement interest-related investments with material and intangible assets and thereby generate returns on the basis of broadly diversified, long-term investments.

Traditional fund-based saving offers an investment aimed at long-term capital accumulation. The number of traditional fund-linked savings plan contracts had risen to 2.4 million by the end of the period under review, with an increase in the 12-month savings volume to €4.5 billion (December 31, 2018: €4.3 billion).

In addition, customers invested a total of €0.6 billion in the reporting half-year in the fund-based Riester pension products (UniProfiRente and UniProfiRente Select) offered by the Union Investment Group. The total assets in the portfolio of Riester pension products had increased to €19.3 billion as at June 30, 2019 (December 31, 2018: €16.8 billion).

Business involving fund-based saving in regular installments continued to enjoy dynamic growth overall. This is demonstrated by the number of fund-linked savings plans managed by Union Investment in its retail business as at June 30, 2019, which totaled 5 million (December 31, 2018: 4.9 million). These plans included contracts under employee-funded capital formation schemes as well as the traditional savings plans and Riester pension contracts referred to above.

The open-ended real estate funds offered by the Union Investment Group are tried and tested as an intrinsic-value-based component of the investment mix. These funds generated net new business totaling €2.0 billion in the first half of 2019 (first half of 2018: €0.5 billion). 'UniImmo:Wohnen ZBI' alone was able to place an allocation of almost €1.5 billion in the reporting half-year. This fund was launched in cooperation with the ZBI Group and gives investors risk-optimized access to the residential real estate market.

Assets under management in the funds of the PrivatFonds family reached a record high in the first 6 months of 2019, despite a diminishing rate of inflows. Following the recent addition of a sustainability-oriented variant, there are now 7 multi-asset solutions in the family. They offer an asset structure in line with individual customer preferences combined with a graduated risk profile tailored to the needs of each customer. The portfolio volume for retail clients stood at €23.5 billion at the end of June 2019 (June 30, 2018: €22.5 billion).

In its institutional business, the Union Investment Group generated net inflows amounting to €4.9 billion (first half of 2018: €6.6 billion). A total of 49 new institutional clients were gained in the reporting half-year.

The persistently low level of interest rates also demanded a special effort to manage the risk and returns in the institutional business. As in other areas, the diversification of the institutional client portfolio is

therefore continuing. This is reflected in the structure of the investment accounts, which feature a greater number of asset classes and a broad allocation by country. In the period under review, demand was focused primarily on concentrated equity strategies, structured credit, and, in general, sustainable investment. There continues to be pressure from institutional investors to generate returns, resulting in the ongoing reallocation of short-term investments to products with higher returns.

More and more institutional clients are focusing on sustainability, although such investors are also increasingly paying attention to economic criteria and not just, as in the past, solely to ethical, social, and environmental aspects. As a result of the constantly growing demand for sustainably managed funds, the portfolio of such funds had expanded to €48.0 billion at the end of the reporting period (December 31, 2018: €41.4 billion).

The €7 million improvement in **gains and losses on investments** to €0 million (first half of 2018: net loss of €7 million) was attributable to higher realized gains than in the prior-year period on the sale of funds in Union Investment's own-account investing activities.

The €42 million improvement in **other gains and losses on valuation of financial instruments** to a net gain of €20 million (first half of 2018: net loss of €22 million) can be explained by a positive contribution from the valuation of own-account investments and by lower losses related to the valuation of guarantee commitments compared to the first half of 2018.

The €11 million rise in **administrative expenses** to €436 million (first half of 2018: €425 million) was predominantly caused by staff expenses advancing by €10 million to €208 million (first half of 2018: €198 million), which in turn was due to average pay rises and appointments to new positions.

Other net operating income improved by €69 million to €85 million (first half of 2018: €16 million). This increase was primarily the result of the derecognition of the fully consolidated subsidiary Union Investment Towarzystwo Funduszy Inwestycyjnych S.A. (TFI), Poland, following its sale.

Profit before taxes went up by €111 million to €384 million (first half of 2018: €273 million), above all due to the changes described above.

The **cost/income ratio** came to 53.2 percent in the first half of 2019 (first half of 2018: 60.9 percent).

Regulatory RORAC was greater than 100.0 percent (first half of 2018: greater than 100.0 percent).

3.2.9 VR Smart Finanz

Net interest income at VR Smart Finanz declined by €1 million to €75 million in the reporting period (first half of 2018: €76 million).

The positive effect on net interest income of the growth in core business, which was attributable to a further sharp rise in the volumes of the digital products 'VR Smart flexibel' and 'VR Smart express', was offset by a decrease in net interest income from non-core areas of business, which have been either scaled back or sold in accordance with the strategy. This non-core business includes real estate leasing, centralized settlement, IT leasing, hire purchase and leasing business with a value of more than €750,000, together with VR Smart Finanz's factoring business. For the following businesses, which had been classified as available for sale, contracts of sale were signed at the end of 2018 and took effect in the second quarter of 2019: real estate leasing (VR-IMMOBILIEN-LEASING GmbH), centralized settlement, and IT leasing (BFL Leasing GmbH). Siemens Finance & Leasing GmbH, Munich, is available to act as a partner for the cooperative banks in the case of individual transactions with an asset value of more than €750,000.

In the half-year under review, the priority at VR Smart Finanz was to continue the work to transform itself into a digital provider of finance for the self-employed and small businesses. VR Smart Finanz serves as a decentralized partner for very simple solutions for small and medium-sized enterprises (SMEs), supporting the cooperative banks with automated financing solutions for leasing, hire purchase, and lending up to €750,000, digital services, and forward-looking intelligent data analysis in connection with day-to-day finance activities in omnichannel sales. This brand focuses on the self-employed and small businesses as well as on the lower end of the SME segment. Its expertise lies in reliable, digitally supported financing decisions made within just a few minutes.

The online tool VR LeasyOnline facilitates integrated, automated decision-making, enabling cooperative banks to come to a decision in real time on applications for finance up to an amount of €250,000 (up to €100,000 in the case of the 'VR Smart flexibel'

business lending product and up to a total lending volume of €250,000 in the case of 'VR Smart express' asset finance). These solutions support the digital and digital/face-to-face sales channels. They help the cooperative banks provide their customers with a digital ecosystem of solutions and make use of the income potential offered by small-business and self-employed customers.

The growing importance of digitally supported financing solutions was underlined by the year-on-year rise of 32.4 percent (first half of 2018: 9.8 percent) in the volume of online business (leasing, hire purchase, and lending) transacted with the cooperative banks in the first half of 2019. The proportion of total new business (leasing and lending) accounted for by contracts entered into online increased from 85.2 percent in the first half of 2018 to 89.9 percent in the reporting period.

Nevertheless, rapid market changes in the era of digitalization require solutions and processes to be refined and updated on an ongoing basis in order to keep up with the ever-shorter innovation cycles. That is why VR Smart Finanz's innovative online order channel is increasingly gaining significance: Small-business customers of the participating cooperative banks can now use an entirely online process via the website of their local cooperative bank at any time not only to apply for a business loan up to €100,000 but also to actually enter into the agreement.

The digital services under the VR Smart Finanz brand, such as the VR Smart Guide accounting software, have been enhanced to provide further components of a cooperative ecosystem. VR Smart Guide provides digital support for small businesses and the self-employed, focusing on bookkeeping and financial planning. Further development work was also carried out on the Bonitätsmanager (credit status manager), which enables business people to check their own credit status and obtain information on how to optimize it. This online application is available to businesses throughout Germany.

Net fee and commission income declined by €6 million to a net expense of €1 million (first half of 2018: net income of €5 million). The main reason for this change was the level of trailer fees to be paid to the cooperative banks, which climbed in line with the volume of business.

Expenses for **loss allowances** increased by €10 million to €12 million (first half of 2018: €2 million). This change was predominantly due to the rise in the volume of the 'VR Smart flexibel' product.

Administrative expenses amounted to €70 million, which was the same as in the prior-year period (first half of 2018: €70 million).

Other net operating income stood at €9 million (first half of 2018: net expense of €15 million). This change in other net operating income can be largely explained by the gain on the sale of the centralized settlement business in the first half of 2019 and by the adverse impact in the first half of 2018 of the restructuring expenses in connection with the transformation into a digital provider of finance for the self-employed and small businesses.

VR Smart Finanz generated a **profit before taxes** of €1 million (first half of 2018: €1 million), largely as a consequence of the factors described above.

The **cost/income ratio** in the 6 months under review came to 84.3 percent (first half of 2018: 95.9 percent).

Regulatory RORAC was 0.7 percent (first half of 2018: 0.6 percent).

3.2.10 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 BSH with R+V.

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

4 Net assets

As at June 30, 2019, the DZ BANK Group's **total assets** had increased by €42.1 billion, or 8.1 percent, to €560.8 billion (December 31, 2018: €518.7 billion). This increase was largely attributable to a higher level of total assets at DZ BANK (up by €26.1 billion), DZ HYP (up by €3.7 billion), and R+V (up by €10.5 billion).

The **volume of business** amounted to €972,785 million (December 31, 2018: €904,918 million). This figure comprised the total assets, the assets under management at UMH as at June 30, 2019 amounting to €349,070 million (December 31, 2018: €323,370 million), the financial guarantee contracts and loan commitments amounting to €62,029 million (December 31, 2018: €61,871 million), and the volume of trust activities amounting to €903 million (December 31, 2018: €944 million).

The DZ BANK Group's **loans and advances to banks** rose to €93.0 billion, an increase of €1.4 billion or 1.4 percent. Loans and advances to banks in Germany were unchanged at €85.0 billion, while loans and advances to foreign banks went up by €1.4 billion to €8.0 billion.

The DZ BANK Group's **loans and advances to customers** amounted to €181.8 billion, which was €7.3 billion higher than at the end of 2018. The corresponding prior-year figure has been restated (see note 2 in the notes to the consolidated financial statements). Within this figure, loans and advances to customers in Germany rose by €7.3 billion to €153.2 billion, whereas loans and advances to customers outside Germany were almost unchanged at €28.5 billion (December 31, 2018: €28.6 billion).

As at June 30, 2019, **financial assets held for trading** amounted to €48.1 billion, an increase of €10.2 billion, or 26.9 percent, on the figure as at December 31, 2018. This change was mainly due to a rise in derivatives (positive fair values) (up by €6.6 billion), bonds and other fixed-income securities (up by €1.2 billion), receivables (up by €2.4 billion), and shares and other variable-yield securities (up by €0.1 billion).

FIG. 3 – TOTAL ASSETS

Investments were up by €2.0 billion, or 4.2 percent, to €50.3 billion. The principal reasons were a growth of €2.0 billion in the portfolio of bonds and other fixed-income securities and a rise of €0.2 billion in the portfolio of shares and other variable-yield securities, although some of these increases were offset by a decrease in investments in joint ventures (down by €0.2 billion).

Investments held by insurance companies rose by €8.5 billion (8.4 percent) to €109.3 billion (December 31, 2018: €100.8 billion). This was due, above all, to a €1.0 billion increase in variable-yield securities to €10.2 billion, a €5.2 billion increase in fixed-income securities to €54.1 billion, and a €1.3 billion increase in assets related to unit-linked contracts to €13.0 billion.

In the DZ BANK Group, **non-current assets and disposal groups classified as held for sale** amounted to €4.6 billion as at June 30, 2019, a fall of €2.5 billion compared with the figure as at December 31, 2018. This change compared with the end of 2018 was largely attributable to two items. Firstly, it consisted of an amount of €1.3 billion relating to credit portfolios at DVB in the land transport finance business and the fully consolidated subsidiary LogPay Financial Services GmbH, Eschborn, which were sold in the first half of 2019. Secondly, it consisted of an amount totaling €0.7 billion relating to BFL Leasing GmbH, which no longer formed part of the core business of VR Smart Finanz, and 94.0 percent of VR-IMMOBILIEN-LEASING GmbH, which were sold in the first half of 2019.

The DZ BANK Group's **deposits from banks** as at June 30, 2019 amounted to €146.4 billion, which was €3.9 billion, or 2.7 percent, higher than the figure reported as at December 31, 2018. Deposits from domestic banks were down by €2.7 billion to €126.1 billion, while deposits from foreign banks increased by €6.6 billion to €20.3 billion.

Deposits from customers grew by €4.6 billion, or 3.5 percent, to €137.1 billion (December 31, 2018: €132.5 billion). Deposits from domestic customers increased by €0.5 billion to €117.5 billion (December 31, 2018: €117.0 billion). Deposits from foreign customers rose by €4.1 billion to €19.6 billion (December 31, 2018: €15.5 billion).

At the end of the reporting half-year, the carrying amount of **debt certificates issued including bonds** in the DZ BANK Group was €72.3 billion (December 31, 2018: €63.9 billion). The rise of €8.4 billion was largely due to a growth of €10.0 billion in the portfolio of other debt certificates issued to €22.9 billion, although, at the same time, the portfolio of bonds issued contracted by €1.6 billion to €49.4 billion.

Financial liabilities held for trading went up by €16.3 billion, or 36.2 percent, to €61.3 billion (December 31, 2018: €45.0 billion). This change was due to a rise in derivatives (negative fair values) (up by €5.9 billion), short positions (up by €2.0 billion), bonds issued (up by €1.8 billion), and money market deposits (up by €6.6 billion).

Insurance liabilities increased by €8.2 billion, or 8.8 percent, to €101.4 billion (December 31, 2018: €93.2 billion). This was largely attributable to rises of €1.5 billion in the benefit reserve and €4.0 billion in the provision for premium refunds.

As at June 30, 2019, the **equity** reported by the DZ BANK Group was €25.5 billion (December 31, 2018: €23.5 billion). The increase of €2.0 billion compared with the end of 2018 can essentially be explained by the growth of the reserve from other comprehensive income (up by €1.3 billion), which was largely due to interest-rate-related changes in the fair value of investments and of investments held by insurance companies. Moreover, unappropriated earnings had risen to €0.9 billion as at June 30, 2019 (December 31, 2018: €0.3 billion).

The **capital and solvency situation** of the DZ BANK financial conglomerate, the DZ BANK Group, and the R+V Versicherung AG insurance group is described in this group management report in chapter V (Opportunity and risk report), section 5.2 (Normative internal perspective).

5 Financial position

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

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

The DZ BANK Group has a highly diversified funding base for **operational liquidity**. A considerable portion is accounted for by money market activities resulting from the cash-pooling function with the local cooperative banks. This enables local cooperative banks with available liquidity to invest it with DZ BANK, while local cooperative banks requiring liquidity can obtain it from DZ BANK. Traditionally, this results in a liquidity surplus, which provides the main basis for short-term funding in the unsecured money markets. Corporate customers and institutional clients are another important source of funding for operational liquidity requirements. The DZ BANK Group therefore has a comfortable level of liquidity at its disposal. Funding on the interbank market is not strategically important to the DZ BANK Group.

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

Money market funding also includes collateralized money market activities, which form the basis for broadly diversified funding on money markets. To this end, key repo and securities lending activities, together with the collateral management process, are managed centrally in DZ BANK's Group Treasury division.

Group Treasury also has at its disposal a portfolio of investment-grade liquid securities. These securities can be used as collateral in monetary policy funding transactions with central banks, in bilateral repos, or in the tri-party repo market.

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

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

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

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

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

Monthly **structural analyses** of the various resources available on the liabilities side of DZ BANK's balance sheet are also conducted. The purpose of these analyses is to provide senior management with information that can then be used as the basis for actively managing the liability profile.

To complement the description of the funding structure, further information on **liquidity risk** can be found in this interim group management report in chapter V (Opportunity and risk report), section 6.1 (Economic perspective). The year-on-year changes in cash flows from operating activities, investing activities, and financing activities are shown in the **statement of cash flows** in the interim consolidated financial statements.

III Events after the balance sheet date

There were no events of particular importance after the end of the first half of 2019.

IV Outlook

1. Economic conditions

1.1 Global economic trends

Following a boom period, the global economy has been expanding at a markedly slower pace since last year. At the same time, an exceptionally high number of economic and political uncertainties have emerged. Consequently, the risks to economic growth going forward are also high.

There is currently no sign of an end to the trade dispute between the United States and China and it is hard to gauge what will happen next. Further escalation of the trade dispute or a spillover to trade relations with the European Union poses a significant downside risk for the global economy. Because of the high degree of international integration, barely any country remains unaffected by the dispute. The Brexit negotiations between the EU and United Kingdom also continue to generate a great deal of uncertainty. It is currently doubtful whether the new UK prime minister will manage to have any changes made to the existing withdrawal agreement negotiated with the EU. And it is equally doubtful whether a no-deal Brexit will be backed by a majority in the UK parliament.

Overall, however, expansionary fiscal policy and a weak oil price should mitigate the damage to the global economy. Given the US economy's healthy fundamentals, interest rates do not necessarily need to be lowered in the United States. Nevertheless, the Federal Reserve recently implemented a precautionary 'insurance cut' and could make further rate reductions between now and the end of 2019.

In this environment, global economic growth is currently expected to be around 3.0 percent both this year and in 2020. As inflationary pressure is only moderate, the worldwide inflation rate is predicted to stand at approximately 3.0 percent in 2019 and next year.

1.2 Trends in the USA

Based on the data currently available, the US economy's growth in the second quarter – on an annualized basis – is likely to have been low at just under 1.5 percent. The simmering trade/tariff dispute with China is taking its toll on both the manufacturing and the service sectors. This is evidenced by sentiment surveys, which are showing a fall as a result of increased cost pressures created by the existing tariffs and the real danger that tariffs will soon be imposed on the remaining goods imported from China. An economic slump is improbable, however, as many other sentiment indicators are still at a very high level. In particular, very upbeat consumer sentiment points to strong growth stimulus from consumer spending.

In these conditions, the US growth rate is forecast to be approximately 2.3 percent in 2019 and around 1.7 percent in 2020.

The latest job market figures paint a rosy picture of the first half of this year. Unemployment in the United States is at a historically low level, which means almost full employment for skilled workers. As a result, employment increased at a slower rate overall. Nevertheless, wages have started to rise more slowly again recently. A sudden increase in the oil price and thus energy prices is not on the horizon.

Consequently, the average inflation rate for 2019 is expected to be in the region of 2.0 percent. Current forecasts for 2020 are predicting an inflation rate in the vicinity of 2.4 percent.

1.3 Trends in the eurozone

The economic performance of the eurozone was relatively weak in the first half of 2019. Although the European economy is not directly impacted by the trade dispute between the United States and China or the resulting increases in tariffs, it is facing a general strengthening of headwinds for foreign trade. Almost all countries in the eurozone are likely to be affected. However, countries with a stronger focus on exports – such as Germany and the Netherlands – will probably suffer to a much greater degree.

The protracted Brexit process is also creating sustained uncertainty in the eurozone. Sentiment in European companies will probably not improve any time soon. This can be seen from the first sentiment indicators published for June 2019, which show that the economic outlook in the eurozone is continuing to cloud over. The DZ BANK Euro-Indicator, for example, was down slightly, by 0.2 percent, compared with the previous month. Manufacturing continues to be most affected by the gloomier conditions, as particularly clearly demonstrated by the deterioration of companies' production forecasts at the midway point of 2019.

Sentiment among purchasing managers in the manufacturing sector is showing no signs of improvement either.

By contrast, consumer sentiment in the eurozone remains upbeat, even though recent months point to a slight cooling of sentiment. Consumers continue to be very optimistic about their own financial situation, due in part to the unwaveringly benign labor market.

Overall, the eurozone is still going through a period of economic weakness, but will probably not slip into recession. Economic growth is therefore expected to slow to approximately 1.0 percent in 2019. The current growth forecast for 2020 is 1.1 percent.

Domestic inflationary pressure remains moderate in the eurozone, with two opposing forces affecting consumer prices. On the one hand, the slower increase in energy prices has lowered the rate of inflation. But on the other, prices for services have risen more sharply again. Consequently, the average inflation rate for 2019 is expected to be in the region of 1.2 percent. Current forecasts for 2020 are predicting an inflation rate in the vicinity of 1.3 percent.

1.4 Trends in Germany

The German economy's rate of expansion has diminished significantly. On the demand side, this is mainly due to much softer demand for exports in key sales markets. And on the supply side, full capacity utilization and shortages of workers are playing a role.

The growth of industrial output is slowing particularly noticeably. This is probably due in large part to the dwindling level of orders on hand since last autumn. The escalating trade disputes are currently hitting Germany's heavily export-dependent industrial sector particularly hard. In April 2019, exports fell by almost 4 percent compared with the previous month. As a result of the poor data, combined with the expectation that the US/Chinese trade dispute will not be resolved any time soon, Germany's economic forecasts are being downgraded.

A growth rate of 0.7 percent is predicted for 2019 as a whole. For 2020, the forecast is 1.2 percent.

The rate of inflation in Germany recently rose to 1.5 percent. It was driven up by services, the prices of which have gone up at a disproportionately strong rate. The pressure on energy prices has eased in recently months. The oil price has been at a much lower level since the end of May 2019. Given the weaker state of the global economy, it is not expected to go back up quickly. Despite the booming property sector, the average rent increase calculated by the Statistisches Bundesamt [German Federal Statistical Office] remains at a modest 1.4 percent.

The average inflation rate is expected to be 1.5 percent in 2019 and 1.7 percent next year.

1.5 Trends in the financial sector

For some years, the financial sector has faced considerable pressure in terms of both adjustment and costs caused by the need to comply with regulatory reforms and implement structural change to adapt to competitive conditions.

In response to these regulatory requirements, banks have reduced their leverage over the last few years and substantially bolstered their risk-bearing capacity by improving capital and liquidity adequacy.

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

As before, efforts to address the challenges described above are being made more difficult by the persistently low nominal interest rates in the eurozone, which are still accompanied by a relatively flat yield curve and are likely to prevent any significant increase in margins in interest-related business.

In view of various geopolitical risks and related economic concerns, the major international central banks are signaling that they will continue to pursue an expansionary monetary policy in order to shore up the economy.

The uncertain political and economic trends could have an adverse effect on the economic position of the financial sector. Further information on macroeconomic risk factors can be found in section 2.2.1 of the opportunity and risk report.

2 Financial performance

Based on a current assessment, **profit before taxes** will rise year on year and be in the middle to the upper end of the long-term target range of €1.5 billion to €2.0 billion in the current financial year. While profit before taxes in the BSH, DVB, DZ HYP, R+V, and UMH operating segments is likely to be above the budgeted figures, that of the DZ BANK operating segment will, from the current perspective, be lower than in 2018.

In 2020, profit before taxes is expected to be at the lower end of the long-term target range.

Financial performance will be impacted by the persistently low level of interest rates. The future financial performance of the DZ BANK Group could be subject to risks arising from the political and economic climate outlined above.

Net interest income including **income from long-term equity investments** is predicted to be lower in 2019 than in 2018.

In 2020, net interest income is expected to go up markedly in nearly all management units, assuming that interest rates rise moderately.

The possible slowdown of economic growth in the eurozone, coupled with a yield curve that remains flat and with low rates of interest, may lead to falls in income, especially in relation to the interest-rate-sensitive business models within the DZ BANK Group.

Once again, **net fee and commission income** is projected to make a strong, positive contribution to the earnings of the DZ BANK Group in 2019 but will be lower than in 2018.

In 2020, there is likely to be a growth-driven rise in net fee and commission income, especially in the UMH and DZ BANK operating segments.

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

In all probability, **gains and losses on trading activities** will improve in 2019 compared with 2018.

According to the planning for 2020, gains and losses on trading activities will be much better than in 2019. Impetus is particularly likely to come from customer-driven capital markets business in the DZ BANK operating segment.

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

Gains and losses on investments will be boosted by the disposal of shares in CMSS, with a significantly higher net gain than in 2018 expected.

From the current perspective, gains and losses on investments will deteriorate significantly in 2020 because no substantial non-recurring items are expected.

In 2019, **other gains and losses on valuation of financial instruments** are likely to improve significantly year on year, above all due to the effects of measuring securities from government issuers in European periphery countries.

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

Net income from insurance business is also currently expected to go up sharply in 2019 compared with 2018. This income is being driven, in particular, by the growth-related increases in premiums earned accompanied by a substantial year-on-year improvement in gains and losses on investments held by insurance companies.

In 2020, net income from insurance business is expected to be lower than in 2019 but still at a high level thanks to growth in premiums.

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

Expenses for **loss allowances** are likely to rise in 2019 compared with their low level in 2018.

In 2020, expenses for loss allowances are likely to continue going up in line with the targeted volume of new business and the long-term costs for covering expected losses arising from the lending business.

The effects of possible political and macroeconomic developments on the credit markets relevant to the DZ BANK Group could have a detrimental impact on loss allowances.

In 2019, **administrative expenses** are expected to rise moderately year on year.

The planning for 2020 assumes a small decrease in administrative expenses compared with 2019. The intention is for growth-related increases in administrative expenses in selected segments to be offset by savings.

A sharp year-on-year rise in **other net operating income** is anticipated in 2019, partly due to the deconsolidation of TFI.

From the current perspective, other net operating income is forecast to fall in 2020 because no substantial non-recurring items are expected.

The **cost/income ratio** for the DZ BANK Group is likely to improve markedly in 2019 as a result of the expected significant year-on-year increase in income and a small rise in expenses. One of the main strategic aims is to continue reducing the cost/income ratio by rigorously managing costs in all operating segments on the one hand and by accelerating growth in the operating business of all segments on the other.

Regulatory RORAC, the risk-adjusted performance measure based on regulatory risk capital, will probably increase substantially year on year in 2019 but decrease in 2020.

3 Liquidity and capital adequacy

The DZ BANK Group is assuming that it can continue to maintain a sufficient level of liquidity during the remainder of 2019 and in 2020 in terms of **liquidity adequacy** requirements. Further information on liquidity adequacy can be found in section 4 of the opportunity and risk report.

As matters currently stand, the DZ BANK Group's **capital adequacy** is assured for 2019 and 2020; that is to say, it will continue to have at its disposal the available internal capital necessary to cover the risks associated with the finance business and other risks arising from the group's business operations. Further information on capital adequacy can be found in section 5 of the opportunity and risk report.

V Opportunity and risk report

DZ BANK Group

1 Disclosure principles

In its capacity as the parent company in the DZ BANK Group, DZ BANK is publishing this opportunity and risk report in order to meet the transparency requirements for opportunities and risks applicable to the DZ BANK Group as specified in **sections 115 and 117 WpHG** and **section 315 HGB** in conjunction with **GAS 16** (Interim Financial Reporting).

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

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

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

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

2 Summary

2.1 Opportunity and risk management system

The DZ BANK Group's opportunity and risk management system was described in the combined opportunity and risk report ('2018 opportunity and risk report') in the 2018 group management report. Those disclosures are also applicable to the first half of this year, unless otherwise indicated in this report. The main aspects of the opportunity and risk management system are presented below.

2.1.1 Fundamental features

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

The **management of opportunities** in the DZ BANK Group is integrated into the annual strategic planning process. Strategic planning is designed to enable the group to identify and analyze market discontinuities based on different macroeconomic scenarios, trends, and changes in the markets, and forms the basis for evaluating opportunities. Attractive opportunities are taken into account in the business strategies.

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

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

sets out quantitative guidelines reflecting the risk appetite specified by the Board of Managing Directors.

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

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

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

2.1.2 KPIs

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

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

The **minimum liquidity surplus** and **economic capital adequacy** are calculated using the methods developed by DZ BANK. These methods are explained in sections 6.2.4 and 7.2.1 of the 2018 opportunity and risk report. The relationship between these two KPIs and the balance sheet is presented in sections 6.2.6 and 7.2.1 of the 2018 opportunity and risk report. The other KPIs mentioned above are calculated in accordance with the methods stipulated by the supervisory authorities.

The minimum liquidity surplus and economic capital adequacy cannot be reconciled directly to individual line items in the consolidated financial statements because they are forward-looking considerations. Although these key figures are based on the consolidated financial statements, a number of other factors are used in their calculation. The use of these figures in the opportunity and risk report complies with the financial reporting standards to be applied in external risk reporting.

2.1.3 Management units

All DZ BANK Group entities are integrated into the groupwide opportunity and risk management system. DZ BANK and its main subsidiaries – also referred to as management units – form the core of the financial services group.

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

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

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

Insurance sector:
- R+V.

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

The management units represent the operating segments of the DZ BANK Group. They are deemed to be material in terms of their contribution to the DZ BANK Group's aggregate risk and are therefore directly incorporated into the group's risk management system. The other subsidiaries and investee entities are included in the system indirectly as part of equity investment risk.

The management units ensure that their respective subsidiaries and investees are also included in the DZ BANK Group's risk management system – indirectly via the majority-owned entities – and meet the minimum standards applicable throughout the group.

2.1.4 Material changes

ECB guides to the ILAAP and ICAAP

Since the start of 2019, the DZ BANK Group has applied the guides to the internal liquidity adequacy assessment process (ILAAP) and the internal capital adequacy assessment process (ICAAP) that were published by the ECB as part of the Single Supervisory Mechanism (SSM) in November 2018. In accordance with these guides, the DZ BANK Group manages both its liquidity adequacy and its capital adequacy from an economic perspective and from a normative internal perspective. This includes integration of the economic and internal normative perspectives within the ILAAP and within the ICAAP as well as integration between the ICAAP and the ILAAP.

Management of **liquidity adequacy** from an **economic perspective** is closely based on the method that was used until last year. The **normative internal perspective** is based on the liquidity ratios in Pillar 1. Its objective is to assess the DZ BANK banking group's ability to comply with regulatory minimum requirements (plus an internally specified management buffer). This assessment comprises an analysis of the current position as well as forward-looking scenarios. It includes the assumptions used in the economic perspective.

The aim of the ICAAP is to ensure that, from two complementary perspectives, capital resources are adequate for an institution to be able to continue operating. The **economic perspective** is purely an internal perspective for managing **capital adequacy** with the aim of ensuring that all of the DZ BANK Group's material capital risks are fully backed by capital plus an internally specified management buffer. According to the ICAAP guide, the economic perspective is based on the assumption of an institution's continuity. Consequently, subordinated liabilities have not been included in the calculation of the DZ BANK Group's available internal capital since the beginning of this year. The new method therefore means that the level of economic capital adequacy is significantly lower than under the previous method. The assessment of current economic capital adequacy is supplemented by **stress tests** that analyze economic losses in scenarios covering all types of risk and in scenarios for specific risk types. Following the introduction of the new ICAAP concept, the risk capital requirement is no longer specifically stress tested.
The **normative internal perspective** is based on the capital ratios in Pillar 1. Its objective is to ensure that the DZ BANK financial conglomerate and the DZ BANK banking group comply with regulatory minimum capital requirements (plus an internally specified management buffer), both in the current circumstances and in forward-looking scenarios. The internal normative perspective comprises three management dimensions: monitoring of regulatory KPIs, capital planning, and adverse stress tests.

Central market risk model

Various components are used to quantify market risk in the Bank sector from a present value perspective. These components determine the aggregate risk capital requirement for market risk, taking into account the effects of concentration and diversification. The risks arising in connection with the assets and liabilities

associated with direct pension commitments are also factored in. Since the start of this year, the models have been operated centrally by DZ BANK and are fed with input data provided by the management units on each trading day. Sector-wide standards and rules are in place to ensure that the modeling is appropriate.

Limits instead of upper loss limits

Since the start of this year, the term 'upper loss limit' has been replaced by the term 'limit' in internal reporting. This change is reflected in this report.

2.2 Risk factors, risks, and opportunities

2.2.1 Risk factors

The DZ BANK Group is exposed to **risk factors related to both the market and the sector**. These risk factors may be reflected in liquidity adequacy and capital adequacy. For example, the **regulatory framework** for the banking industry remains characterized by ever tighter regulatory liquidity and capital standards and increasingly stringent process and reporting requirements. These developments particularly have an impact on business risk. There are also significant **macroeconomic risk factors** in the shape of economic divergence in the eurozone, the UK's exit from the EU by October 31, 2019, the ongoing phase of low interest rates, the persistently tough market conditions faced by the offshore finance business and by some of the shipping finance business, and the threat of a global trade war. Potentially, the macroeconomic risk factors could particularly have a negative impact on credit risk, equity investment risk, market risk, business risk, and reputational risk in the Bank sector and on market risk, counterparty default risk, and reputational risk in the Insurance sector. Moreover, adverse macroeconomic developments could manifest themselves as a combination of the aforementioned risk effects on liquidity risk. The protracted period of low interest rates will probably reduce profits.

Moreover, the DZ BANK Group is exposed to **business-specific risk factors of an overarching nature** that affect a number of risk types. These factors may include potential shortcomings in the risk management system, the possible downgrading of the credit rating for DZ BANK or its subsidiaries, or ineffective hedges.

The aforementioned risk factors are explained in the 2018 opportunity and risk report. These risk factors continued to be relevant to the DZ BANK Group in the first 6 months of this year and apply equally to the second half of 2019.

2.2.2 Risks and opportunities

The extent to which the liquidity risks and the risks backed by capital (risk profile) assumed by the DZ BANK Group are in accordance with its risk limits is expressed in the values for the group's **risk-related key performance indicators (KPIs)** shown in Fig. 4. The values for these KPIs are compared against the (internal) minimum targets specified by the Board of Managing Directors of DZ BANK with due regard to the business and risk strategies– also referred to as risk appetite – and against the (external) minimum targets laid down by the supervisory authorities. The DZ BANK Group met the internal and external minimum targets on every measurement date/every reporting date in the first 6 months of 2019.

The **solvency** of the DZ BANK Group was never in jeopardy on any risk measurement date during the reporting period. By holding ample liquidity reserves, the group aims to be able to protect its liquidity against any potential crisis-related threats. It also complied with regulatory requirements for liquidity adequacy on every reporting date. The DZ BANK Group remained within its economic **risk-bearing capacity** in the first half of 2019 and also complied with regulatory requirements for capital adequacy on every reporting date. There are no indications that the **continued existence** of the DZ BANK Group as a going concern might be at risk.

The **opportunities** presented by the forecast developments are reasonable in relation to the risks that will be incurred.

FIG. 4 – RISK-RELATED KPIS

	Measured figure		Internal minimum target[1]		External minimum target	
	Jun. 30, 2019	Dec. 31, 2018	2019	2018	2019	2018
LIQUIDITY ADEQUACY						
DZ BANK Group						
Minimum liquidity surplus (€ billion)[2]	7.2	12.0	4.0	4.0	0.0	0.0
DZ BANK banking group						
Liquidity coverage ratio (%)	135.2	141.4	110.0	110.0	100.0	100.0
CAPITAL ADEQUACY						
DZ BANK Group						
Economic capital adequacy (%)[3]	149.9	170.3	120.0	120.0	100.0	100.0
DZ BANK financial conglomerate						
Coverage ratio for the financial conglomerate (%)[4]	169.1	174.0	120.0	120.0	100.0	100.0
DZ BANK banking group						
Common equity Tier 1 capital ratio (%)[5]	14.3	13.7	11.5	11.0	9.8	8.8
Tier 1 capital ratio (%)[5]	14.8	14.3	13.0	12.5	11.3	10.3
Total capital ratio (%)[5]	17.1	16.8	15.0	14.5	13.3	12.3
Leverage ratio (%)	4.4	4.3	3.5	3.5		

1 As specified by the Board of Managing Directors.
2 The measured value relates to the stress scenario with the lowest minimum liquidity surplus. The internal minimum target relates to the observation threshold.
3 The internal minimum target is the amber threshold in the traffic light system for managing and monitoring economic capital adequacy.
4 The value measured as at June 30, 2019 was calculated in the context of internal management.
5 The external minimum targets are the binding regulatory minimum capital requirements. Details on the minimum capital requirements can be found in section 5.2.2.

Not available

3 Potential opportunities

The potential opportunities described in the 2018 opportunity and risk report – **focus on the cooperative banks** and **digitalization** – continued to be relevant to the DZ BANK Group in the first 6 months of this year and apply equally to the second half of 2019. Collaboration with the cooperative banks offers particular potential in the context of the joint lending business.

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

There were no changes during the reporting half-year in terms of the potential opportunities offered by DZ BANK's **credit rating**. Fig. 5 provides an overview of DZ BANK's credit ratings.

As at June 30, 2019, the long-term credit rating for the cooperative financial network issued by Fitch and Standard & Poor's remained unchanged at AA-.

FIG. 5 – DZ BANK RATINGS

	Standard & Poor's		Moody's		Fitch	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Issuer rating	AA-	AA-	Aa1	Aa1	AA-	AA-
Covered bonds (DZ BANK BRIEFE)	AA+	AA+	Aaa	Aaa	–	–
Long-term rating for deposits	–	–	Aa1	Aa1	AA-	AA-
Long-term counterparty risk assessment/ derivative counterparty rating	–	–	Aa1	Aa1	AA-	AA-
Long-term rating for unsecured, 'preferred' bonds	AA-	AA-	Aa1	Aa1	AA-	AA-
Long-term rating for unsecured, 'non-preferred' bonds	A+	A+	A1	A1	AA-	AA-
Short-term rating	A-1+	A-1+	P-1	P-1	F1+	F1+

4 Liquidity adequacy

4.1 Economic perspective

4.1.1 Quantitative variables

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

Liquid securities

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

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

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

Fig. 6 shows the liquidity value of the liquid securities that would result from secured funding or if the securities were sold.

The total liquidity value as at June 30, 2019 amounted to €39.2 billion (December 31, 2018: €41.8 billion). The contraction of the securities portfolio was mainly the result of an increase in the net repo volume at DZ BANK.

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

FIG. 6 – LIQUID SECURITIES

€ billion	Jun. 30, 2019	Dec. 31, 2018
Liquid securities eligible for GC Pooling (ECB Basket)[1]	**18.7**	23.4
Securities in own portfolio	20.8	22.7
Securities received as collateral	12.5	9.7
Securities provided as collateral	-14.5	-9.0
Liquid securities eligible as collateral for central bank loans	**13.7**	12.3
Securities in own portfolio	15.0	13.4
Securities received as collateral	5.0	4.9
Securities provided as collateral	-6.2	-6.0
Other liquid securities	**6.7**	6.0
Securities in own portfolio	5.6	5.4
Securities received as collateral	1.3	0.9
Securities provided as collateral	-0.2	-0.2
Total	**39.2**	41.8
Securities in own portfolio	41.3	41.5
Securities received as collateral	18.7	15.5
Securities provided as collateral	-20.9	-15.3

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

Funding

For the most part, the DZ BANK Group covers its funding requirements through the local cooperative banks and on the unsecured money markets. The following sources of funding in the unsecured money markets are used:

- Other banks and central banks
- Corporate customers and institutional customers
- Commercial paper (institutional investors).

The breakdown of funding is shown in Fig. 7.

Unsecured funding continues to be dominated by the ongoing availability of surplus liquidity on the short-term money markets.

Further details on funding are provided in section II.5 (Financial position) of the business report in the interim group management report.

FIG. 7 – UNSECURED FUNDING

%	Jun. 30, 2019	Dec. 31, 2018
Local cooperative banks	45	55
Other banks, central banks	19	14
Corporate customers, institutional customers	15	15
Commercial paper (institutional investors)	22	16

4.1.2 Risk position

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

The liquidity risk value measured as at the reporting date for the stress scenario with defined limits with the lowest minimum liquidity surplus (squeeze scenario) was €7.2 billion (December 31, 2018: €12.0 billion). The decline in the minimum liquidity surplus was largely due to reduced issuance activity coupled with a larger volume of own issues, investment certificates, and own funds that will mature in the 1-year forecast period, but also due to standardization of the risk measurement methods at DZ HYP following the merger of WL BANK and DG HYP.

During the period under review, liquidity did not, in any of the stress scenarios with defined limits, fall below the observation threshold of €4 billion set by the Board of Managing Directors as the internal minimum target for 2019. Furthermore, it did not fall below the limit of €1 billion or the external minimum target of €0 billion on any measurement date in the reporting period. The observation threshold, limit, and external minimum target remained unchanged compared with 2018.

The results demonstrate that economic liquidity adequacy was maintained on every measurement date in the reporting period. The minimum liquidity surplus as at June 30, 2019 was positive in the stress scenarios with defined limits that were determined on the basis of risk appetite. This is due to the fact that the counterbalancing capacity was above the cumulative cash outflows on each day of the defined forecast period in every scenario, which indicates that the cash outflows assumed to take place in a crisis could be comfortably covered.

4.2 Normative internal perspective

The **liquidity coverage ratio** for the DZ BANK banking group calculated in accordance with Commission Delegated Regulation (EU) No. 2015/61 as at June 30, 2019 is shown in Fig. 9.

The decrease in the LCR from 141.4 percent as at December 31, 2018 to 135.2 percent as at June 30, 2019 was attributable to the ratio's increased sensitivity to net liquidity outflows, with excess cover remaining almost unchanged. Excess cover is the difference between the liquidity buffer and the net liquidity outflows.

In the reporting period, both the internal minimum target of 110.0 percent and the regulatory minimum requirement of 100.0 percent were significantly exceeded on every reporting date. These minimum targets were the same as in 2018.

FIG. 9 – LIQUIDITY COVERAGE RATIO AND ITS COMPONENTS

	Jun. 30, 2019	Dec. 31, 2018
Total liquidity buffer (€ billion)	90.6	78.7
Total net liquidity outflows (€ billion)	67.0	55.6
Liquidity coverage ratio (%)	135.2	141.4

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

	Forward cash exposure		Counterbalancing capacity		Minimum liquidity surplus	
€ billion	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Downgrading	-48.9	-39.3	71.6	61.8	22.8	22.5
Corporate crisis	-49.9	-37.1	59.7	50.1	9.7	13.0
Market crisis	-57.7	-42.5	67.7	58.2	10.0	15.7
Combination crisis	-56.7	-42.1	63.9	54.1	7.2	12.0

5 Capital adequacy

5.1 Economic perspective

It was necessary to **recalculate the overall solvency requirement** as at December 31, 2018 owing to scheduled changes to the parameters for the risk measurement procedures and the updating of actuarial assumptions carried out in the second quarter of 2019 for the Insurance sector on the basis of R+V's 2018 consolidated financial statements. The recalculation reflects updated measurements of insurance liabilities based on annual actuarial analyses and updates to parameters in the risk capital calculation. Because of the complexity and the amount of time involved, the parameters are not completely updated in the in-year calculation and an appropriate projection is made.

The recalculation led to changes in the available internal capital, key risk indicators, and economic capital adequacy. The figures as at December 31, 2018 given in this opportunity and risk report have been restated accordingly.

The DZ BANK Group's **available internal capital** as at June 30, 2019 stood at €26,139 million. The comparable figure as at December 31, 2018 was €27,954 million. The figure originally measured as at December 31, 2018 and disclosed in the 2018 opportunity and risk report came to €28,562 million. The reduction in available internal capital compared with the end of 2018 was largely due to capital components no longer being included following implementation of the new requirements in the ECB's ICAAP guide.

The **limit** derived from the available internal capital amounted to €21,723 million as at June 30, 2019 (December 31, 2018: €24,276 million). The reduction was due to sub-limits that were no longer required being relinquished.

As at June 30, 2019, **aggregate risk** was calculated at €17,443 million. The comparable figure as at December 31, 2018 was €16,418 million. The figure originally measured as at December 31, 2018 and disclosed in the 2018 opportunity and risk report came to €17,025 million. This increase was driven by higher numbers in both the Bank sector and the Insurance sector. The increase in risk attributable to the Insurance sector was due to portfolio growth and the level of interest rates. This trend was accompanied by a sharp rise in own funds in the Insurance sector.

As at June 30, 2019, the **economic capital adequacy ratio** for the DZ BANK Group was calculated at 149.9 percent. The comparable figure as at December 31, 2018 was 170.3 percent. The figure originally measured as at December 31, 2018 and disclosed in the 2018 opportunity and risk report was 167.8 percent. During the first half of 2019, the economic capital adequacy ratio was higher than the internal and external minimum targets of 120.0 percent and 100.0 percent respectively on every measurement date. The reduction in economic capital adequacy compared with the end of 2018 was largely due to capital components no longer being included in available internal capital following implementation of the requirements in the ECB's new ICAAP guide.

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

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

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

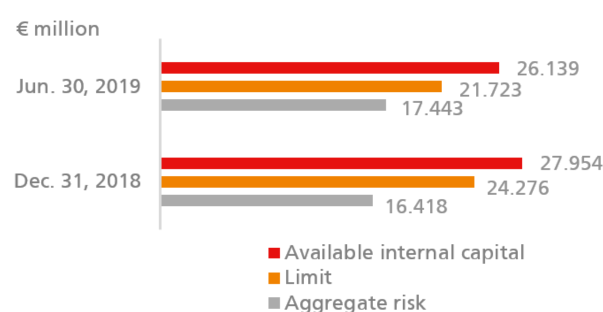


FIG. 11 – LIMITS AND RISK CAPITAL REQUIREMENTS INCLUDING CAPITAL BUFFER IN THE BANK SECTOR

	Limit		Risk capital requirement[4]	
€ million	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Credit risk	7,189	8,238	5,790	5,541
Equity investment risk	1,400	1,341	1,065	1,091
Market risk[1]	5,646	6,768	4,102	4,030
Technical risk of a home savings and loan company[2]	706	667	364	553
Business risk[3]	1,016	1,118	849	857
Operational risk	926	1,030	799	804
Total (after diversification)	**15,533**	18,236	**11,917**	11,600

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

Fig. 12 sets out the limits and overall solvency requirements for the **Insurance sector**, broken down by risk type, and includes policyholder participation. The definition of the limits and determination of overall solvency requirements take into account the ability to offset deferred taxes against losses (which arises where deferred tax liabilities can be eliminated in the loss scenario). Diversification effects between the risk types are also taken into consideration. Owing to these effects of correlation, the overall solvency requirement and limit for each risk type are not cumulative.

In addition to the amounts shown in Fig. 11 and Fig. 12, there was a **centralized capital buffer requirement across all types of risk** of €537 million as at June 30, 2019 (December 31, 2018: €301 million). The corresponding limit was €620 million as at the reporting date (December 31, 2018: €340 million). This increase was predominantly the result of the specifications in the ECB's new ICAAP guide.

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

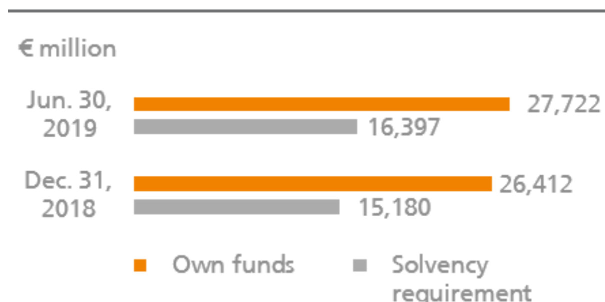
	Limit		Overall solvency requirement	
€ million	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Life actuarial risk	1,200	1,100	946	921
Health actuarial risk	300	350	261	234
Non-life actuarial risk	3,800	3,650	3,548	3,300
Market risk	3,600	4,350	3,410	3,205
Counterparty default risk	120	100	109	64
Operational risk	700	640	635	557
Risks from entities in other financial sectors	130	145	111	111
Total (after diversification)	**5,570**	**5,700**	**4,989**	**4,517**

5.2 Normative internal perspective

5.2.1 DZ BANK financial conglomerate

The changes in the own funds and the solvency requirements are shown in Fig. 13.

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



1 June 30, 2019: internal management figures; December 31, 2018: final figures reported to the supervisory authorities.

These components give a **coverage ratio** for the financial conglomerate of 169.1 percent as at June 30, 2019. This figure is used for internal management purposes. The final coverage ratio, which is reported to the supervisory authorities, amounted to 174.0 percent as at December 31, 2018 (provisional figure given in the 2018 opportunity and risk report: 175.7 percent). This is significantly in excess of the regulatory minimum requirement (100.0 percent) and the internal minimum target (120.0 percent).

As financial conglomerate solvency is reported to the supervisory authorities only at the end of the year, the figures as at June 30, 2019 have not been reported to the banking regulator but are used for the internal management of the DZ BANK financial conglomerate. The figures as at the interim reporting date are calculated using the method stipulated by the supervisory authorities.

5.2.2 DZ BANK banking group

Regulatory minimum capital requirements

The mandatory minimum capital requirements and their components applicable to 2019 and 2018 are shown in Fig. 14.

Applying the CRR in full, the mandatory minimum capital requirements stipulated by the supervisory authorities and the recommended minimum capital requirements were complied with on every reporting date in the first half of 2019.

The internal minimum targets at the level of the DZ BANK banking group for the common equity Tier 1 capital ratio, the Tier 1 capital ratio, and the total capital ratio were satisfied on every reporting date during the reporting period. According to current projections, the requirements will also be satisfied throughout the rest of 2019. The internal minimum targets are shown in Fig. 4.

Regulatory capital ratios

The regulatory **own funds** of the DZ BANK banking group as at June 30, 2019 determined in accordance with full application of the CRR amounted to a total of €23,621 million (December 31, 2018: €22,210 million).

This equates to a rise in own funds of €1,411 million compared with the end of 2018, comprising an increase in **Tier 1 capital** of €1,678 million and a decrease in **Tier 2 capital** of €267 million.

In the case of **common equity Tier 1 capital**, net profits eligible for retention had a particularly positive impact. The interim profit calculated as at June 30, 2019 was included in common equity Tier 1 capital in accordance with article 26 (2) CRR.

Tier 2 capital declined from €3,344 million as at December 31, 2018 to €3,077 million as at June 30, 2019, a decrease of €267 million. This change was mainly attributable to the reduced level of eligibility under CRR rules for own funds instruments in this capital category in the last 5 years before their maturity date and to the reduced possibilities for including minority interests.

Regulatory **risk-weighted assets** in the DZ BANK banking group went up from €132,152 million as at December 31, 2018 to €138,485 million as at June 30, 2019, a rise of €6,333 million. This increase was primarily due to a higher level of credit risk. It was partly negated by the fall in the capital requirements for market risk calculated using the internal model.

As at June 30, 2019, the DZ BANK banking group's **common equity Tier 1 capital ratio** was 14.3 percent (December 31, 2018: 13.7 percent). The **Tier 1 capital ratio** calculated as at the reporting date was 14.8 percent (December 31, 2018: 14.3 percent). The **total capital ratio** advanced from 16.8 percent as at December 31, 2018 to 17.1 percent as at the reporting date.

Fig. 15 provides an overview of the DZ BANK banking group's regulatory capital ratios.

Leverage ratio

The leverage ratio for the DZ BANK banking group, calculated by applying the CRR in full, is shown in Fig. 16.

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

%	2019	2018
Minimum requirement for common equity Tier 1 capital	4.50	4.50
Additional Pillar 2 capital requirement	1.75	1.75
Capital conservation buffer	2.50	1.88
Countercyclical capital buffer[1]	0.03	0.05
O-SII capital buffer	1.00	0.66
Mandatory minimum requirement for common equity Tier 1 capital	**9.78**	**8.84**
Minimum requirement for additional Tier 1 capital[2]	1.50	1.50
Mandatory minimum requirement for Tier 1 capital	**11.28**	**10.34**
Minimum requirement for Tier 2 capital[3]	2.00	2.00
Mandatory minimum requirement for total capital	**13.28**	**12.34**

1 The value for the countercyclical capital buffer is recalculated at each reporting date. Unlike the other reported values, which apply to the entire financial year, the countercyclical capital buffers shown for 2019 and 2018 relate solely to the reporting dates of June 30, 2019 and December 31, 2018 respectively.
2 The minimum requirement can also be satisfied with common equity Tier 1 capital.
3 The minimum requirement can also be satisfied with common equity Tier 1 capital or additional Tier 1 capital.

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

	Jun. 30, 2019	Dec. 31, 2018
Capital		
Common equity Tier 1 capital (€ million)	19,835	18,158
Additional Tier 1 capital (€ million)	709	708
Tier 1 capital	**20,544**	**18,866**
Total Tier 2 capital (€ million)	3,077	3,344
Own funds	**23,621**	**22,210**
Risk-weighted assets		
Credit risk including long-term equity investments (€ million)	121,113	112,425
Market risk (€ million)	6,656	9,104
Operational risk (€ million)	10,716	10,623
Total	**138,485**	**132,152**
Capital ratios		
Common equity Tier 1 capital ratio (%)	14.3	13.7
Tier 1 capital ratio (%)	14.8	14.3
Total capital ratio (%)	17.1	16.8

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

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

The leverage ratio calculated by **applying the rules in the CRR in full** went up by 0.1 percentage points during the reporting period. This increase was due to Tier 1 capital being €1.7 billion higher as at the reporting date than as at December 31, 2018, coupled with a simultaneous rise of €29.4 billion in the total exposure. The growth of the total exposure was mainly attributable to the expansion of on-balance-sheet business at DZ BANK.

The leverage ratio calculated by using the currently applicable **CRR transitional guidance** stood at 4.5 percent as at June 30, 2019. This was the same as the figure at the end of 2018.

Using both calculation methods, the internal minimum target of 3.5 percent for the leverage ratio was met on every reporting date in the first six months of 2019. The banking regulator does not currently specify an (external) minimum target for the leverage ratio.

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

Minimum requirement for own funds and eligible liabilities (MREL)

The MREL is intended to ensure that banks hold a sufficiently large volume of own funds and liabilities that can be 'bailed-in' to make it possible at all times to carry out an orderly resolution. 'Bail-in-able' liabilities are those that provide for creditors to take an interest in losses incurred and recapitalization if a bank gets into financial difficulties, enabling resolution to take place on the basis of the bail-in and other instruments without recourse to government help and without jeopardizing the stability of the financial system.

The MREL ratio is the ratio of the total of own funds and eligible bail-in-able liabilities to the total liabilities and own funds of the DZ BANK banking group.

In June 2018, the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) [German Federal Financial Supervisory Authority] notified DZ BANK that the Single Resolution Board had set an MREL ratio of 8.2 percent for the DZ BANK banking group. This minimum requirement was met on every measurement date during the first half of 2019.

5.2.3 R+V Versicherung AG insurance group

In the first half of the year, all of the supervised insurance companies of R+V together with the R+V Versicherung AG insurance group, which is the higher-level entity for regulatory purposes, satisfied the minimum solvency requirements.

The project accounting applied in the internal planning shows that the R+V Versicherung AG insurance group's solvency ratio will continue to exceed the minimum statutory requirement as at December 31, 2019.

Bank sector

6 Credit risk

6.1 Lending volume

6.1.1 Change in lending volume

To implement the principles for effective risk data aggregation and risk reporting (BCBS 239) published by the Basel Committee on Banking Supervision (BCBS), the DZ BANK Group made some changes to the methods used to calculate DZ BANK's key figures for credit risk in the first half of this year. On the whole, these changes led to an increase in the lending volume.

The **total lending volume** increased by 3 percent overall in the first half of the year, from €378.9 billion as at December 31, 2018 to €390.0 billion as at June 30, 2019. This was mainly because of a rise of 2 percent
in the lending volume in the **traditional lending business**, from €289.3 billion as at December 31, 2018 to €294.3 billion as at June 30, 2019. This rise primarily related not only to the volume of lending disbursed by DZ BANK to local cooperative banks but also to business with corporates. The lending volume in the **derivatives and money market business** was also up, by 19 percent, from €16.6 billion as at December 31, 2018 to €19.8 billion as at June 30, 2019. This increase was also largely attributable to DZ BANK. There was a 4 percent increase in the volume in the **securities business**, which advanced from €73.0 billion as at December 31, 2018 to €75.8 billion as at June 30, 2019 and related to DZ BANK.

6.1.2 Sector structure of the credit portfolio

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

As at June 30, 2019, a significant proportion (37 percent) of the lending volume continued to be concentrated in the financial sector (December 31, 2018: 36 percent). In addition to the local cooperative banks, the borrowers in this customer segment comprised banks from other parts of the banking industry and other financial institutions.

In its role as central institution for the Volksbanken Raiffeisenbanken cooperative financial network, DZ BANK provides funding for the entities in the Bank sector and for the cooperative banks. For this reason, the cooperative banks account for one of the largest receivables items in the DZ BANK Group's credit portfolio. DZ BANK also supports the cooperative banks in the provision of larger-scale funding to corporate customers.

The resulting syndicated business, DZ BANK, DZ HYP and DVB's direct business in Germany and abroad, the retail real-estate business under the umbrella of BSH, TeamBank's consumer finance business, and DZ HYP's commercial real-estate lending and local authority loans businesses determine the sectoral breakdown of the remainder of the portfolio.

6.1.3 Geographical structure of the credit portfolio

Fig. 18 shows the geographical distribution of the credit portfolio by country group. The lending volume is assigned to the individual country groups using the International Monetary Fund's breakdown, which is updated annually. This also applies to the other country-group breakdowns related to credit risk in this opportunity and risk report.

As at June 30, 2019, 96 percent of the total lending volume was concentrated in Germany and other industrialized countries. This was the same as the figure at the end of 2018.

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Financial sector	101.1	98.3	27.8	25.7	13.8	12.8	142.7	136.8
Public sector	11.8	10.4	36.1	35.9	0.5	0.4	48.3	46.7
Corporates	113.9	114.9	8.1	7.6	5.2	3.0	127.2	125.5
Retail	58.8	57.2	1.4	2.4	-	-	60.2	59.6
Industry conglomerates	8.2	7.8	2.3	1.5	0.4	0.4	10.8	9.7
Other	0.7	0.7	-	-	-	-	0.7	0.7
Total	**294.3**	**289.3**	**75.8**	**73.0**	**19.8**	**16.6**	**390.0**	**378.9**

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Germany	261.0	254.3	44.2	43.1	12.7	10.1	317.9	307.4
Other industrialized countries	22.3	23.5	27.5	26.1	6.7	5.5	56.4	55.2
Advanced economies	2.3	2.5	0.8	0.8	0.1	0.1	3.2	3.4
Emerging markets	8.8	9.0	1.0	0.9	0.2	0.2	10.1	10.1
Supranational institutions	-	-	2.3	2.1	0.2	0.6	2.5	2.8
Total	**294.3**	**289.3**	**75.8**	**73.0**	**19.8**	**16.6**	**390.0**	**378.9**

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

	Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
≤ 1 year	50.7	53.6	9.7	13.2	9.9	11.6	70.4	78.4
> 1 year to ≤ 5 years	63.9	53.2	29.0	26.3	2.8	1.4	95.8	81.0
> 5 years	179.7	182.4	37.1	33.5	7.1	3.6	223.8	219.5
Total	294.3	289.3	75.8	73.0	19.8	16.6	390.0	378.9

6.1.4 Residual maturity structure of the credit portfolio

The breakdown of the credit portfolio by residual maturity as at June 30, 2019 presented in Fig. 19 shows that the lending volume had decreased by €8.0 billion in the short-term maturity band compared with the figure as at December 31, 2018. The increase in the medium-term maturity band amounted to €14.8 billion. The rise in the long-term maturity band was €4.3 billion. By contrast, the lending volume in the longer-term maturity band contracted by €22.4 billion. These changes were mainly attributable to DZ BANK.

6.1.5 Rating structure of the credit portfolio

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

The proportion of the total lending volume accounted for by rating classes 1A to 3A (investment grade) remained unchanged at 78 percent between December 31, 2018 and June 30, 2019. Rating classes 3B to 4E (non-investment grade) represented 20 percent of the total lending volume as at the reporting date, which was also unchanged compared with the end of 2018. Defaults, represented by rating classes 5A to 5E, accounted for 1.3 percent of the total lending volume as at June 30, 2019, which was also unchanged compared with December 31, 2018.

As at June 30, 2019, the **10 counterparties associated with the largest lending volumes** accounted for 7 percent of total lending (unchanged on the value as at December 31, 2018). These counterparties largely comprised financial-sector and public-sector borrowers domiciled in Germany with an investment-grade rating.

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

		Traditional lending business		Securities business		Derivatives and money market business		Total	
€ billion		Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Investment grade	1A	5.4	5.1	30.6	30.8	0.8	1.2	36.8	37.1
	1B	1.7	1.6	2.8	2.8	2.1	2.5	6.6	6.9
	1C	95.1	91.8	9.5	8.2	4.5	3.4	109.2	103.4
	1D	7.4	6.8	1.9	2.0	0.4	0.2	9.8	9.0
	1E	12.7	11.5	2.5	2.0	2.9	1.9	18.1	15.4
	2A	9.9	9.9	3.2	5.8	1.2	1.4	14.2	17.1
	2B	9.6	11.4	9.2	6.1	2.5	2.1	21.3	19.7
	2C	15.0	14.9	2.5	2.5	1.3	1.0	18.8	18.4
	2D	17.4	17.1	3.8	2.9	1.0	0.7	22.3	20.7
	2E	16.2	17.6	2.3	2.5	1.1	0.8	19.6	20.9
	3A	21.6	21.8	4.1	3.8	0.6	0.6	26.4	26.2
Non-investment grade	3B	24.8	22.9	1.6	1.4	0.5	0.3	26.8	24.7
	3C	17.1	16.3	0.7	0.3	0.1	0.1	17.9	16.7
	3D	15.7	15.0	0.1	0.5	0.1	0.1	15.9	15.5
	3E	5.7	5.7	0.2	0.2	-	-	6.0	6.0
	4A	2.4	2.3	-	-	-	-	2.5	2.3
	4B	4.6	5.1	-	-	-	-	4.6	5.1
	4C	2.7	2.6	-	0.1	-	-	2.7	2.7
	4D	0.6	0.6	-	-	-	-	0.6	0.6
	4E	2.1	2.2	-	-	-	-	2.1	2.2
Default		4.7	4.8	0.1	0.1	-	-	4.9	5.0
Not rated		1.9	2.5	0.5	0.8	0.5	0.3	2.9	3.5
Total		**294.3**	**289.3**	**75.8**	**73.0**	**19.8**	**16.6**	**390.0**	**378.9**

6.1.6 Collateralized lending volume

Fig. 21 shows the breakdown of the collateralized lending volume at overall portfolio level by type of collateral and class of risk-bearing instrument. In the case of traditional lending business, figures are generally reported before the application of any offsetting agreements, whereas the collateralized exposure in the securities business and derivatives and money market business is shown on a netted basis.

As at June 30, 2019, the collateralized lending volume had fallen to €120.5 billion from €121.5 billion as at December 31, 2018. The collateralization rate was 38.4 percent as at the reporting date (December 31, 2018: 39.7 percent).

In the **traditional lending business**, most of the collateralized lending volume (87 percent as at June 30, 2019) was accounted for by lending secured by charges over physical assets such as land charges, mortgages, and registered ship and aircraft mortgages (December 31, 2018: 85 percent). These types of collateral are particularly important for BSH, DZ HYP, and DVB.

In **securities transactions**, there is generally no further collateralization to supplement the hedging activities already taken into account. Equally, in the **derivatives and money market business**, collateral received under collateral agreements is already factored into the calculation of gross lending volume with the result that only a comparatively low level of collateral (personal and financial collateral) is then additionally reported.

FIG. 21 – BANK SECTOR: COLLATERALIZED LENDING VOLUME, BY TYPE OF COLLATERAL

	Traditional lending business		Derivatives and money market business		Total	
€ billion	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Guarantees, indemnities, risk subparticipation	6.5	6.4	0.3	0.3	6.8	6.7
Credit insurance	3.7	3.7	-	-	3.7	3.7
Land charges, mortgages, registered ship and aircraft mortgages	104.1	103.5	-	-	104.2	103.5
Pledged loans and advances, assignments, other pledged assets	4.3	6.0	-	-	4.4	6.0
Financial collateral	1.2	1.3	0.1	0.1	1.3	1.3
Other collateral	0.2	0.2	-	-	0.2	0.2
Collateralized lending volume	**120.0**	**121.1**	**0.6**	**0.4**	**120.5**	**121.5**
Gross lending volume	294.3	289.3	19.8	16.6	314.2	305.9
Uncollateralized lending volume	**174.3**	**168.2**	**19.3**	**16.2**	**193.6**	**184.4**
Collateralization rate (%)	**40.8**	**41.9**	**2.8**	**2.4**	**38.4**	**39.7**

6.1.7 Securitizations

The **asset-backed securities portfolio** (ABS portfolio) is predominantly held by DZ BANK and DZ HYP. This portfolio had a fair value of €2,197 million as at the reporting date (December 31, 2018: €2,644 million). The substantial decrease mainly affected the trading portfolio and was predominantly due to Regulation (EU) No. 2017/2402 coming into force. The new regulatory requirements, which create a specific framework for simple, transparent, and standardized securitization, led to a temporary shortage of supply in the securitization market.

The figures above included the **ABS wind-down portfolio** dating back to the period before the financial crisis, which had a fair value of €1,215 million (December 31, 2018: €1,353 million). The volume of the wind-down portfolio contracted during the first half of this year, primarily because of regular redemptions.

In addition, DZ BANK acts as a **sponsor** in ABCP programs that are funded by issuing money market-linked asset-backed commercial paper (ABCP) or liquidity lines. The ABCP programs are made available for DZ BANK customers who then securitize their own assets via these companies.

As at June 30, 2019, the fair value of the securitization exposures arising from DZ BANK's activities in which it acts as a sponsor amounted to €1,275 million (December 31, 2018: €1,398 million). The decrease in the exposures was largely due to fluctuations in the drawdown of liquidity lines.

6.2 Credit portfolios with increased risk content

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

6.2.1 Loans and advances to borrowers in eurozone periphery countries

As at June 30, 2019, loans and advances to borrowers in the countries directly affected by the **economic divergence in the eurozone** amounted to €7,430 million (December 31, 2018: €7,355 million). The rise was predominantly attributable to increases in the fair value of Portuguese bonds.

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

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

€ million	Traditional lending business[1]		Securities business		Derivatives and money market business		Total	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Portugal	**51**	62	**1,146**	1,026	**-**	-	**1,197**	1,089
of which: public sector	-	-	1,059	925	-	-	1,059	925
of which: non-public sector	51	62	87	101	-	-	138	164
of which: financial sector	-	1	-	-	-	-	1	-
Italy	**128**	148	**2,925**	2,847	**40**	70	**3,094**	3,065
of which: public sector	-	-	2,726	2,599	-	-	2,726	2,599
of which: non-public sector	128	148	199	248	40	70	368	465
of which: financial sector	33	32	52	59	40	70	125	161
Spain	**197**	222	**2,845**	2,850	**98**	129	**3,139**	3,201
of which: public sector	-	13	2,029	1,859	-	-	2,029	1,872
of which: non-public sector	197	210	816	991	98	129	1,111	1,330
of which: financial sector	28	28	221	364	91	126	341	518
Total	**376**	432	**6,916**	6,723	**138**	199	**7,430**	7,355
of which: public sector	-	13	5,814	5,383	-	-	5,814	5,396
of which: non-public sector	376	419	1,102	1,341	138	199	1,617	1,959
of which: financial sector	62	61	273	423	132	196	467	680

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

6.2.2 Loans and advances to borrowers in the UK

Loans and advances from entities in the Bank sector to borrowers in the UK amounted to €7,730 million as at June 30, 2019 (December 31, 2018: €8,069 million). As at June 30, 2019, the breakdown of the lending volume by credit-risk-bearing instrument was as follows (corresponding figures as at December 31, 2018 in parentheses):

- Traditional lending business: €2,865 million (€3,143 million)
- Securities business: €1,787 million (€2,041 million)
- Derivatives and money market business: €3,087 million (€2,884 million).

The principal reason for the increased credit risk is that the quality of the lending volume to individual UK counterparties is adversely impacted by country-specific events (**Brexit**) even though the creditworthiness of the individual counterparties themselves is not impaired. A disorderly, hard ('no deal') Brexit would have more negative consequences than an orderly Brexit (exit with a 'deal').

6.2.3 Shipping finance and offshore finance

Business background

Within the DZ BANK Group's **Bank sector**, the **shipping finance** business is mainly operated by DVB and, to a much lesser degree, by DZ BANK.

DVB also has offshore finance business in its credit portfolio. At DVB and DZ BANK, the lending volume associated with shipping finance comprises loans and advances to customers, guarantees and indemnities, irrevocable loan commitments, and derivatives.

DVB's offshore credit portfolio consists of various financing arrangements with broad links to the shipping sector. The portfolio includes finance for drilling platforms, drill ships, offshore construction ships, and supply ships for oil platforms.

Crisis management

In the shipping finance business, an oversupply of tonnage continues to have a detrimental impact on asset values and customer credit quality in some cases. To add to the problems, the fall in the oil price from mid-2014 through to last year adversely affected global offshore oil production, leading to lower demand for supply ships and other floating offshore equipment. This trend resulted in a relatively high number of laid-up offshore vessels. The recovery of employment data observed in the first half of the year was therefore not reflected in higher charter rates or ship values for the most part, because previously laid-up offshore ships were reactivated.

DVB has initiated various corrective measures in response to the crisis. For example, the lending policy

for **shipping finance** was steadily tightened. Problem shipping loans have also been classified as no longer consistent with the corporate strategy and assigned to a **non-core asset (NCA) portfolio**. Problem exposures are non-performing loans and other loans requiring particular scrutiny.

The NCA portfolio has been transferred to an internal workout unit with the aim of scaling back the assets in a way that preserves value on the basis of the NCA strategy adopted by the DVB Board of Managing Directors.

At **DVB** and **DZ BANK**, shipping finance is deemed to be non-performing if it has been rated between 5A and 5E on the VR credit rating master scale. The two banks aim to secure and optimize the non-performing exposures within their management system for handling problem loans.

The **offshore finance** market remains difficult and is not expected to bounce back significantly in the short term. All offshore finance has therefore been moved to the NCA portfolio. No further new business has been taken on in the offshore segment since 2017.

In the first half of 2019, **DVB** continued with the process, begun in 2018, of scaling back the NCA shipping portfolio and the offshore finance portfolio while preserving as much value as possible.

Shipping finance lending volume

As at June 30, 2019, the **Bank sector's** shipping finance portfolio had a total volume of €7,566 million (December 31, 2018: €8,692 million). The breakdown of the lending volume between the two management units as at June 30, 2019 was as follows (corresponding figures as at December 31, 2018 in parentheses):

- DVB: €6,878 million (€8,084 million), of which €6,029 million (€6,922 million) is core business
- DZ BANK: €688 million (€608 million), of which €323 million (€313 million) is business not classified as non-performing.

The lending volume of **DVB** shipping finance exposed to heightened risk (NCA portfolio) consists solely of traditional lending business. It declined from €1,162 million as at December 31, 2018 to €849 million as at June 30, 2019, a decrease of 27 percent. This significant fall was attributable, among other things, to redemptions and (partial) workouts.

The breakdown by country group of DVB's NCA shipping finance portfolio as at June 30, 2019 was as follows (corresponding figures as at December 31, 2018 in parentheses):

- Germany: €125 million (€136 million)
- Other industrialized countries: €571 million (€820 million)
- Advanced economies: €79 million (€150 million)
- Emerging markets: €74 million (€56 million).

As at June 30, 2019, DVB's NCA shipping finance portfolio included 88 financed vessels (December 31, 2018: 135 vessels). The average exposure as at the reporting date was €24 million (December 31, 2018: €26 million) and the largest single exposure was €80 million (December 31, 2018: €115 million).

The largest proportion of the NCA shipping finance portfolio was attributable to the financing of bulk carriers. As at June 30, 2019, this proportion had risen to 49 percent of DVB's total NCA shipping finance volume (December 31, 2018: 38 percent) as a consequence of the disproportionate level of redemptions in other shipping finance segments. The portfolio was almost fully collateralized in compliance with DVB strategy.

At **DZ BANK**, shipping loans with a value of €365 million were classified as non-performing as at June 30, 2019 (December 31, 2018: €295 million). The increase compared with the end of 2018 was caused by a change of method following the implementation of BCBS 239. As a result of this change, proceeds received from the recovery of collateral are now assigned to separate accounts and are no longer recognized against the outstanding amount as a reduction of risk.

This exposure consisted almost entirely of traditional lending business. Broken down by type of ship, DZ BANK's non-performing portfolio was focused mainly on multifunctional merchant vessels. In terms of carrying capacity, these ships were almost exclusively small- to medium-sized vessels. As in 2018, DZ BANK's shipping finance portfolio in the first half of 2019 was mainly concentrated in Germany and broadly diversified by type of vessel, borrower, charterer, and shipping activity.

Offshore finance lending volume
As at June 30, 2019, the Bank sector's lending volume in the offshore finance business, which is attributable exclusively to **DVB** and is classified as traditional lending business, amounted to €1,107 million (December 31, 2018: €1,335 million).

6.3 Volume of non-performing loans

There was a small reduction in the volume of non-performing loans (NPLs), from €5.0 billion as at December 31, 2018 to €4.9 billion as at June 30, 2019. The NPL ratio was unchanged at 1.3 percent as at the reporting date.

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

6.4 Risk position

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

As at June 30, 2019, the **risk capital requirement (including capital buffer requirement)** amounted to €5,790 million (December 31, 2018: €5,541 million) with a **limit** of €7,189 million (December 31, 2018: €8,238 million) that was not exceeded on any measurement date during the first 6 months of this year.

The credit value-at-risk including capital buffer requirement was below the applicable limit on every measurement date during the first half of 2019.

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

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

	Jun. 30, 2019	Dec. 31, 2018
Total lending volume (€ billion)	390.0	378.9
Volume of non-performing loans (€ billion)[1]	4.9	5.0
Balance of loss allowances (€ billion)	2.6	2.7
Loss allowance ratio (%)[2]	0.7	0.7
Coverage ratio (%)[3]	53.8	54.5
NPL ratio (%)[4]	1.3	1.3

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

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

	Average probability of default (%)		Expected loss (€ million)		Credit value-at-risk[1] (€ million)	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Traditional lending business	0.5	0.5	409	405	2,601	2,568
Securities business	0.2	0.2	48	49	1,579	1,511
Derivatives and money market business	0.1	0.1	12	10	554	453
Total			469	464	4,735	4,532
Average	0.4	0.4				

1 Excluding capital buffer requirement.

Not relevant

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

€ million	Jun. 30, 2019	Dec. 31, 2018
Eurozone periphery countries portfolio	1,141	1,079
United Kingdom portfolio (Brexit)	283	265
Shipping finance portfolio[2]	73	98
Offshore finance portfolio	79	118

1 Excluding capital buffer requirement.
2 DVB: NCA portion; DZ BANK: non-performing business.

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

Compared with December 31, 2018, the credit value-at-risk for the Bank sector entities' exposure in the **peripheral countries of the eurozone** had increased marginally as at June 30, 2019.

As at June 30, 2019, the credit value-at-risk for the Bank sector entities' exposure in the **UK** remained at a moderate level because the credit quality of most of the individual exposures did not present any problem.

At the level of the Bank sector, the credit value-at-risk for the part of the **shipping finance portfolio** exposed to heightened risk stood at €73 million as at June 30, 2019 (December 31, 2018: €98 million). The figure as at December 31, 2018 is different from the corresponding figure reported in the 2018 opportunity and risk report owing to the inclusion of DZ BANK.

The credit value-at-risk for shipping finance stems primarily from DVB. The decline in the credit value-at-risk for the shipping finance portfolio compared with the end of 2018 arose mainly because of the scaling back of DVB's NCA portfolio.

The credit value-at-risk for offshore finance also went down. This was due to the continued scaling back of this business operated by DVB in line with the strategy.

7 Equity investment risk

The **carrying amounts of long-term equity investments** relevant for the measurement of equity investment risk amounted to €2,658 million as at June 30, 2019 (December 31, 2018: €2,776 million).

The **risk capital requirement (including capital buffer requirement)** for equity investment risk was measured at €1,065 million on the reporting date (December 31, 2018: €1,091 million). The **limit** was €1,400 million (December 31, 2018: €1,341 million) and was not exceeded at any time during the first 6 months of the year.

8 Market risk

8.1 Value-at-risk

Since the start of this year, DZ BANK has been using a central, sector-wide market risk model for the short-term (operational) management of market risk in the Bank sector and at DZ BANK. Because of this change of management system, the aggregate risk is no longer separated into trading and non-trading portfolios. This has resulted in changes to the table of risk values compared with the one presented in the 2018 opportunity and risk report.

Fig. 26 shows the change in the value-at-risk for the types of market risk and the change in the aggregate risk in the first half of the year.

In addition, Fig. 27 shows the daily changes in risk and the results of daily backtesting of trading portfolios in the first half of 2019.

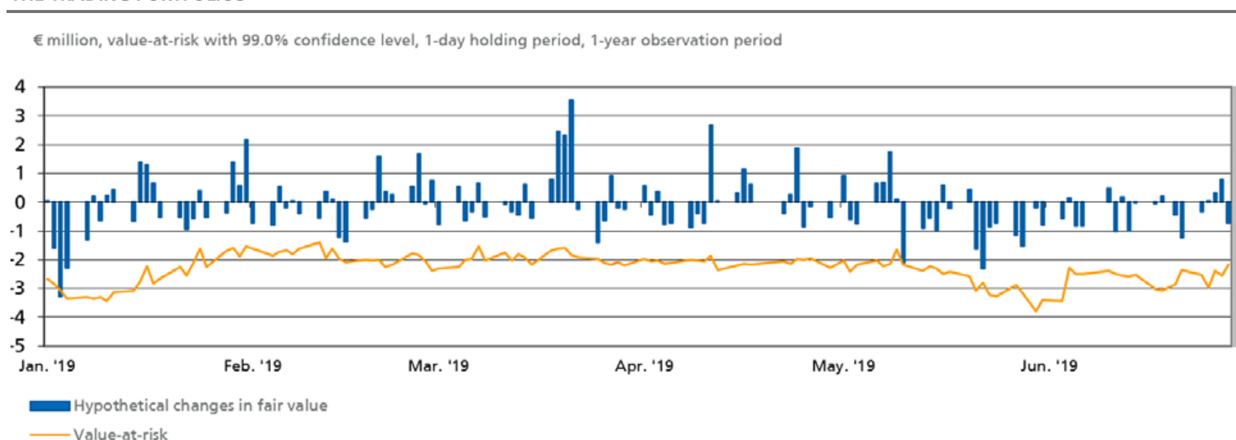
As at June 30, 2019, **market risk** amounted to €87 million (December 31, 2018: €88 million). In the first half of 2019, the **hypothetical changes in fair value in the trading portfolios** exceeded the forecast risk value on 1 trading day. The overrun predominantly arose from market movements.

FIG. 26 – BANK SECTOR: VALUE-AT-RISK FOR MARKET RISK[1 2]

€ million	Interest-rate risk	Spread risk	Equity risk[3]	Currency risk	Commodity risk	Diversification effect[4]	Total
Jun. 30, 2019	20	76	6	1	-	-15	87
Average	24	83	6	1	-	-18	96
Maximum	30	90	8	2	-	-26	105
Minimum	19	73	6	-	-	-10	87
Dec. 31, 2018	23	76	7	1	-	-19	88

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

FIG. 27 – BANK SECTOR: VALUE-AT-RISK FOR MARKET RISK IN THE TRADING PORTFOLIOS AND HYPOTHETICAL CHANGES IN FAIR VALUE IN THE TRADING PORTFOLIOS



8.2 Risk capital requirement

One of the tools used to quantify market risk from a longer-term (strategic) perspective is a spread and migration risk model. This model determines the combined spread and migration risk over a 1-year horizon and with a confidence level of 99.9 percent. A value-at-risk model is also used. It determines the general market risk from a short-term (operational) perspective over 1 day and with a confidence level of 99.0 percent. Drawing on the results of the value-at-risk measurement, a transformation model scales up the operational key risk indicators (also taking account of stress events) to a strategic perspective with a 1-year holding period and a confidence level of 99.9 percent. The results from the spread and migration risk model and from the transformation model are then combined to give the aggregate risk capital requirement for market risk. The aggregate risk capital requirement is compared with the related limits every month to ensure there is capacity to bear market risk.

As at June 30, 2019, the **risk capital requirement (including capital buffer requirement)** for market risk amounted to €4,102 million (December 31, 2018: €4,030 million) with a **limit** of €5,646 million (December 31, 2018: €6,768 million).

The risk capital requirement (including capital buffer requirement) encompasses the **asset-management risk** of UMH. The asset-management risk for guarantee funds was measured at €33 million as at June 30, 2019 (unchanged on the value as at December 31, 2018). The asset-management risk for pension products as at the reporting date amounted to €211 million (December 31, 2018: €193 million).

The risk capital requirement (including capital buffer requirement) was below the limit on every measurement date during the first half of 2019.

9 Technical risk of a home savings and loan company

As at June 30, 2019, the **capital requirement** for the technical risk of a home savings and loan company amounted to €364 million (December 31, 2018: €553 million) with a **limit** of €706 million (December 31, 2018: €667 million). A capital buffer requirement was not calculated for the technical risk of a home savings and loan company as at the reporting date.

10 Business risk and reputational risk

As at June 30, 2019, the **risk capital requirement (including capital buffer requirement)** for business risk (including reputational risk) amounted to €849 million (December 31, 2018: €857 million). This rise was mainly a reflection of costs at DZ BANK. The **limit** was €1,016 million as at the reporting date (December 31, 2018: €1,118 million) and was not exceeded on any measurement date during the first 6 months of the year.

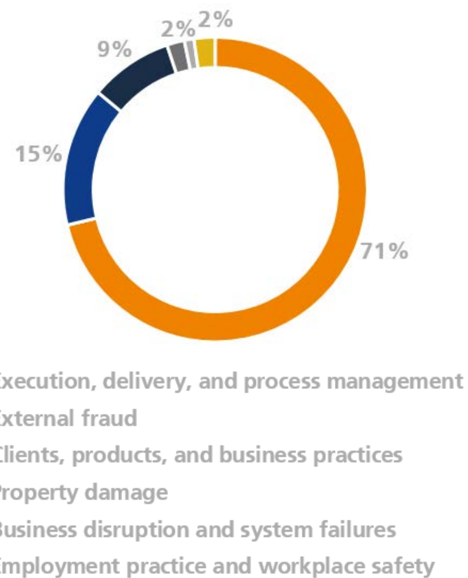
11 Operational risk

11.1 Loss events

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

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

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



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

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

The 'Execution, delivery, and process management' event category accounted for the majority (71 percent) of total net losses. The net loss in this event category was largely attributable to 29 loss events, of which 23 loss events resulted from failures in process implementation or in process design, 5 were due to disagreements with business partners, and 1 was in connection with tax law matters.

Losses did not reach a critical level relative to the expected loss from operational risk at any point during the first half of 2019.

11.2 Risk position

Using the internal portfolio model, the **risk capital requirement (including capital buffer requirement)** for operational risk as at June 30, 2019 was calculated at €799 million (December 31, 2018: €804 million) with a **limit** of €926 million (December 31, 2018: €1,030 million).

The limit was not exceeded at any time during the first 6 months of the year.

Insurance sector

12 Actuarial risk

As at June 30, 2019, the **overall solvency requirement** for **life actuarial risk** amounted to €946 million (December 31, 2018: €921 million). The **limit** was set at €1,200 million as at the reporting date (December 31, 2018: €1,100 million) and was not exceeded on any measurement date during the first 6 months of this year.

As at June 30, 2019, the **overall solvency requirement for health actuarial risk** was measured at €261 million (December 31, 2018: €234 million) with a **limit** of €300 million (December 31, 2018: €350 million). Again, the risk capital requirement was below the limit on every measurement date during the first 6 months of 2019.

As at June 30, 2019, the **overall solvency requirement** for **non-life actuarial risk** amounted to €3,548 million (December 31, 2018: €3,300 million). The increase was primarily the result of the growth in the volume of business. The **limit**, which was fixed at €3,800 million as at the reporting date (December 31, 2018: €3,650 million), was not exceeded on any measurement date during the reporting period. The overall solvency requirement for the various types of non-life actuarial risk is shown in Fig. 29.

In the first 6 months of 2019, the claims rate trend was unremarkable both in the **direct non-life insurance** business and in the **inward reinsurance** business.

13 Market risk

13.1 Change in lending volume

According to the Solvency II definition, the bulk of credit risk within market risk is assigned to spread risk. The capital requirements for spread risk are calculated using a factor approach based on the relevant lending volume.

As at June 30, 2019, the **total lending volume** of R+V had advanced by 8 percent to €93.7 billion (December 31, 2018: €86.9 billion). This increase was attributable to the expansion of the investment portfolios in connection with the growth in the insurance business.

The volume of lending in the **home finance** business totaled €10.3 billion as at June 30, 2019 (December 31, 2018: €9.9 billion). Of this amount, 89 percent (December 31, 2018: 90 percent) was accounted for by loans for less than 60 percent of the value of the property. The volume of home finance was broken down by finance type as at the reporting date as follows (figures as at December 31, 2018 shown in parentheses):

– Consumer home finance: €9.6 billion (€9.3 billion)
– Commercial home finance: €0.1 billion (€0.1 billion)
– Commercial finance: €0.5 billion (€0.5 billion).

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

The financial sector and the public sector, which are the dominant **sectors**, together accounted for 70 percent of the total lending volume as at June 30, 2019 (December 31, 2018: 71 percent). This lending mainly comprised loans and advances in the form of German and European Pfandbriefe backed by collateral in accordance with statutory requirements. Loans and advances to the public sector and consumer home finance (retail) highlight the safety of this investment. Fig. 30 shows the sectoral breakdown of the lending volume in the Insurance sector.

FIG. 29 – INSURANCE SECTOR: OVERALL SOLVENCY REQUIREMENT FOR NON-LIFE ACTUARIAL RISK

€ million	Jun. 30, 2019	Dec. 31, 2018
Premium and reserve risk	2,209	2,004
Non-life catastrophe risk	2,279	2,167
Lapse risk	45	97
Total (after diversification)	3,548	3,300

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

€ billion	Jun. 30, 2019	Dec. 31, 2018
Financial sector	43.4	40.0
Public sector	22.3	21.3
Corporates	17.7	15.6
Retail	9.6	9.3
Industry conglomerates	0.7	0.6
Other	-	-
Total	93.7	86.9

An analysis of the **geographical breakdown** of lending in Fig. 31 reveals that Germany and other

industrialized countries continued to account for the lion's share of the lending volume as at June 30, 2019 – as they also did at December 31, 2018 – with an unchanged share of 90 percent. European countries dominated within the broadly diversified exposure in industrialized countries.

Obligations in connection with the life insurance business require investments with longer maturities. This is also reflected in the breakdown of **residual maturities** shown in Fig. 32.

As at June 30, 2019, 83 percent of the total lending volume had a residual maturity of more than 5 years (unchanged on the value as at December 31, 2018). By contrast, just 3 percent of the total lending volume was due to mature within 1 year as at June 30, 2019 (December 31, 2018: 2 percent).

The **rating structure** of the lending volume in the Insurance sector is shown in Fig. 33. Of the total lending volume as at June 30, 2019, 80 percent was attributable to investment-grade borrowers (unchanged on the value as at December 31, 2018). This reflects the regulatory requirements and the safety-oriented risk strategy of R+V. The lending volume that is not rated, which remained unchanged compared with the end of 2018 at 17 percent of the total lending volume, essentially comprised low-risk consumer home finance for which external ratings were not available.

To rate the creditworthiness of the lending volume, R+V uses external ratings that have received general approval. It also applies its own expert ratings in accordance with the provisions of Credit Rating Agency Regulation III to validate the external credit ratings. R+V has defined the external credit rating as the maximum, even in cases where its own rating is better. The ratings calculated in this way are matched to the DZ BANK credit rating master scale using the methodology shown in figure 23 of the 2018 opportunity and risk report.

As at the reporting date, the **10 counterparties associated with the largest lending volumes** accounted for 19 percent of R+V's total lending volume (December 31, 2018: 21 percent).

FIG. 31 – INSURANCE SECTOR: LENDING VOLUME, BY COUNTRY GROUP

€ billion	Jun. 30, 2019	Dec. 31, 2018
Germany	34.8	31.9
Other industrialized countries	49.8	46.6
Advanced economies	1.1	1.1
Emerging markets	4.7	4.2
Supranational institutions	3.3	3.1
Total	**93.7**	**86.9**

FIG. 32 – INSURANCE SECTOR: LENDING VOLUME, BY RESIDUAL MATURITY

€ billion	Jun. 30, 2019	Dec. 31, 2018
≤ 1 year	2.4	2.1
> 1 year to ≤ 5 years	13.9	12.9
> 5 years	77.4	71.9
Total	**93.7**	**86.9**

FIG. 33 – INSURANCE SECTOR: LENDING VOLUME, BY RATING CLASS

€ billion		Jun. 30, 2019	Dec. 31, 2018
Investment grade	1A	26.1	25.1
	1B	13.3	11.9
	1C	-	-
	1D	9.0	7.7
	1E	-	-
	2A	8.0	7.4
	2B	6.1	5.5
	2C	5.9	5.5
	2D	2.9	2.7
	2E	-	-
	3A	3.7	4.1
Non-investment grade	3B	0.9	0.8
	3C	0.4	0.4
	3D	-	-
	3E	0.4	0.4
	4A	0.1	0.1
	4B	0.2	0.1
	4C	0.2	0.2
	4D	-	-
	4E	-	-
Default		-	-
Not rated		16.3	15.0
Total		**93.7**	**86.9**

13.2 Credit portfolios with increased risk content

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

Investments in **eurozone periphery countries** totaled €6,331 million as at June 30, 2019 (December 31, 2018: €6,158 million), a rise of 3 percent. Fig. 34 shows the country breakdown of the exposure.

R+V carried out an analysis of all divisions in view of the anticipated **UK exit from the EU**. No material change in the risk position was identified. The principal reason for the continued increased credit risk is that the quality of the investments with individual UK counterparties is adversely impacted by country-specific events even though the creditworthiness of the individual counterparties themselves is not impaired. A disorderly, hard ('no deal') Brexit would have more negative consequences than an orderly Brexit (exit with a 'deal').

R+V's investments in the UK totaled €3,788 million as at June 30, 2019 (December 31, 2018: €3,721 million).

13.3 Risk position

As at June 30, 2019, the **overall solvency requirement** for market risk amounted to €3,410 million (December 31, 2018: €3,205 million) with a **limit** of €3,600 million (December 31, 2018: €4,350 million). This increase in market risk was attributable to the expansion of the investment portfolios in connection with the growth in the insurance business. Higher share prices and a sharp fall in interest rates also caused market risk to go up.

Fig. 35 shows the overall solvency requirement for the various types of market risk.

The overall solvency requirement for market risk includes a **capital buffer requirement**. This capital buffer requirement covers the spread and migration risk arising from sub-portfolios of Italian government bonds, while also taking account of the increase in market risk that could arise from refinement of the method for measuring interest-rate risk.

FIG. 34 – INSURANCE SECTOR: EXPOSURE IN EUROZONE PERIPHERY COUNTRIES

€ million	Jun. 30, 2019	Dec. 31, 2018
Italy	**3,790**	4,081
of which: public sector	2,720	2,983
of which: non-public sector	1,070	1,099
of which: financial sector	494	836
Spain	**2,541**	2,077
of which: public sector	1,542	1,402
of which: non-public sector	999	675
of which: financial sector	750	468
Total	**6,331**	6,158
of which: public sector	4,261	4,384
of which: non-public sector	2,070	1,773
of which: financial sector	1,244	1,304

FIG. 35 – INSURANCE SECTOR: OVERALL SOLVENCY REQUIREMENT FOR MARKET RISK

€ million	Jun. 30, 2019	Dec. 31, 2018
Interest-rate risk	1,241	1,465
Spread risk	1,402	1,248
Equity risk	1,724	1,496
Currency risk	-	165
Real-estate risk	352	359
Total (after diversification)	**3,410**	3,205

Working with DZ BANK, R+V is currently examining what further changes need to be made as a result of the review process conducted by the European Insurance and Occupational Pensions Authority (EIOPA) under Delegated Regulation (EU) No. 2015/35 (Solvency II Regulation). The capital buffer relating to the refinement of the measurement of interest-rate risk will be removed again once the new methodology has been implemented.

As at June 30, 2019, the capital buffer requirement for market risk totaled €185 million (December 31, 2018: €333 million).

14 Counterparty default risk

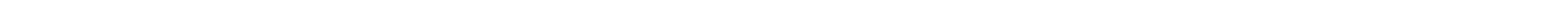
As at June 30, 2019 the **overall solvency requirement** for counterparty default risk was €109 million (December 31, 2018: €64 million) with a **limit** of €120 million (December 31, 2018: €100 million). The limit was not exceeded on any measurement date during the first 6 months of the year.

15 Operational risk

As at June 30, 2019, the **overall solvency requirement** for operational risk amounted to €635 million (December 31, 2018: €557 million). The **limit** applicable at the reporting date was set at €700 million (December 31, 2018: €640 million) and was not exceeded on any measurement date during the first 6 months of this year.

16 Risks from entities in other financial sectors

As at June 30, 2019, the **overall solvency requirement** for risks in connection with non-controlling interests in insurance companies and entities in other financial sectors stood at €111 million (December 31, 2018: €111 million) with a **limit** of €130 million (December 31, 2018: €145 million). The limit was not exceeded on any measurement date during the first half of the year.



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Income statement for the period January 1 to June 30, 2019

€ million	(Note)	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Net interest income	(10)	1,279	1,420
Interest income		3,019	2,936
Interest income calculated using the effective interest method		2,797	2,524[1]
Interest income not calculated using the effective interest method		222	412[1]
Current income and expense		40	43
Interest expense		-1,780	-1,559[1]
Net fee and commission income	(11)	958	958
Gains and losses on trading activities	(12)	141	206
Gains and losses on investments	(13)	130	46[1]
Other gains and losses on valuation of financial instruments	(14)	179	-48
Gains and losses from the derecognition of financial assets measured at amortized cost		15	54[1]
Premiums earned	(15)	8,328	8,115
Gains and losses on investments held by insurance companies and other insurance company gains and losses	(16)	3,516	1,219[1]
Insurance benefit payments	(17)	-9,634	-7,709
Insurance business operating expenses	(18)	-1,443	-1,322
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business		-6	-4[1]
Loss allowances	(19)	-105	44
Administrative expenses	(20)	-2,046	-2,018
Other net operating income	(21)	152	73
Profit before taxes		1,464	1,034
Income taxes	(22)	-430	-303
Net profit		**1,034**	**731**
Attributable to:			
Shareholders of DZ BANK		919	648
Non-controlling interests		115	83

1 Amount restated (see note 2).

Statement of comprehensive income for the period January 1 to June 30, 2019

€ million	(Note)	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Net profit		1,034	731
Other comprehensive income/loss		1,292	-93
Items that may be reclassified to the income statement		**1,322**	**-170**
Gains and losses on debt instruments measured at fair value through other comprehensive income	(23)	1,830	-304
Gains and losses on cash flow hedges	(23)	-	-7
Exchange differences on currency translation of foreign operations	(23)	1	7
Gains and losses on hedges of net investments in foreign operations	(23)	2	-3
Income taxes	(24)	-511	137
Items that will not be reclassified to the income statement		**-30**	**77**
Gains and losses on equity instruments for which the fair value OCI option has been exercised		258	93
Gains and losses in relation to financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk		-135	13
Gains and losses arising from remeasurement of defined benefit plans		-230	-4
Income taxes	(24)	77	-25
Total comprehensive income		**2,326**	**638**
Attributable to:			
Shareholders of DZ BANK		2,072	595
Non-controlling interests		254	43

Balance sheet as at June 30, 2019

ASSETS

€ million	(Note)	Jun. 30, 2019	Dec. 31, 2018
Cash and cash equivalents	(25)	66,270	51,845
Loans and advances to banks	(26)	92,953	91,627
Loans and advances to customers	(27)	181,814	174,549[1]
Hedging instruments (positive fair values)	(28)	259	883
Financial assets held for trading	(29)	48,134	37,942
Investments	(30)	50,303	48,262
Investments held by insurance companies	(31)	109,335	100,840
Property, plant and equipment, investment property, and right-of-use assets	(32)	1,686	1,423
Income tax assets		1,089	1,457
Other assets	(33)	5,263	4,655
Loss allowances	(34)	-2,335	-2,416[1]
Non-current assets and disposal groups classified as held for sale	(35)	4,572	7,133
Fair value changes of the hedged items in portfolio hedges of interest-rate risk		1,440	533
Total assets		**560,783**	**518,733**

1 Amount restated (see note 2).

EQUITY AND LIABILITIES

€ million	(Note)	Jun. 30, 2019	Dec. 31, 2018
Deposits from banks	(36)	146,386	142,486
Deposits from customers	(37)	137,130	132,548
Debt certificates issued including bonds	(38)	72,323	63,909
Hedging instruments (negative fair values)	(39)	995	2,516
Financial liabilities held for trading	(40)	61,281	44,979
Provisions	(41)	3,709	3,380
Insurance liabilities	(42)	101,417	93,252
Income tax liabilities		1,221	920
Other liabilities	(43)	8,051	7,919
Subordinated capital	(44)	2,620	2,897
Liabilities included in disposal groups classified as held for sale	(35)	22	281
Fair value changes of the hedged items in portfolio hedges of interest-rate risk		157	134
Equity	(45)	25,471	23,512
Shareholders’ equity		22,516	20,775
Subscribed capital		4,926	4,926
Capital reserve		5,551	5,551
Retained earnings		8,384	8,530
Reserve from other comprehensive income		1,891	599
Additional equity components		845	845
Unappropriated earnings		919	324
Non-controlling interests		2,955	2,737
Total equity and liabilities		**560,783**	**518,733**

Statement of changes in equity

€ million	Subscribed capital	Capital reserve	Equity earned by the group	Reserve from other comprehensive income	Additional equity components	**Shareholders' equity**	Non-controlling interests	**Total equity**
Equity as at Jan. 1, 2018	4,926	5,551	8,450	965	848	20,740	2,810	23,550
Net profit	-	-	648	-	-	648	83	731
Other comprehensive income/loss	-	-	-2	-51	-	-53	-40	-93
Total comprehensive income/loss	**-**	**-**	**646**	**-51**	**-**	**595**	**43**	**638**
Capital increase/capital repaid	-	-	-1	-	-3	-4	4	-
Changes in scope of consolidation	-	-	-4	4	-	-	-	-
Acquisition/disposal of non-controlling interests	-	-	-1	-	-	-1	-2	-3
Reclassifications within equity	-	-	19	-19	-	-	-	-
Dividends paid	-	-	-322	-	-	-322	-38	-360
Equity as at Jun. 30, 2018	**4,926**	**5,551**	**8,787**	**899**	**845**	**21,008**	**2,817**	**23,825**
Equity as at Jan. 1, 2019	4,926	5,551	8,854	599	845	20,775	2,737	23,512
Net profit	-	-	919	-	-	919	115	1,034
Other comprehensive income/loss	-	-	-149	1,302	-	1,153	139	1,292
Total comprehensive income/loss	**-**	**-**	**770**	**1,302**	**-**	**2,072**	**254**	**2,326**
Capital increase/capital repaid	-	-	-	-	-	-	1	1
Changes in scope of consolidation	-	-	-	-6	-	-6	-	-6
Acquisition/disposal of non-controlling interests	-	-	-3	-	-	-3	-1	-4
Reclassifications within equity	-	-	4	-4	-	-	-	-
Dividends paid	-	-	-322	-	-	-322	-36	-358
Equity as at Jun. 30, 2019	**4,926**	**5,551**	**9,303**	**1,891**	**845**	**22,516**	**2,955**	**25,471**

In the first half of 2019, a dividend of €0.18 per share was paid for the 2018 financial year (first half of 2018: €0.18). The composition of equity is explained in note 45.

Statement of cash flows

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Net profit	**1,034**	**731**
Non-cash items included in net profit	2,844	511[1]
Subtotal	3,878	1,242
Cash changes in assets and liabilities arising from operating activities		
Loans and advances to banks and customers	-6,683	-7,197
Other assets and liabilities from operating activities	3,230	1,267
Hedging instruments (positive and negative fair values)	-3,198	-1,140
Financial assets and financial liabilities held for trading	6,745	5,016
Deposits from banks and customers	8,417	19,734
Debt certificates issued including bonds	8,028	2,585
Interest payments, dividends, and operating lease payments received (net cash flow)	1,476	2,223[1]
Income taxes paid	-199	-115
Cash flows from operating activities	**21,694**	**23,615**
Cash flows from investing activities	**-6,438**	**1,568**[1]
Cash flows from financing activities	**-831**	**147**

1 Amount restated (see note 2).

€ million	2019	2018
Cash and cash equivalents as at January 1	51,845	43,910
Cash flows from operating activities	21,694	23,615[1]
Cash flows from investing activities	-6,438	1,568[1]
Cash flows from financing activities	-831	147
Cash and cash equivalents as at June 30	**66,270**	**69,240**

1 Amount restated (see note 2).

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

Cash payments from lessees in repayment of lease liabilities, which are included in cash flows from financing activities, amounted to €93 million in the first half of 2019.

As had also been the case in the first half of 2018, there was no impact on cash and cash equivalents from the first-time consolidation or deconsolidation of subsidiaries.

Notes

A General disclosures

>> 01 Basis of preparation

Pursuant to section 115 of the German Securities Trading Act (WpHG) in conjunction with section 117 no. 2 WpHG, the interim consolidated financial statements of DZ BANK AG Deutsche Zentral-Genossenschafts-bank, Frankfurt am Main, (DZ BANK) for the first half of the 2019 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 2018 financial year, unless these policies are subject to the amendments described below.

First-time application in 2019 of changes in IFRS

The following new accounting standards, amendments to IFRS, interpretations from the IFRS Interpretations Committee (IFRIC interpretations), and the specified improvements to IFRS are applied for the first time in DZ BANK's interim consolidated financial statements for the first half of the 2019 financial year:

- IFRS 16 *Leases*,
- *Prepayment Features with Negative Compensation* (Amendments to IFRS 9),
- *Long-term Interests in Associates and Joint Ventures* (Amendments to IAS 28),
- *Plan Amendment, Curtailment or Settlement* (Amendments to IAS 19),
- IFRIC 23 *Uncertainty over Income Tax Treatments*,
- *Annual Improvements to IFRSs 2015–2017 Cycle*.

The provisions of IFRS 16 *Leases* supersede the content of IAS 17 *Leases* and must be applied to financial years beginning on or after January 1, 2019. They must be adopted using either a fully retrospective approach or a modified retrospective approach. IFRS 16 is being adopted using the modified retrospective application method by recognizing any cumulative effect resulting from initial application of the standard as at January 1, 2019 in

retained earnings. Under this method, IFRS 16 is applied to new contracts and to existing contracts that were not yet completed on the date of initial application. In connection with the transition to IFRS 16, no effects were identified as at the date of initial application that needed to be recognized directly in retained earnings. The main changes introduced by IFRS 16 relate to accounting by lessees. On the balance sheet, lessees have to recognize right-of-use assets for all leases and corresponding lease liabilities for the contracted payment obligations. Exemptions are permitted for leases involving low-value assets and short-term leases. For lessees and lessors, the disclosures required in the notes to the financial statements at the end of the financial year will be considerably more extensive under IFRS 16 than under IAS 17. The new provisions under IFRS 16 particularly affect the DVB and VR Smart Finanz (until July 9, 2019: VR LEASING) subgroups as lessors and all group companies that are lessees with leased or rented assets. Under IAS 17, minimum lease payments from operating leases had totaled €943 million as at December 31, 2018. At the time of initial application of IFRS 16 on January 1, 2019, however, liabilities from non-cancellable leases – in accordance with the definition of a lease pursuant to IFRS 16 – amounted to less than half of the minimum lease payments reported as at December 31, 2018. The liabilities from non-cancellable leases to be recognized at the time of initial application are measured at the present value of the remaining lease payments, discounted at the lessee's incremental borrowing rate of interest as at January 1, 2019. The weighted average incremental borrowing rates of interest for land and buildings and for office furniture and equipment are 2.1 percent and 1.2 percent respectively. The implementation of IFRS 16 has no material impact on the consolidated financial statements.

Prepayment Features with Negative Compensation (Amendments to IFRS 9) provides clarity on the classification and measurement of financial instruments with symmetric termination rights. The amendments explicitly state that the SPPI criterion under IFRS 9 is not breached in the event of reasonable negative compensation for early termination of the contract. The amendments were required to be applied for the first time from January 1, 2019. There is no impact on the consolidated financial statements.

Long-term Interests in Associates and Joint Ventures (Amendments to IAS 28) clarifies that an entity applies the rules of IFRS 9 to long-term interests in associates or joint ventures that form part of its net investment in the associate or joint venture but to which the equity method is not applied. The date of initial application for the amendments was January 1, 2019. There is no impact on the consolidated financial statements.

As a result of *Plan Amendment, Curtailment or Settlement* (Amendments to IAS 19), there is a mandatory requirement for any amendment, curtailment, or settlement of a defined benefit plan to be accompanied by a recalculation of the current service cost and the net interest for the remainder of the financial year using the latest actuarial assumptions that have been used for the necessary remeasurement of the net liability (asset). The amendments to the standard also include additions to clarify the effect of a plan amendment, curtailment, or settlement on the requirements regarding the asset ceiling. The amendments have been required to be applied since January 1, 2019. The implementation of the amendments to IAS 19 has no material impact on the consolidated financial statements.

IFRIC 23 *Uncertainty over Income Tax Treatments* sets out rules on the recognition and measurement of tax risk exposures, thereby closing gaps in this regard in IAS 12 *Income Taxes*. IFRIC 23 mainly addresses the decision as to whether an entity should consider the uncertain tax treatment of specific circumstances independently or collectively. It also addresses assumptions to be made by an entity in relation to the examination of tax treatments by tax authorities. IFRIC 23 also governs the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits, and tax rates as well as the effects of changes in facts and circumstances. The tax risks must be measured using the most likely amount or the expected value. IFRIC 23 specifies that an entity should use the measurement method that best reflects the risk involved. The application of IFRIC 23 does not result in any changes in accounting treatment because tax risk exposures have already been recognized with the best possible value in the past and because the scenario of a lower probability did not apply. The interpretation was required to be applied for the first time from January 1, 2019.

In accordance with the amendments to IFRS 3 *Business Combinations* as part of the *Annual Improvements to IFRSs 2015–2017 Cycle*, if an entity acquires further interests in a business that was previously a joint operation and thereby obtains control pursuant to IFRS 10, the rules in IFRS 3 regarding a business combination achieved in stages must be applied and the interests already held in that business must be remeasured. All of the interests previously held in the joint operation must be remeasured, not only the share of the assets and liabilities that was previously recognized. The amendments must be applied prospectively to business combinations occurring in financial years beginning on or after January 1, 2019.

In accordance with the amendments to IFRS 11 *Joint Arrangements* as part of the *Annual Improvements to IFRSs 2015–2017 Cycle*, if an entity acquires further interests in a joint operation and thereby obtains joint control, the interests already held in the joint operation do not have to be remeasured. The amendments must be applied prospectively to business combinations occurring in financial years beginning on or after January 1, 2019.

The amendments to IAS 12 *Income Taxes* as part of the *Annual Improvements to IFRSs 2015–2017 Cycle* clarify that the income tax consequences of dividends are more directly linked to previous transactions or events that generated distributable profits than to distributions to shareholders. An entity therefore recognizes the income tax consequences of dividends in profit or loss, in other comprehensive income, or in equity, depending on where these previous transactions or events were originally recorded. As a result of these amendments, the taxes on the payments deemed to be distributions in respect of AT1 bonds are no longer recognized in other comprehensive income. Due to the lack of materiality, the amendments were not adopted retrospectively. The amendments apply to financial years beginning on or after January 1, 2019.

The amendments to IAS 23 *Borrowing Costs* as part of the *Annual Improvements to IFRSs 2015–2017 Cycle* clarify that borrowing – where the original purpose of such borrowing was to obtain a specific qualifying asset – that remains outstanding after this qualifying asset is essentially ready for its intended use or sale must be included in the calculation of the capitalization rate on general borrowing for other qualifying assets for which no specific borrowing was obtained. The amendments must be applied prospectively to borrowing costs that are incurred in financial years beginning on or after January 1, 2019.

The *Annual Improvements to IFRSs 2015–2017 Cycle* described above have no material impact on DZ BANK's interim consolidated financial statements.

Changes in presentation

To increase transparency and improve the reliability and relevance of the information provided, the gains and losses from the derecognition of financial assets measured at amortized cost and the gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business are presented as separate line items in the income statement from 2019 onward. Previously, these gains and losses from the derecognition of financial assets measured at amortized cost were explained below the income statement and in the affected notes to the financial statements. The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

Income statement for the period January 1 to June 30, 2018

€ million	Jan. 1 – Jun. 30, 2018 before restatement	Amount of restatement	**Jan. 1 – Jun. 30, 2018 after restatement**
Net interest income	1,422	-2	1,420
(...)			
Gains and losses on investments	98	-52	46
(...)			
Gains and losses from the derecognition of financial assets measured at amortized cost	-	54	54
(...)			
Gains and losses on investments held by insurance companies and other insurance company gains and losses	1,215	4	1,219
(...)			
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business	-	-4	-4
(...)			
Profit before taxes	1,034	-	1,034
Income taxes	-303	-	-303
Net profit	**731**	-	**731**

As a result of the netting of interest payments from certain derivatives, which was presented in note 2 (Accounting policies and estimates) of the consolidated financial statements as at December 31, 2018, the related comparative figures in the income statement and the affected disclosures in the notes to the interim consolidated financial statements as at June 30, 2019 have been restated. The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

From 2019, loans and advances to customers at stage 3 that are measured at amortized cost are shown at a nominal amount of €1,082 million, inclusive of the interest entitlement attributable to this line item (gross interest entitlement). The adjustment resulted in a corresponding increase in both loans and advances to customers and loss allowances and changes to the affected disclosures in the notes. Due to a lack of materiality, presentation was previously on a net basis. The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

Balance sheet as at December 31, 2018

ASSETS

€ million	Dec. 31, 2018 before restatement	Amount of restatement	**Dec. 31, 2018 after restatement**
(...)			
Loans and advances to customers	174,438	111	174,549
(...)			
Loss allowances	-2,305	-111	-2,416
(...)			
Total assets	**518,733**	-	**518,733**

Balance sheet as at January 1, 2018

ASSETS

€ million	Jan. 1, 2018 before restatement	Amount of restatement	Jan. 1, 2018 after restatement
(...)			
Loans and advances to customers	175,091	72	175,163
(...)			
Loss allowances	-2,862	-72	-2,934
(...)			
Total assets	**507,388**	-	**507,388**

From 2019, due to an adjustment to reflect industry practice, assets related to unit-linked contracts – where the investment risk is borne in full by the policyholder – are now also shown under financial assets mandatorily measured at fair value through profit or loss in note 46 (Classes, categories, and fair values of financial instruments). The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

There are other minor presentation changes in the statement of cash flows and in notes 11 (Net fee and commission income), 23 (Items reclassified to the income statement), 49 (Nature and extent of risks arising from financial instruments and insurance contracts), and 54 (Disclosures on revenue from contracts with customers). The adjusted amounts within the comparative figures are indicated by the footnote 'Amount restated'.

Sources of estimation uncertainty

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

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

>> 03 Scope of consolidation

In the first half of 2019, the change to the scope of consolidation resulted from the disposal of fully consolidated subsidiaries of the VR Smart Finanz subgroup in connection with the sale of shares in BFL Leasing GmbH, Eschborn, and in VR-IMMOBILIEN-LEASING GmbH, Eschborn.

>> 04 Leases

DZ BANK Group as lessor

A lease is classified as a finance lease if substantially all the risks and rewards incidental to the ownership of an asset are transferred to the lessee. If the risks and rewards remain substantially with the lessor, the lease is an operating lease.

If a lease is classified as a finance lease, a receivable due from the lessee must be recognized. The receivable is measured at an amount equal to the net investment in the lease at the inception of the lease. Lease payments are apportioned into a payment of interest and repayment of principal. The interest portion based on the lessor's internal discount rate for a constant periodic rate of return is recognized as interest income, whereas the repayment of principal reduces the carrying amount of the receivable.

If a lease is classified as an operating lease, the DZ BANK Group retains beneficial ownership of the leased asset. These leased assets are reported as assets. The leased assets are measured at cost less depreciation and any impairment losses. Unless another systematic basis is more representative of the pattern of income over time, lease income is recognized in profit or loss on a straight-line basis over the term of the lease and is included in the current income from operating leases reported under net interest income. Gains on disposal, reversals of impairment losses, depreciation, losses on disposal, and impairment losses relating to the underlying leased assets are also included in the current income from operating leases.

DZ BANK Group as lessee

For every lease, the lessee recognizes a right-of-use asset for a leased asset as well as a corresponding lease liability. The only exceptions are short-term leases and leases for low-value assets; in these cases, the lease payments are recognized as an expense.

The amount of the right-of-use asset initially corresponds to the amount of the lease liability. In subsequent periods, the right-of-use asset is measured at amortized cost. Depreciation is recognized on a straight-line basis over the entire lease term and reported as an administrative expense.

The lease liability is measured as the present value of the future lease payments and is shown under other liabilities. Lease payments must be broken down into an interest portion and a repayment portion. The interest portion based on the internal discount rate or the incremental borrowing rate of interest is recognized as interest expense, whereas the repayment of principal reduces the liability.

The DZ BANK Group uses the practical expedient that enables a lessee to elect not to separate non-lease components from lease components and instead account for all components as a lease.

>> 05 Loans and advances to banks and customers

All receivables attributable to registered debtors that are categorized as 'financial assets measured at amortized cost', 'financial assets measured at fair value through profit or loss', or 'financial assets measured at fair value through other comprehensive income' are recognized as loans and advances to banks and customers. To eliminate or significantly reduce accounting mismatches, certain loans and advances are designated as at fair value through profit or loss. In addition to fixed-term receivables and receivables payable on demand in

connection with lending, lease, and money market business, loans and advances to banks and to customers include promissory notes and registered bonds.

Loans and advances to banks and customers are measured predominantly at amortized cost using the effective interest method. In fair value hedges, the carrying amounts of hedged receivables are adjusted for the change in fair value attributable to the hedged risk. The resulting hedge adjustments are recognized within other gains and losses on valuation of financial instruments under gains and losses arising on hedging transactions. Finance lease receivables are recognized and measured in accordance with the requirements for the accounting treatment of leases.

Loss allowances for loans and advances to banks and customers are determined on the basis of the IFRS 9 requirements applicable to the relevant category of financial assets. Depending on these requirements, the loss allowances are reported as a separate line item deduction on the assets side of the balance sheet or in the reserve from other comprehensive income.

Interest income on loans and advances to banks and customers is recognized as interest income from lending and money market business. This also includes the amortization of hedge adjustments to carrying amounts due to fair value hedges. Realized gains and losses on loans and advances to banks and customers that are categorized as ‘financial assets measured at amortized cost’ are included in the gains and losses from the derecognition of financial assets measured at amortized cost. Gains and losses on the valuation of loans and advances for which the fair value option has been exercised are shown under the item of the same name as part of other gains and losses on valuation of financial instruments.

>> 06 Investments

The following are recognized as investments: bearer bonds and other fixed-income securities, shares and other variable-yield securities, and other bearer or registered shareholdings in entities in which the DZ BANK Group has no significant influence, provided that these securities or shares are not held for trading purposes. Investments also include investments in subsidiaries, joint ventures, and associates.

Investments are initially recognized at fair value. Investments in joint ventures and associates that are accounted for using the equity method are initially recognized at cost. These investments are subsequently measured in accordance with the principles applicable to the relevant measurement category. In the case of investments in joint ventures and associates, the equity method is used for subsequent measurement.

Impairment losses on investments are determined on the basis of the IFRS 9 requirements applicable to the relevant category of financial assets or on the basis of accounting standards relevant to the financial assets concerned. They are generally reported as a separate line item on the assets side of the balance sheet or in the reserve from other comprehensive income.

Interest and any investment premiums or discounts amortized over the maturity of the investment using the effective interest method are recognized under net interest income. Dividends derived from equity instruments are recognized as current income under net interest income. Gains or losses on investments accounted for using the equity method are also reported under net interest income.

Gains and losses realized on the sale of investments that are not categorized as ‘financial assets measured at amortized cost’, as well as impairment losses and reversals thereof on investments in associates and joint ventures that are accounted for using the equity method, are reported under gains and losses on investments.

Realized gains and losses on investments that are categorized as ‘financial assets measured at amortized cost’ are included in the gains and losses from the derecognition of financial assets measured at amortized cost.

Fair value gains and losses on investments that are measured at fair value through profit or loss are reported under other gains and losses on valuation of financial instruments.

>> 07 Property, plant and equipment, investment property, and right-of-use assets

Property, plant and equipment, investment property, and right-of-use assets comprises land and buildings as well as office furniture and equipment with an estimated useful life of more than one year used by the entities in the DZ BANK Group. This item also includes assets subject to operating leases and right-of-use assets arising from leases. Investment property is real estate held for the purposes of generating rental income or capital appreciation.

Property, plant and equipment, and investment property is measured at cost less cumulative depreciation and cumulative impairment losses in subsequent financial years. Depreciation is largely recognized on a straight-line basis over the useful life of the asset. In most cases, external valuations are used to measure recoverability.

If facts or circumstances give rise to indications that assets might be impaired, the recoverable amount is determined. An impairment loss is recognized if the recoverable amount is lower than the asset’s carrying amount. The recoverable amount is the higher of fair value less costs to sell and value in use.

Borrowing costs directly assignable to property, plant and equipment, and investment property are capitalized as part of the asset cost, provided that the asset concerned is a qualifying asset.

Right-of-use assets arising from leases are recognized in accordance with the requirements for the accounting treatment of leases and measured using the cost model.

Depreciation on property, plant and equipment, investment property, and right-of-use assets is reported as an administrative expense. Impairment losses and reversals of impairment losses are reported under other net operating income.

>> 08 Other assets and other liabilities

Other assets also include intangible assets and contract assets. Intangible assets are recognized at cost. In the subsequent measurement of software, acquired customer relationships, and other intangible assets with a finite useful life, carrying amounts are reduced by cumulative amortization and cumulative impairment losses. Goodwill and other intangible assets with an indefinite useful life are not amortized but are subject to an impairment test at least once during the financial year.

If the group has satisfied its performance obligation in respect of a customer, but the customer has not yet paid the consideration and payment of the consideration still depends on a condition other than simply a due date, then the group recognizes a contract asset on the balance sheet in place of a receivable. As soon as an unconditional right to the consideration arises, the contract asset is reclassified as a receivable. Contract assets are not amortized, but are included in the calculation of the loss allowances in accordance with IFRS 9.

Other liabilities include other liabilities of insurance companies, accrued expenses, and lease liabilities.

The other assets and other liabilities line items are used to report assets and liabilities that cannot be allocated to any of the other asset or liability line items.

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

>> 09 Segment information

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

€ million	DZ BANK	BSH	DVB
Net interest income	582	217	102
Net fee and commission income	198	-15	27
Gains and losses on trading activities	130	-	-4
Gains and losses on investments	-2	120	2
Other gains and losses on valuation of financial instruments	24	17	-16
Gains and losses from the derecognition of financial assets measured at amortized cost	11	15	-
Premiums earned	-	-	-
Gains and losses on investments held by insurance companies and other insurance company gains and losses	-	-	-
Insurance benefit payments	-	-	-
Insurance business operating expenses	-	-	-
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business	-	-	-
Loss allowances	1	6	-50
Administrative expenses	-748	-249	-109
Other net operating income	13	38	-19
Profit/loss before taxes	**209**	**149**	**-67**
Cost/income ratio (%)	78.2	63.5	>100.0
Regulatory RORAC (%)	3.1	26.2	-42.7
Average own funds/solvency requirement	4,928	1,139	289
Total assets/total equity and liabilities as at Jun. 30, 2019	297,253	74,896	18,508

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR Smart Finanz	Other/ Consolidation	**Total**
	256	30	-	239	9	75	-231	1,279
	1	85	-	-11	706	-1	-32	958
	1	4	-	-	-	-	10	141
	10	-	-	-	-	-	-	130
	123	5	-	-	20	-	6	179
	-	-	-	-	-	-	-11	15
	-	-	8,328	-	-	-	-	8,328
	-	-	3,551	-	-	-	-35	3,516
	-	-	-9,634	-	-	-	-	-9,634
	-	-	-1,524	-	-	-	81	-1,443
	-	-	-6	-	-	-	-	-6
	4	-	-	-54	-	-12	-	-105
	-139	-114	-	-114	-436	-70	-67	-2,046
	12	3	-4	3	85	9	12	152
	268	**13**	**711**	**63**	**384**	**1**	**-267**	**1,464**
	34.5	89.8	-	49.4	53.2	84.3	-	56.6
	35.8	8.4	18.0	26.3	>100.0	0.7	-	17.0
	1,505	308	7,923	482	339	305	-	17,218
	89,588	21,774	117,806	8,982	2,463	4,092	-74,579	560,783

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2018

€ million	DZ BANK	BSH	DVB
Net interest income [1]	591	385	80
Net fee and commission income	185	-12	42
Gains and losses on trading activities	195	-	-4
Gains and losses on investments [1]	29	3	11
Other gains and losses on valuation of financial instruments	19	3	-87
Gains and losses from the derecognition of financial assets measured at amortized cost [1]	45	10	-
Premiums earned	-	-	-
Gains and losses on investments held by insurance companies and other insurance company gains and losses [1]	-	-	-
Insurance benefit payments	-	-	-
Insurance business operating expenses	-	-	-
Gains and losses from the derecognition of financial assets measured at amortized cost in the insurance business [1]	-	-	-
Loss allowances	96	-2	-20
Administrative expenses	-756	-237	-97
Other net operating income	33	22	4
Profit/loss before taxes	**437**	**172**	**-71**
Cost/income ratio (%)	68.9	57.7	>100.0
Regulatory RORAC (%)	12.4	31.7	-34.1
Average own funds/solvency requirement	4,699	1,081	378
Total assets/total equity and liabilities as at Dec. 31, 2018	271,189	71,667	20,566

1 Amount restated (see note 2).

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR Smart Finanz	Other/ Consolidation	**Total**
	282	33	-	221	6	76	-254	1,420
	1	94	-	-5	705	5	-57	958
	-	5	-	-	-	-	10	206
	4	-	-	-	-7	7	-1	46
	30	-2	-	-	-22	-	11	-48
	-	-	-	-	-	-	-1	54
	-	-	8,115	-	-	-	-	8,115
	-	-	1,266	-	-	-	-47	1,219
	-	-	-7,709	-	-	-	-	-7,709
	-	-	-1,406	-	-	-	84	-1,322
	-	-	3	-	-	-	-7	-4
	4	-	-	-32	-	-2	-	44
	-162	-115	-	-112	-425	-70	-44	-2,018
	5	-7	5	4	16	-15	6	73
	164	**8**	**274**	**76**	**273**	**1**	**-300**	**1,034**
	50.3	93.5	-	50.9	60.9	95.9	-	67.1
	22.8	4.6	7.3	34.2	>100.0	0.6	-	12.5
	1,444	349	7,508	444	351	333	-	16,587
	85,882	18,322	107,351	8,536	2,559	4,768	-72,107	518,733

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 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 BANK, DZ HYP AG, Hamburg, (DZ HYP), TeamBank AG Nürnberg, Nuremberg, (TeamBank), DZ PRIVATBANK, and the BSH, DVB, R+V, UMH, and VR Smart Finanz subgroups. All other companies in the DZ BANK Group, which are not required to provide regular quantitative reports to the chief operating decision-makers, and the consolidations are reported on an aggregated basis under Other/Consolidation.

Presentation of operating segments

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

Measurement

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

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

The key indicators for assessing the performance of the operating segments are profit/loss before taxes, the cost/income ratio, and the return on risk-adjusted capital (regulatory RORAC). The cost/income ratio shows the ratio of administrative expenses to operating income and reflects the economic efficiency of the operating segment concerned.

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

Regulatory RORAC is a risk-adjusted performance measure. In the reporting period, it reflected the relationship between adjusted profit (profit before taxes largely taking into account performance-related income and capital structure effects) and average own funds for the year (determined on a quarterly basis) in accordance with the own funds/solvency requirement 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.

>> 10 Net interest income

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
INTEREST INCOME AND CURRENT INCOME AND EXPENSE	**3,059**	**2,979**
Interest income from	**3,019**	**2,936**
Lending and money market business	2,996	3,135[1]
Bonds and other fixed-income securities	274	201[1]
Portfolio hedges of interest-rate risk	-116	-275
Financial assets with a negative effective interest rate	-135	-125
Current income and expense from	**40**	**43**
Shares and other variable-yield securities	9	13
of which: income from other shareholdings	8	12
Investments in subsidiaries	2	2
Operating leases	11	-4
Entities accounted for using the equity method	17	32
of which relating to: investments in joint ventures	12	28
investments in associates	5	4
Income from profit-pooling, profit-transfer and partial profit-transfer agreements	1	-
INTEREST EXPENSE ON	**-1,780**	**-1,559**
Deposits from banks and customers	-1,639	-1,487[1]
Debt certificates issued including bonds	-283	-214
Subordinated capital	-39	-63
Portfolio hedges of interest-rate risk	67	95
Financial liabilities with a positive effective interest rate	118	114
Provisions and other liabilities	-4	-4
Total	**1,279**	**1,420**

1 Amount restated (see note 2).

The interest expense on provisions and other liabilities included interest expense on lease liabilities of €2 million in the reporting period.

>> 11 Net fee and commission income

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Fee and commission income	**1,985**	**1,874**
Securities business	1,497	1,413[1]
Asset management	112	114
Payments processing including card processing	146	125
Lending business and trust activities	70	72
Financial guarantee contracts and loan commitments	29	27
International business	5	5
Building society operations	17	15
Other	109	103
Fee and commission expenses	**-1,027**	**-916**
Securities business	-673	-590[1]
Asset management	-74	-74
Payments processing including card processing	-77	-64
Lending business	-42	-42
Financial guarantee contracts and loan commitments	-5	-4
Building society operations	-44	-36
Other	-112	-106
Total	**958**	**958**

1 Amount restated (see note 2).

In the reporting period, fee and commission income included revenue from contracts with customers pursuant to IFRS 15 in an amount of €1,980 million. In the first half of 2018, fee and commission income had included revenue from contracts with customers pursuant to IFRS 15 in an amount of €1,838 million[1] (see note 54).

>> 12 Gains and losses on trading activities

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Gains and losses on non-derivative financial instruments and embedded derivatives	-1,129	90
Gains and losses on derivatives	1,258	67
Gains and losses on exchange differences	12	49
Total	**141**	**206**

>> 13 Gains and losses on investments

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Gains and losses on the disposal of bonds and other fixed-income securities	**28**	35[1]
Gains and losses on the disposal of shares and other variable-yield securities	**-**	-6
Gains and losses on investments in joint ventures	**98**	14
Disposals	98	6
Reversals of impairment losses	-	8
Gains and losses on investments in associates	**4**	3
Disposals	4	8
Impairment losses	-7	-5
Reversals of impairment losses	7	-
Total	**130**	46

1 Amount restated (see note 2).

>> 14 Other gains and losses on valuation of financial instruments

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Gains and losses from hedge accounting	**2**	-11
Gains and losses on derivatives used for purposes other than trading	**27**	-46
Gains and losses on financial instruments designated as at fair value through profit or loss	**123**	-18
Gains and losses on non-derivative financial instruments and embedded derivatives	-187	-91
Gains and losses on derivatives	310	73
Gains and losses on financial assets mandatorily measured at fair value through profit or loss	**27**	27
Total	**179**	-48

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.

>> 15 Premiums earned

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Net premiums written	**9,164**	**8,926**
Gross premiums written	9,237	8,961
Reinsurance premiums ceded	-73	-35
Change in provision for unearned premiums	**-836**	**-811**
Gross premiums	-857	-816
Reinsurers' share	21	5
Total	**8,328**	**8,115**

>> 16 Gains and losses on investments held by insurance companies and other insurance company gains and losses

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Income from investments held by insurance companies	**4,624**	**2,786**
Interest income and current income	1,273	1,215
Income from reversals of impairment losses and reversals of loss allowances, and unrealized gains	241	346
Gains on valuation through profit or loss of investments held by insurance companies	2,764	724
Gains on disposals	346	501 [1]
Expenses in connection with investments held by insurance companies	**-1,040**	**-1,651**
Administrative expenses	-104	-69
Depreciation/amortization expense, additions to loss allowances, and impairment losses and unrealized losses	-239	-247
Losses on valuation through profit or loss of investments held by insurance companies	-469	-924
Losses on disposals	-228	-411 [1]
Other gains and losses of insurance companies	**-68**	**84**
Other insurance gains and losses	154	122
Other non-insurance gains and losses	-222	-38
Total	**3,516**	**1,219**

1 Amount restated (see note 2).

Income from and expenses in connection with investments held by insurance companies included additions to loss allowances of €2 million (first half of 2018: €3 million), reversals of loss allowances of €2 million (first half of 2018: €3 million), and directly recognized impairment losses of €1 million. There had been no directly recognized impairment losses in the first half of 2018.

>> 17 Insurance benefit payments

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Expenses for claims	**-5,570**	-5,006
Gross expenses for claims	-5,579	-5,040
Reinsurers' share	9	34
Changes in the benefit reserve and in other insurance liabilities	**-2,479**	-2,712
Gross changes in provisions	-2,479	-2,684
Reinsurers' share	-	-28
Expenses for premium refunds	**-1,585**	9
Gross expenses for premium refunds	-409	-17
Expenses for deferred premium refunds	-1,176	26
Total	**-9,634**	**-7,709**

>> 18 Insurance business operating expenses

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Gross expenses	-1,451	-1,332
Reinsurers' share	8	10
Total	**-1,443**	**-1,322**

>> 19 Loss allowances

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Loss allowances for loans and advances to banks	**2**	**21**
Additions	-8	-6
Reversals	8	27
Recoveries on loans and advances to banks previously impaired	2	-
Loss allowances for loans and advances to customers	**-104**	**-26**
Additions	-799	-829
Reversals	673	777
Directly recognized impairment losses	-14	-13
Recoveries on loans and advances to customers previously impaired	26	31
Other	10	8
Loss allowances for investments	**2**	**4**
Additions	-5	-16
Reversals	7	20
Other loss allowances for loans and advances	**-5**	**45**
Additions to and reversals of provisions for loan commitments	-11	24
Additions to and reversals of provisions for financial guarantee contracts	7	21
Additions to and reversals of other provisions for loans and advances	-1	-
Total	**-105**	**44**

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.

>> 20 Administrative expenses

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Staff expenses	-923	-906
General and administrative expenses	-993	-1,025
Depreciation and amortization	-130	-87
Total	**-2,046**	**-2,018**

>> 21 Other net operating income

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Gains and losses on non-current assets and disposal groups classified as held for sale	108	7
Income from the reversal of provisions and accruals	67	59
Restructuring expenses	-50	-12
Expenses for other taxes	-11	-11
Residual other net operating income	38	30
Total	**152**	**73**

>> 22 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.

>> 23 Items reclassified to the income statement

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

€ million	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Gains and losses on debt instruments measured at fair value through other comprehensive income	**1,830**	**-304**
Gains (+)/losses (-) arising during the reporting period	1,913	-197[1]
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-83	-107[1]
Gains and losses on cash flow hedges	**-**	**-7**
Gains (+)/losses (-) arising during the reporting period	-	-3
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-	-4
Exchange differences on currency translation of foreign operations	**1**	**7**
Gains (+)/losses (-) arising during the reporting period	1	8
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-	-1
Gains and losses on hedges of net investments in foreign operations	**2**	**-3**
Gains (+)/losses (-) arising during the reporting period	2	-10
Gains (-)/losses (+) reclassified to the income statement during the reporting period	-	7

1 Amount restated (see note 2).

>> 24 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, 2019			Jan. 1 – Jun. 30, 2018		
€ 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	**1,833**	**-511**	**1,322**	**-307**	**137**	**-170**
Gains and losses on debt instruments measured at fair value through other comprehensive income	1,830	-510	1,320	-304	131	-173
Gains and losses on cash flow hedges	-	-	-	-7	-	-7
Exchange differences on currency translation of foreign operations	1	-	1	7	-1	6
Gains and losses on hedges of net investments in foreign operations	2	-1	1	-3	7	4
Items that will not be reclassified to the income statement	**-107**	**77**	**-30**	**102**	**-25**	**77**
Gains and losses on equity instruments for which the fair value OCI option has been exercised	258	-41	217	93	-23	70
Gains and losses in relation to financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk	-135	42	-93	13	-4	9
Gains and losses arising from remeasurement of defined benefit plans	-230	76	-154	-4	2	-2
Total	**1,726**	**-434**	**1,292**	**-205**	**112**	**-93**

C Balance sheet disclosures

>> 25 Cash and cash equivalents

€ million	Jun. 30, 2019	Dec. 31, 2018
Cash on hand	256	386
Balances with central banks	66,014	51,459
Total	**66,270**	**51,845**

>> 26 Loans and advances to banks

€ million	Repayable on demand		Other loans and advances		Total	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Domestic banks	**3,558**	4,392	**81,393**	80,599	**84,951**	84,991
Affiliated banks	1,436	1,443	74,013	72,625	75,449	74,068
Other banks	2,122	2,949	7,380	7,974	9,502	10,923
Foreign banks	**5,199**	4,107	**2,803**	2,529	**8,002**	6,636
Total	**8,757**	**8,499**	**84,196**	**83,128**	**92,953**	**91,627**

>> 27 Loans and advances to customers

€ million	Jun. 30, 2019	Dec. 31, 2018
Loans and advances to domestic customers	153,249	145,932
Loans and advances to foreign customers	28,565	28,617[1]
Total	**181,814**	**174,549**

1 Amount restated (see note 2).

>> 28 Hedging instruments (positive fair values)

Hedging instruments (positive fair values) amounted to €259 million (December 31, 2018: €883 million) and resulted solely from derivatives used as fair value hedges.

>> 29 Financial assets held for trading

€ million	Jun. 30, 2019	Dec. 31, 2018
DERIVATIVES (POSITIVE FAIR VALUES)	**22,229**	**15,647**
Interest-linked contracts	20,212	13,773
Currency-linked contracts	1,052	1,194
Share-/index-linked contracts	565	403
Other contracts	51	52
Credit derivatives	349	225
BONDS AND OTHER FIXED-INCOME SECURITIES	**12,104**	**10,939**
Money market instruments	243	187
Bonds	11,861	10,752
SHARES AND OTHER VARIABLE-YIELD SECURITIES	**1,073**	**989**
Shares	1,064	959
Investment fund units	8	29
Other variable-yield securities	1	1
RECEIVABLES	**12,728**	**10,367**
of which: from affiliated banks	259	485
from other banks	10,153	7,927
Money market placements	**11,903**	**9,619**
with banks	9,897	7,975
with customers	2,006	1,644
Promissory notes and registered bonds	**825**	**748**
from banks	515	437
from customers	310	311
Total	**48,134**	**37,942**

>> 30 Investments

€ million	Jun. 30, 2019	Dec. 31, 2018
Bonds and other fixed-income securities	**47,637**	**45,614**
Money market instruments	393	466
Bonds	47,244	45,148
Shares and other variable-yield securities	**1,733**	**1,577**
Shares and other shareholdings	578	526
Investment fund units	1,144	1,041
Other variable-yield securities	11	10
Investments in subsidiaries	**316**	**300**
Investments in joint ventures	**332**	**482**
Investments in associates	**285**	**289**
Total	**50,303**	**48,262**

The carrying amount of investments in joint ventures accounted for using the equity method totaled €332 million (December 31, 2018: €482 million). €285 million of the investments in associates has been accounted for using the equity method (December 31, 2018: €288 million).

>> 31 Investments held by insurance companies

€ million	Jun. 30, 2019	Dec. 31, 2018
Investment property	3,233	2,842
Investments in subsidiaries	801	758
Investments in joint ventures	17	15
Investments in associates	3	3
Mortgage loans	9,443	9,307
Promissory notes and loans	7,515	7,386
Registered bonds	9,448	9,567
Other loans	665	654
Variable-yield securities	10,212	9,186
Fixed-income securities	54,148	48,954
Derivatives (positive fair values)	575	168
Loss allowances	-3	-4
Deposits with ceding insurers and other investments	317	294
Assets related to unit-linked contracts	12,961	11,710
Total	**109,335**	**100,840**

>> 32 Property, plant and equipment, investment property, and right-of-use assets

€ million	Jun. 30, 2019	Dec. 31, 2018
Land and buildings	919	911
Office furniture and equipment	177	182
Assets subject to operating leases	50	72
Investment property	243	258
Right-of-use assets	297	
Total	**1,686**	**1,423**

>> 33 Other assets

€ million	Jun. 30, 2019	Dec. 31, 2018
Other assets held by insurance companies	3,730	3,372
Goodwill	41	41
Other intangible assets	449	436
of which: software	407	394
acquired customer relationships	4	4
Other loans and advances	318	338
Residual other assets	725	468
Total	**5,263**	**4,655**

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

€ million	Jun. 30, 2019	Dec. 31, 2018
Intangible assets	133	140
Reinsurers' share of insurance liabilities	151	139
Receivables	1,610	1,650
Credit balances with banks, checks and cash on hand	638	409
Residual other assets	1,200	1,036
Loss allowances	-2	-2
Total	**3,730**	**3,372**

Residual other assets included right-of-use assets amounting to €60 million as at June 30, 2019.

>> 34 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 changes in loss allowances recognized under assets were as follows:

€ million	Loss allowances for loans and advances to banks			Loss allowances for loans and advances to customers			
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	POCI assets
Balance as at Jan. 1, 2018	9	-	22	217	185	2,420[1]	11
Additions	5	1	-	119	185	520	5
Utilizations	-	-	-	-	-1	-348[1]	-
Reversals	-6	-1	-20	-208	-94	-466	-8
Other changes	-	-	-	93	-111	109[1]	-
Balance as at Jun. 30, 2018	**8**	**-**	**2**	**221**	**164**	**2,235**	**8**
Balance as at Jan. 1, 2019	8	-	4	218	164	1,957[1]	3
Additions	6	-	2	144	217	435	3
Utilizations	-	-	-	-	-4	-237	-
Reversals	-6	-	-2	-212	-95	-359	-5
Other changes	-	-	-	73	-110	71	-
Balance as at Jun. 30, 2019	**8**	**-**	**4**	**223**	**172**	**1,867**	**1**

1 Amount restated (see note 2).

€ million	Loss allowances for investments			Total
	Stage 1	Stage 2	Stage 3	
Balance as at Jan. 1, 2018	10	36	24	2,934
Additions	3	12	1	851
Utilizations	-	-	-	-349
Reversals	-4	-6	-6	-819
Other changes	-2	2	1	92
Balance as at Jun. 30, 2018	**7**	**44**	**20**	**2,709**
Balance as at Jan. 1, 2019	5	40	17	2,416
Additions	-	3	-	810
Utilizations	-	-	-	-241
Reversals	-1	-4	-	-684
Other changes	-	-	-	34
Balance as at Jun. 30, 2019	**4**	**39**	**17**	**2,335**

>> 35 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 credit portfolios for the land transport finance business, which previously constituted a disposal group not qualifying as a discontinued operation, were sold in the first half of 2019, as was the fully consolidated subsidiary LogPay Financial Services GmbH, Eschborn (LogPay). The net gain on disposal of €38 million was reported under other net operating income. Of this total, €9 million was attributable to the disposal of the land transport finance business and €29 million to the disposal of LogPay. The credit portfolios of the aviation finance business continue to be recognized, in an amount of €4,444 million, as a disposal group not qualifying as a discontinued operation. The sale is expected to be completed by the end of 2019.

Assets of €55 million and liabilities of €18 million at VR Smart Finanz similarly constitute disposal groups that do not qualify as discontinued operations. They are attributable to a fully consolidated subsidiary. BFL Leasing GmbH, Eschborn, which previously constituted a disposal group not qualifying as a discontinued operation and no longer formed part of the core business of VR Smart Finanz, was sold in the first half of 2019, as was 94.0 percent of VR-IMMOBILIEN-LEASING GmbH, Eschborn. The net loss on disposal of €3 million was reported under other net operating income.

Other disposal groups not qualifying as discontinued operations included units in various investment funds as at June 30, 2019. A fully consolidated subsidiary was sold in the first six months of 2019. The net gain on disposal of €72 million was reported under other net operating income.

The individual non-current assets classified as held for sale comprise a long-term equity investment and items of property, plant and equipment.

>> 36 Deposits from banks

€ million	Repayable on demand		With agreed maturity or notice period		Total	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Domestic banks	**44,420**	44,142	**81,690**	84,606	**126,110**	128,748
Affiliated banks	38,038	38,365	21,010	22,193	59,048	60,558
Other banks	6,382	5,777	60,680	62,413	67,062	68,190
Foreign banks	**7,003**	3,968	**13,273**	9,770	**20,276**	13,738
Total	**51,423**	48,110	**94,963**	94,376	**146,386**	142,486

>> 37 Deposits from customers

€ million	Repayable on demand		With agreed maturity or notice period		Total	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Domestic customers	19,371	19,907	98,173	97,084	117,544	116,991
Foreign customers	15,392	10,555	4,194	5,002	19,586	15,557
Total	**34,763**	30,462	**102,367**	102,086	**137,130**	132,548

>> 38 Debt certificates issued including bonds

€ million	Jun. 30, 2019	Dec. 31, 2018
Bonds issued	**49,403**	50,958
Mortgage Pfandbriefe	20,463	19,318
Public-sector Pfandbriefe	2,407	2,452
Other bonds	26,533	29,188
Other debt certificates issued	**22,920**	12,951
Total	**72,323**	63,909

All other debt certificates issued are commercial paper.

>> 39 Hedging instruments (negative fair values)

Hedging instruments (negative fair values) amounted to €995 million (December 31, 2018: €2,516 million) and resulted solely from derivatives used as fair value hedges.

>> 40 Financial liabilities held for trading

€ million	Jun. 30, 2019	Dec. 31, 2018
DERIVATIVES (NEGATIVE FAIR VALUES)	**21,993**	**16,079**
Interest-linked contracts	18,522	12,099
Currency-linked contracts	2,005	1,975
Share-/index-linked contracts	1,327	1,853
Other contracts	69	78
Credit derivatives	70	74
SHORT POSITIONS	**3,098**	**1,102**
BONDS ISSUED	**22,095**	**20,250**
DEPOSITS	**14,095**	**7,548**
of which: from affiliated banks	2,482	2,582
from other banks	11,067	4,346
Money market deposits	**13,847**	**7,292**
from banks	13,446	6,816
from customers	401	476
Promissory notes and registered bonds issued	**248**	**256**
to banks	103	112
to customers	145	144
Total	**61,281**	**44,979**

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

>> 41 Provisions

€ million	Jun. 30, 2019	Dec. 31, 2018
Provisions for employee benefits	**1,844**	**1,635**
Provisions for defined benefit plans	1,366	1,161
Provisions for other long-term employee benefits	150	155
of which: for semi-retirement schemes	26	26
Provisions for termination benefits	304	282
of which: for early retirement schemes	10	11
for restructuring	268	242
Provisions for short-term employee benefits	24	37
Provisions for share-based payment transactions	**31**	**42**
Other provisions	**1,834**	**1,703**
Provisions for onerous contracts	14	13
Provisions for restructuring	20	25
Provisions for loan commitments	60	49
Provisions for financial guarantee contracts	106	113
Other provisions for loans and advances	40	39
Provisions relating to building society operations	1,257	1,072
Residual provisions	337	392
Total	**3,709**	**3,380**

The discount rate applied to defined benefit plans had been reduced to 1.00 percent as at June 30, 2019 (December 31, 2018: 1.75 percent).

>> 42 Insurance liabilities

€ million	Jun. 30, 2019	Dec. 31, 2018
Provision for unearned premiums	2,032	1,171
Benefit reserve	63,255	61,709
Provision for claims outstanding	12,837	12,079
Provision for premium refunds	12,246	8,283
Other insurance liabilities	66	64
Reserve for unit-linked insurance contracts	10,981	9,946
Total	**101,417**	**93,252**

>>43 Other liabilities

€ million	Jun. 30, 2019	Dec. 31, 2018
Other liabilities of insurance companies	6,194	5,806
Accruals	795	1,155
Financial liabilities from contingent considerations in a business combination	5	5
Other payables	176	399
Lease liabilities	295	
Residual other liabilities	586	554
Total	**8,051**	**7,919**

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

€ million	Jun. 30, 2019	Dec. 31, 2018
Other provisions	411	373
Payables and residual other liabilities	5,783	5,433
Total	**6,194**	**5,806**

Payables and residual other liabilities included lease liabilities amounting to €78 million as at June 30, 2019.

>>44 Subordinated capital

€ million	Jun. 30, 2019	Dec. 31, 2018
Subordinated liabilities	2,536	2,810
Profit-sharing rights	66	68
Other hybrid capital	6	6
Share capital repayable on demand	12	13
Total	**2,620**	**2,897**

>>45 Equity

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

	Items not reclassified to the income statement		Items reclassified to the income statement		
€ million	Reserve from equity instruments for which the fair value OCI option has been exercised	Reserve from gains and losses on financial liabilities for which the fair value option has been exercised, attributable to changes in own credit risk	Reserve from debt instruments measured at fair value through other comprehensive income	Cash flow hedge reserve	Currency translation reserve
Equity as at Jan. 1, 2018	380	-	537	5	43
Other comprehensive income/loss	79	8	-147	-6	15
Total comprehensive income/loss	**79**	**8**	**-147**	**-6**	**15**
Changes in scope of consolidation	4	-	-	-	-
Reclassifications within equity	-19	-	-	-	-
Equity as at Jun. 30, 2018	**444**	**8**	**390**	**-1**	**58**
Equity as at Jan. 1, 2019	361	23	131	-	84
Other comprehensive income/loss	198	-91	1,192	-	3
Total comprehensive income/loss	**198**	**-91**	**1,192**	**-**	**3**
Changes in scope of consolidation	1	-	-	-	-7
Reclassifications within equity	-4	-	-	-	-
Equity as at Jun. 30, 2019	**556**	**-68**	**1,323**	**-**	**80**

The changes in loss allowances included in the reserve from other comprehensive income were as follows:

€ million	Loss allowances for loans and advances to customers			Loss allowances for investments		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Balance as at Jan. 1, 2018	1	3	-	4	7	33
Additions	-	-	-	2	-	-
Reversals	-	-1	-	-3	-3	-
Other changes	-	1	-	-	1	-
Balance as at Jun. 30, 2018	**1**	**3**	**-**	**3**	**5**	**33**
Balance as at Jan. 1, 2019	1	2	-	3	1	29
Additions	-	-	-	2	-	-
Reversals	-1	-1	-	-2	-	-
Balance as at Jun. 30, 2019	**-**	**1**	**-**	**3**	**1**	**29**

€ million	Loss allowances for investments held by insurance companies			Total
	Stage 1	Stage 2	Stage 3	
Balance as at Jan. 1, 2018	4	-	-	52
Additions	2	-	-	4
Reversals	-2	-	-	-9
Other changes	-	-	-	2
Balance as at Jun. 30, 2018	**4**	**-**	**-**	**49**
Balance as at Jan. 1, 2019	4	-	-	40
Additions	3	-	-	5
Reversals	-2	-	-	-6
Balance as at Jun. 30, 2019	**5**	**-**	**-**	**39**

D Financial instruments and fair value disclosures

>>46 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 instruments (in accordance with IFRS 9):

€ million	Jun. 30, 2019 Carrying amount	Jun. 30, 2019 Fair value	Dec. 31, 2018 Carrying amount	Dec. 31, 2018 Fair value
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**180,117**	**180,117**	**159,271**	**159,271**
Financial assets measured at fair value through profit or loss	**85,445**	**85,445**	**73,091**	**73,091**
Financial assets mandatorily measured at fair value through profit or loss	***75,476***	***75,476***	***63,324***	***63,324***
Loans and advances to banks	-	-	1	1
Loans and advances to customers	248	248	234	234
Hedging instruments (positive fair values)	259	259	883	883
Financial assets held for trading	48,134	48,134	37,942	37,942
Investments	2,223	2,223	2,219	2,219
Investments held by insurance companies	24,612	24,612	22,045[1]	22,045[1]
Financial assets designated as at fair value through profit or loss	***9,969***	***9,969***	***9,767***	***9,767***
Loans and advances to banks	2,006	2,006	1,874	1,874
Loans and advances to customers	1,610	1,610	1,629	1,629
Investments	6,353	6,353	6,264	6,264
Financial assets measured at fair value through other comprehensive income	**94,336**	**94,336**	**85,764**	**85,764**
Financial assets mandatorily measured at fair value through other comprehensive income	***88,128***	***88,128***	***80,275***	***80,275***
Loans and advances to banks	179	179	230	230
Loans and advances to customers	3,853	3,853	3,716	3,716
Investments	22,731	22,731	19,774	19,774
Investments held by insurance companies	61,365	61,365	56,555	56,555
Financial assets designated as at fair value through other comprehensive income	***6,208***	***6,208***	***5,489***	***5,489***
Investments	655	655	603	603
Investments held by insurance companies	5,553	5,553	4,886	4,886
Non-current assets and disposal groups classified as held for sale	**336**	**336**	**416**	**416**
FINANCIAL ASSETS MEASURED AT AMORTIZED COST	**368,133**	**377,628**	**346,553**	**352,762**
Cash and cash equivalents	66,014	66,014	51,459	51,459
Loans and advances to banks	90,756	94,439	89,510	91,398
Loans and advances to customers	172,067	176,102	164,628	167,011
Investments	17,664	18,686	18,570	19,382
Investments held by insurance companies	14,255	16,448	14,218	15,744
Other assets	1,730	1,732	1,674	1,676
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	1,440		533	
Non-current assets and disposal groups classified as held for sale	**4,207**	**4,207**	**5,961**	**6,092**
FINANCE LEASES	**1,773**	**1,780**	**2,000**	**2,005**
Loans and advances to customers	1,773	1,780	2,000	2,005

1 Amount restated (see note 2).

€ million	Jun. 30, 2019		Dec. 31, 2018	
	Carrying amount	Fair value	Carrying amount	Fair value
FINANCIAL LIABILITIES MEASURED AT FAIR VALUE	**95,155**	**95,155**	**81,126**	**81,126**
Financial liabilities mandatorily measured at fair value through profit or loss	**62,290**	**62,290**	**47,511**	**47,511**
Hedging instruments (negative fair values)	995	995	2,516	2,516
Financial liabilities held for trading	61,281	61,281	44,979	44,979
Other liabilities	14	14	16	16
Financial liabilities designated as at fair value through profit or loss	**32,864**	**32,864**	**33,607**	**33,607**
Deposits from banks	5,190	5,190	5,767	5,767
Deposits from customers	10,539	10,539	10,697	10,697
Debt certificates issued including bonds	16,758	16,758	16,763	16,763
Subordinated capital	377	377	380	380
Liabilities included in disposal groups classified as held for sale	**1**	**1**	**8**	**8**
FINANCIAL LIABILITIES MEASURED AT AMORTIZED COST	**327,314**	**334,169**	**310,201**	**313,569**
Deposits from banks	141,196	145,104	136,719	138,765
Deposits from customers	126,591	128,698	121,851	123,031
Debt certificates issued including bonds	55,565	56,423	47,146	47,299
Other liabilities	1,543	1,545	1,629	1,630
Subordinated capital	2,243	2,380	2,517	2,616
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	157		134	
Liabilities included in disposal groups classified as held for sale	**19**	**19**	**205**	**228**
LEASES	**373**	**373**		
Other liabilities	373	373		
FINANCIAL GUARANTEE CONTRACTS AND LOAN COMMITMENTS	**166**	**166**	**162**	**162**
Financial guarantee contracts	**106**	**106**	**113**	**113**
Provisions	106	106	113	113
Loan commitments	**60**	**60**	**49**	**49**
Provisions	60	60	49	49

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

The carrying amounts and fair values reported under investments held by insurance companies relate to receivables and fixed-income securities matched as cover for long-term insurance contract obligations as part of insurance operations. Because these instruments are normally held over their entire maturity, interest-rate-related changes in fair value during the maturity of the financial assets balance each other out in full. The fair values of the investments held by insurance companies comprise both the proportion of the fair values that is attributable to the policyholders and the proportion attributable to the shareholders of the DZ BANK Group. The fair value attributable to the shareholders of the DZ BANK Group of investments held by insurance companies measured at amortized cost was €14,953 million (December 31, 2018: €14,771 million).

>>47 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, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Assets	**80,273**	**70,070**	**91,555**	**81,558**	**8,289**	**8,310**
Loans and advances to banks	-	-	2,185	2,105	-	-
Loans and advances to customers	-	-	4,800	4,651	911	928
Hedging instruments (positive fair values)	-	-	259	883	-	-
Financial assets held for trading	1,566	1,351	46,095	36,037	473	554
Investments	19,495	14,829	10,298	11,852	2,169	2,179
Investments held by insurance companies	59,212	53,889	27,843	25,336	4,475	4,261
Non-current assets and disposal groups classified as held for sale	-	1	75	694	261	388
of which: non-recurring measurement	-	-	-	667	-	-
Liabilities	**4,473**	**3,873**	**102,283**	**87,348**	**1,269**	**1,524**
Deposits from banks	-	-	5,190	5,767	-	-
Deposits from customers	-	-	10,539	10,697	-	-
Debt certificates issued including bonds	3,367	2,488	12,864	13,710	527	565
Hedging instruments (negative fair values)	-	-	995	2,516	-	-
Financial liabilities held for trading	1,100	1,376	59,491	42,696	690	907
Financial liabilities arising from unit-linked insurance products	-	-	12,870	11,619	-	-
Other liabilities	6	9	-	-	8	7
Subordinated capital	-	-	333	335	44	45
Liabilities included in disposal groups classified as held for sale	-	-	1	8	-	-

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, 2019	Jan. 1 – Jun. 30, 2018	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Financial assets measured at fair value	**496**	87	**3,987**	1,594
Financial assets held for trading	24	2	-	64
Investments	-	-	3,710	1,210
Investments held by insurance companies	472	85	277	320
Financial liabilities measured at fair value	**1**	2	**-**	4
Financial liabilities held for trading	1	2	-	4

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 notional 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. This includes, 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, 2019.

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Loans and advances to customers		643	DCF method	BVAL price adjustment	1.8 to 4.0
	Loans	63	DCF method	Credit spread	0.1 to 8.3
	Profit-participation certificates	49	DCF method	Internal credit ratings	3.8 to 17.2
	Shareholders' loans	97	DCF method	Internal credit ratings	3.8 to 17.2
	Receivables arising from silent partnerships	59	DCF method	Internal credit ratings	3.8 to 17.2
Financial assets held for trading	ABSs	4	DCF method	Credit spread	6.1
	Equity/commodity basket products	6	Local volatility model	Correlation of the risk factors considered	9.9 to 85.3
	Loans and advances to issuers in default	6	DCF method	Recovery rate	-
	Collateralized loan obligations	50	Gaussian copula model	Liquidity spread	0.7 to 4.1
	Bearer securities	270	DCF method	BVAL price adjustment	-1.3 to 0.7
	Registered securities	88	DCF method	BVAL price adjustment	-1.8 to 4.0
	Option in connection with acquisition of long-term equity investments	49	Black-Scholes model	Earnings indicator	-
Investments	ABSs	28	DCF method	Credit spread	0.4 to 5.4
	Other variable-yield securities	11	DCF method	Assumptions for measurement of risk parameters	9.7 to 15.2
		30	DCF method	Assumptions for measurement of risk parameters	9.7 to 15.2
		285	Income capitalization approach, net asset value method	Future income	-
	Investments in subsidiaries	1	Liquidation value	-	-
	Collateralized loan obligations	7	Gaussian copula model	Liquidity spread	0.0 to 1.5
	Bearer securities	276	DCF method	BVAL price adjustment	-2.1 to 129.7
	Investment fund units	19	Net asset value	-	-
		350	DCF method	Duration	-
	Mortgage-backed securities	58	DCF method	Recovery rate	15.8 to 94.9
		69	DCF method	Capitalization rate, growth factor	1.0 to 11.4
	Other shareholdings	509	Income capitalization approach, net asset value method	Future income	-
	VR Circle	526	DCF method	Multiple-year default probabilities	0 to 100

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Investments held by insurance companies	ABSs	711	Third-party pricing information	-	-
	Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments	2,285	Net asset value	-	-
	Investments in subsidiaries, associates, and joint ventures, other long-term equity investments, and shares in cooperative banks	294	Income capitalization approach	Future income	7.0 to 11.6
	Fixed-income securities, convertible bonds, shares, and shares in cooperative banks	764	Third-party pricing information	-	-
	Profit-participation certificates and promissory notes	412	DCF method	Credit spread	5.3 to 7.6
	Derivatives (positive fair values)	3	Third-party pricing information	-	-
	Other shareholdings	6	Approximation	-	-
Non-current assets and disposal groups classified as held for sale	Loans	261	DCF method	Credit spread	0.0 to 8.3
Debt certificates issued including bonds	VR Circle	527	DCF method	Multiple-year default probabilities	0 to 100
Financial liabilities held for trading	Equity/commodity basket products	651	Local volatility model	Correlation of the risk factors considered	9.9 to 85.3
	Option in connection with acquisition of long-term equity investments	8	Black-Scholes model	Earnings indicators	-
	Products with commodity volatility derived from comparable instruments	31	Local volatility model	Volatility	6.1 to 59.5
Other liabilities	Incentivization commitment in connection with acquisition of long-term equity investments	5	Expected value	-	-
	Derivatives (negative fair values)	3	Third-party pricing information	-	-
Subordinated capital	Loans	44	DCF method	Credit spread	0.3 to 3.6

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, 2018.

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Loans and advances to customers	Loans	670	DCF method	BVAL price adjustment	-1.4 to 1.9
		56	DCF method	Credit spread	0.0 to 8.3
	Profit-participation certificates	57	DCF method	Internal credit ratings	5.2 to 16.7
	Shareholders' loans	89	DCF method	Internal credit ratings	5.2 to 16.7
	Receivables arising from silent partnerships	56	DCF method	Internal credit ratings	5.2 to 16.7
Financial assets held for trading	ABSs	4	DCF method	Credit spread	0.6 to 5.3
	Equity/commodity basket products	5	Local volatility model	Correlation of the risk factors considered	11.9 to 85.3
	Loans and advances to issuers in default	5	DCF method	Recovery rate	-
	Collateralized loan obligations	141	Gaussian copula model	Liquidity spread	0.0 to 4.4
	Bearer securities	335	DCF method	BVAL price adjustment	-1.3 to 0.7
	Registered securities	15	DCF method	BVAL price adjustment	-1.4 to 1.9
	Option in connection with acquisition of long-term equity investments	49	Black-Scholes model	Earnings indicator	-
Investments	ABSs	31	DCF method	Credit spread	0.6 to 5.3
	Other variable-yield securities	10	DCF method	Assumptions for measurement of risk parameters	9.7 to 13.4
	Investments in subsidiaries	22	DCF method	Assumptions for measurement of risk parameters	9.7 to 13.4
		277	Income capitalization approach, net asset value method	Future income	-
		1	Liquidation value	-	-
	Collateralized loan obligations	7	Gaussian copula model	Liquidity spread	0.0 to 4.4
	Bearer securities	293	DCF method	BVAL price adjustment	-1.3 to 125.0
	Investment fund units	21	Net asset value	-	-
	Mortgage-backed securities	367	DCF method	Duration	-
		62	DCF method	Recovery rate	15.8 to 95.3
	Other shareholdings	57	DCF method	Capitalization rate, growth factor	0.0 to 11.2
		14	DCF method	Assumptions for measurement of risk parameters	9.7 to 13.4
		455	Income capitalization approach, net asset value method	Future income	-
	VR Circle	562	DCF method	Multiple-year default probabilities	0 to 100

Class according to IFRS 13	Assets/liabilities	Fair value (€ million)	Valuation technique	Unobservable inputs	Spread of unobservable inputs (%)
Investments held by insurance companies	ABSs	621	Third-party pricing information	-	-
	Investments in subsidiaries, associates, and joint ventures, real estate funds, profit-participation certificates, and other long-term equity investments	2,128	Net asset value	-	-
	Investments in subsidiaries, associates, and joint ventures, other long-term equity investments, and shares in cooperative banks	296	Income capitalization approach	Future income	6.9 to 11.6
	Fixed-income securities, convertible bonds, shares, and shares in cooperative banks	804	Third-party pricing information	-	-
	Profit-participation certificates and promissory notes	403	DCF method	Credit spread	5.3 to 7.5
	Derivatives (positive fair values)	3	Third-party pricing information	-	-
	Other shareholdings	6	Approximation	-	-
Non-current assets and disposal groups classified as held for sale	Loans	378	DCF method	Credit spread	0.0 to 8.3
	Other shareholdings	10	Income capitalization approach, net asset value method	Future income	-
Debt certificates issued including bonds	VR Circle	565	DCF method	Multiple-year default probabilities	0 to 100
Financial liabilities held for trading	Equity/commodity basket products	863	Local volatility model	Correlation of the risk factors considered	11.9 to 85.3
	Option in connection with acquisition of long-term equity investments	8	Black-Scholes model	Earnings indicators	-
	Products with commodity volatility derived from comparable instruments	36	Local volatility model	Earnings indicators	7.0 to 64.2
Other liabilities	Incentivization commitment in connection with acquisition of long-term equity investments	5	Expected value	-	-
	Derivatives (negative fair values)	2	Third-party pricing information	-	-
Subordinated capital	Loans	45	DCF method	Credit spread	0.0 to 3.6

Fair value measurements within Level 3 of the fair value hierarchy

The table below shows the changes in the recurring 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, 2018	1,522	660	2,255	3,430	50
Additions (purchases)	8	40	59	832	1
Transfers	-	16	252	-27	-
from Level 3 to Levels 1 and 2	-	-2	-91	-95	-
from Levels 1 and 2 to Level 3	-	18	343	68	-
Disposals (sales)	-125	-164	-380	-268	-
Changes resulting from measurement at fair value	-11	-9	175	74	-
through profit or loss	-7	-9	37	76	-
through other comprehensive income	-4	-	138	-2	-
Other changes	3	3	2	-	10
Balance as at Jun. 30, 2018	**1,397**	**546**	**2,363**	**4,041**	**61**
Balance as at Jan. 1, 2019	928	554	2,179	4,261	388
Additions (purchases)	30	-	138	482	122
Transfers	-36	-34	-143	-74	-
from Level 3 to Levels 1 and 2	-36	-51	-157	-109	-
from Levels 1 and 2 to Level 3	-	17	14	35	-
Disposals (sales)	-26	-53	-80	-255	-247
Changes resulting from measurement at fair value	6	3	72	61	-
through profit or loss	-6	3	23	17	-
through other comprehensive income	12	-	49	44	-
Other changes	9	3	3	-	-2
Balance as at Jun. 30, 2019	**911**	**473**	**2,169**	**4,475**	**261**

The table below shows the changes in the recurring 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	Sub-ordinated capital
Balance as at Jan. 1, 2018	543	1,078	15	254
Additions (issues)	37	22	-	-
Transfers	-	-195	-	-
from Level 3 to Level 2	-	-213	-	-
from Level 2 to Level 3	-	18	-	-
Disposals (settlements)	-20	-	-8	-195
Changes resulting from measurement at fair value through profit or loss	-25	-11	-4	2
Other changes	-	6	-	-1
Balance as at Jun. 30, 2018	**535**	**900**	**3**	**60**
Balance as at Jan. 1, 2019	565	907	7	45
Additions (issues)	-	2	-	-
Transfers	-	-242	-	-
from Level 3 to Level 2	-	-243	-	-
from Level 2 to Level 3	-	1	-	-
Disposals (settlements)	-26	-	-	-3
Changes resulting from measurement at fair value	-12	22	1	3
through profit or loss	-12	22	1	-1
through other comprehensive income	-	-	-	4
Other changes	-	1	-	-1
Balance as at Jun. 30, 2019	**527**	**690**	**8**	**44**

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 gain of €67 million during the reporting period (first half of 2018: gain of €47 million). The gains or losses are included in the line items net interest income, gains and losses on trading activities, gains and losses on investments, other gains and losses on

valuation of financial instruments, and gains and losses on investments held by insurance companies and other insurance company gains and losses.

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 profit or loss (December 31, 2018: loss of €32 million) and a loss of €1 million under other comprehensive income/loss (December 31, 2018: loss of €1 million). In the case of the fair values of loans and advances to customers, the same change would lead to the recognition of a €11 million loss in profit or loss (December 31, 2018: loss of €27 million). For the fair values of investments, there would be a €28 million loss under other comprehensive income/loss (December 31, 2018: loss of €27 million) and a €23 million loss in profit or loss (December 31, 2018: loss of €23 million). Within financial assets held for trading, the changes would give rise to a loss of €11 million recognized in profit or loss (December 31, 2018: loss of €11 million); however, changes within financial liabilities held for trading would result in a gain of €2 million recognized in profit or loss (December 31, 2018: gain of €2 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, a rise of 1 percent in the relevant measurement assumptions would lead to the recognition of a loss of €16 million in profit or loss (December 31, 2018: loss of €7 million) and a loss of €22 million in other comprehensive income/loss (December 31, 2018: loss of €22 million). Historical spreads are used for bonds recognized under subordinated capital whose spread components are no longer observable in the market. All other things being equal, an increase of 1 percent in the spread would lead to a €3 million increase in fair value that would be recognized in profit or loss (December 31, 2018: increase of €4 million).

An alternative assumption about the credit spreads used could lead to a significant change in the fair values of some of the ABSs reported under financial assets held for trading and under investments. All other things being equal, a rise of 1 percent in these credit spreads would lead to the recognition of a loss of €2 million in profit or loss (December 31, 2018: loss of €2 million).

Measurement of some of the commodities reported under financial assets and financial liabilities held for trading is based on the benchmark volatility of a comparable underlying. All other things being equal, a 1 percent rise in volatility would lead to the recognition of a gain of €3 million in profit or loss (December 31, 2018: gain 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 profit or loss (December 31, 2018: decrease of €7 million).

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

Exercise of option pursuant to IFRS 13.48

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

>> 48 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, 2019	Jan. 1 – Jun. 30, 2018
Gains and losses on fair value hedges	**1**	**-4**
Gains and losses on hedging instruments	-131	15
Gains and losses on hedged items	132	-19
Gains and losses on portfolio fair value hedges	**1**	**-6**
Gains and losses on hedging instruments	-1,337	-79
Gains and losses on hedged items	1,338	73
Gains and losses on cash flow hedges	**-**	**-1**
Gains and losses on cash flow hedges of existing hedged items	-	-1
Total	**2**	**-11**

>> 49 Nature and extent of risks arising from financial instruments and insurance contracts

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

Credit risk management practices

The rules for recognizing loss allowances are based on the calculation of expected losses in the lending business, on investments, and on other assets. The loss allowance 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 loss allowance 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 one or more events have occurred with an adverse impact on the estimated future cash flows of these financial assets or they are deemed to be in default pursuant to article 178 of the Capital Requirements Regulation (CRR). The definition therein is the same as 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, but particularly on every balance sheet date. 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. If analysis based on one year does not produce a significantly different outcome, the change in the expected credit risk on a one-year basis is used in some cases for reasons of simplification. In both scenarios, macroeconomic information is also factored in. To this end, the credit risk as at the balance sheet date for the residual life is compared with the assets' credit risk over the same maturity period estimated at the time of initial recognition. The thresholds that indicate a significant increase in credit risk are determined for each portfolio separately relative to the portfolio's past migrations of default probability. Internal risk measurement systems, external credit ratings, and risk forecasts are also used to assess the credit risk of financial assets. This test has been extended to look at qualitative criteria that increase credit risk unless these criteria have already been incorporated into the probability of default. In general, allocation to stage 2 is assumed no later than when payments become 30 days past due. Depending on the business line, either this criterion has been defined as an additional backstop or the past-due period is already factored into the credit rating and scoring system. As a rule, however, financial assets are allocated to stage 2 well before payments become 30 days past due. Exceptions are only made in individual cases if it has been shown that there is no significant increase in credit risk, despite payments being 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 advances.

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. In the case of a transfer back from stage 3, the default status is only revoked after the necessary period of good conduct in accordance with the regulatory definition.

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 stages 2 and 3. 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, for example when loss allowances are determined within stage 2, in the form of shifts in the default probabilities calculated using statistical means. The calculation of the expected loss for specific exposures in stage 3 does not use this type of fundamental parameter-based approach but rather 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. A macroeconomic scenario based on empirical estimates is also factored in. This scenario specifically looks at future trends in the labor market, interest rates in the money market, changes in GDP, inflation, and commercial real estate prices. 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. type of asset, credit rating, date of origination, residual life, industry, and origin of the borrower.

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 as directly recognized impairment losses 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 recognized for insignificant amounts.

If substantial modifications are made to the contract for a financial asset, the asset is derecognized and then recognized as a new asset. The POCI asset rules apply to impaired assets (stage 3). If contractual modifications for a financial asset do not have a substantial impact, the asset is reviewed to ascertain whether credit risk has increased significantly since initial recognition.

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

€ million	Stage 1		Stage 2		Stage 3	
	Loss allowances	Fair value	Loss allowances	Fair value	Loss allowances	Fair value
Balance as at Jan. 1, 2018	9	83,114	10	402	33	26
Addition/increase in loan drawdowns	2	11,743	-	-	-	-
Change to financial assets due to transfer between stages	-	22	-	-22	-	-
Transfer from stage 2	-	22	-	-22	-	-
Derecognitions and repayments	-3	-13,316	-	-25	-	-1
Changes to models/risk parameters	-	-	-4	-	-	-
Additions	2	-	-	-	-	-
Reversals	-2	-	-4	-	-	-
Amortization, fair value changes, and other changes in measurement	-	-1,014	-	5	-	-
Exchange differences and other changes	-	52	-	-	-	-
Deferred taxes	-	-	2	-	-	-
Balance as at Jun. 30, 2018	**8**	**80,601**	**8**	**360**	**33**	**25**
Balance as at Jan. 1, 2019	8	80,068	3	182	29	25
Addition/increase in loan drawdowns	2	11,703	-	-	-	-
Change to financial assets due to transfer between stages	-	5	-	-5	-	-
Transfer from stage 2	-	5	-	-5	-	-
Derecognitions and repayments	-3	-8,624	-	-33	-	-2
Changes to models/risk parameters	1	-	-1	-	-	-
Additions	3	-	-	-	-	-
Reversals	-2	-	-1	-	-	-
Amortization, fair value changes, and other changes in measurement	-	4,805	-	4	-	-
Balance as at Jun. 30, 2019	**8**	**87,957**	**2**	**148**	**29**	**23**

Financial assets measured at amortized cost

€ million	Stage 1		Stage 2		Stage 3		POCI assets	
	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount
Balance as at Jan. 1, 2018	233	315,853	212	12,364	2,449 [1]	5,422 [1]	10	32
Addition/increase in loan drawdowns	66	5,883,690	10	8,220 [1]	225	1,457	3	27
Change to financial assets due to transfer between stages	81	1,041	-110	-1,123	35	86	-	-
Transfer from stage 1	-23	-3,378	22	3,334	1	44	-	-
Transfer from stage 2	87	4,260	-147	-4,514	61	259	-	-
Transfer from stage 3	17	159	15	57	-27	-217	-	-
Use of loss allowances/directly recognized impairment losses on gross carrying amounts	-	-	-1	-	-347 [1]	-12	-	-1
Derecognitions and repayments	-46	-5,850,280 [1]	-29	-10,235 [1]	-287	-1,678 [1]	-5	-38
Changes to models/risk parameters	-101	-	115	-	83	-	-	-
Additions	55	-	179	-	279	-	2	-
Reversals	-156	-	-64	-	-196	-	-2	-
Amortization, fair value changes, and other changes in measurement	-	-317	-	56	-	10	-	-
Positive change in fair value of POCI assets								8
Exchange differences and other changes	1	-139	-	-1,335	90 [1]	-288 [1]	-	1
Balance as at Jun. 30, 2018	**234**	**349,848**	**197**	**7,947**	**2,248**	**4,997**	**8**	**29**
Balance as at Jan. 1, 2019	231	330,226	196	7,864	1,972 [1]	4,349 [1]	3	22
Addition/increase in loan drawdowns	80	5,737,169	12	4,270	165	952	-	3
Change to financial assets due to transfer between stages	70	-451	-108	43	38	408	-	-
Transfer from stage 1	-26	-2,297	24	2,139	2	158	-	-
Transfer from stage 2	88	1,812	-149	-2,284	61	472	-	-
Transfer from stage 3	8	34	17	188	-25	-222	-	-
Use of loss allowances/directly recognized impairment losses on gross carrying amounts	-	-	-	-	-237	-14	-	-1
Derecognitions and repayments	-61	-5,713,524	-26	-4,253	-113	-1,145	-	-13
Changes to models/risk parameters	-86	-	131	-	23	-	-2	-
Additions	69	-	199	-	267	-	2	-
Reversals	-155	-	-68	-	-244	-	-4	-
Amortization, fair value changes, and other changes in measurement	-	-147	-	13	-	-115	-	-
Positive change in fair value of POCI assets								10
Exchange differences and other changes	-	-500	-	-101	34	-257	-	-
Balance as at Jun. 30, 2019	**234**	**352,773**	**205**	**7,836**	**1,882**	**4,178**	**1**	**21**

1 Amount restated (see note 2).

The undiscounted expected credit losses on purchased or originated credit-impaired assets that were recognized for the first time during the reporting period totaled €77 million (first half of 2018: €93 million).

Non-current assets and disposal groups classified as held for sale that were previously recognized as financial assets measured at amortized cost

€ million	Stage 1		Stage 2		Stage 3	
	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount	Loss allowances	Gross carrying amount
Balance as at Jan. 1, 2019	5	5,853	-	105	13	40
Addition/increase in loan drawdowns	-	1,174	-	-	-	-
Change to financial assets due to transfer between stages	-1	-195	1	188	-	7
Transfer from stage 1	-1	-210	1	210	-	-
Transfer from stage 2	-	15	-	-22	-	7
Derecognitions and repayments	-1	-2,923	-	-15	-7	-3
Changes to models/risk parameters	3	-	4	-	1	-
Additions	4	-	4	-	3	-
Reversals	-1	-	-	-	-2	-
Amortization, fair value changes, and other changes in measurement	-	70	-	1	-	-
Exchange differences and other changes	-1	85	-	8	2	2
Changes in scope of consolidation	-	-168	-	-3	-	-
Balance as at Jun. 30, 2019	**5**	**3,896**	**5**	**284**	**9**	**46**

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, 2018	6	2,595	10	304	18	51
Addition/increase in loan drawdowns	5	586	8	40	15	3
Change to financial assets due to transfer between stages	10	19	-2	-49	-14	21
Transfer from stage 2	1	33	-2	-48	-	6
Transfer from stage 3	9	-14	-	-1	-14	15
Use of loss allowances/directly recognized impairment losses on gross carrying amounts	-	-	-	-	-1	-
Derecognitions and repayments	-16	-612	-7	-65	-8	-41
Changes to models/risk parameters	-	-	-1	-	-	-
Reversals	-	-	-1	-	-	-
Exchange differences and other changes	-	-	3	-	-1	-
Balance as at Jun. 30, 2018	**5**	**2,588**	**11**	**230**	**9**	**34**
Balance as at Jan. 1, 2019	4	1,811	8	186	8	23
Addition/increase in loan drawdowns	1	158	7	2	4	1
Change to financial assets due to transfer between stages	4	-28	-2	16	-2	12
Transfer from stage 1	-	-89	-	84	-	5
Transfer from stage 2	3	56	-4	-72	1	16
Transfer from stage 3	1	5	2	4	-3	-9
Use of loss allowances/directly recognized impairment losses on gross carrying amounts	-	-	-3	-	-	-
Derecognitions and repayments	-4	-343	-4	-31	-4	-16
Exchange differences and other changes	-	-	-	-	1	-
Balance as at Jun. 30, 2019	**5**	**1,598**	**6**	**173**	**7**	**20**

Financial guarantee contracts and loan commitments

€ million	Stage 1		Stage 2		Stage 3	
	Loss allowances	Nominal amount	Loss allowances	Nominal amount	Loss allowances	Nominal amount
Balance as at Jan. 1, 2018	38	55,702	8	627	147	469
Addition/increase in loan drawdowns	43	26,054	3	317	9	16
Change to financial guarantee contracts and loan commitments due to transfer between stages	-	-382	6	371	-6	11
Transfer from stage 1	-5	-536	5	527	-	9
Transfer from stage 2	4	150	-4	-159	-	9
Transfer from stage 3	1	4	5	3	-6	-7
Derecognitions and repayments	-18	-19,800	-9	-618	-46	-271
Changes to models/risk parameters	-31	-	-	-	5	-
Additions	8	-	9	-	19	-
Reversals	-39	-	-9	-	-14	-
Amortization, fair value changes, and other changes in measurement	-	59	-	-	-	-
Exchange differences and other changes	1	-33	-	3	2	2
Balance as at Jun. 30, 2018	**33**	**61,600**	**8**	**700**	**111**	**227**
Balance as at Jan. 1, 2019	35	60,787	9	834	118	250
Addition/increase in loan drawdowns	57	28,480	2	334	3	66
Change to financial guarantee contracts and loan commitments due to transfer between stages	1	-94	-4	45	3	49
Transfer from stage 1	-1	-356	1	344	-	12
Transfer from stage 2	1	257	-5	-299	4	42
Transfer from stage 3	1	5	-	-	-1	-5
Derecognitions and repayments	-24	-28,361	-4	-448	-10	-103
Changes to models/risk parameters	-28	-	4	-	3	-
Additions	14	-	6	-	23	-
Reversals	-42	-	-2	-	-20	-
Amortization, fair value changes, and other changes in measurement	-	12	-	-	-	-
Exchange differences and other changes	1	176	-	1	-	1
Balance as at Jun. 30, 2019	**42**	**61,000**	**7**	**766**	**117**	**263**

Liabilities included in disposal groups classified as held for sale that were previously recognized as financial guarantee contracts and loan commitments

€ million	Stage 1	
	Loss allowances	Nominal amount
Balance as at Jan. 1, 2019	-	549
Addition/increase in loan drawdowns	-	63
Derecognitions and repayments	-	-259
Changes to models/risk parameters	1	-
Additions	1	-
Exchange differences and other changes	-	-133
Balance as at Jun. 30, 2019	**1**	**220**

>> 50 Exposures to countries particularly affected by the sovereign debt crisis

The table below shows the carrying amounts of the DZ BANK Group's exposures to bonds issued by governments and public authorities in countries particularly affected by the sovereign debt crisis, broken down into the categories applied to financial instruments under IFRS 9.

€ million	Jun. 30, 2019		Dec. 31, 2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Portugal	**843**	**861**	**718**	**731**
Financial assets measured at fair value through profit or loss	439	439	347	347
Financial assets measured at fair value through other comprehensive income	354	354	322	322
Financial assets measured at amortized cost	50	68	49	62
Italy	**4,807**	**4,870**	**4,937**	**4,982**
Financial assets measured at fair value through profit or loss	1,824	1,824	1,734	1,734
Financial assets measured at fair value through other comprehensive income	2,463	2,463	2,683	2,683
Financial assets measured at amortized cost	520	583	520	565
Spain	**2,139**	**2,181**	**1,925**	**1,942**
Financial assets measured at fair value through profit or loss	1,260	1,260	1,122	1,122
Financial assets measured at fair value through other comprehensive income	639	639	563	563
Financial assets measured at amortized cost	240	282	240	257
Total	**7,789**	**7,912**	**7,580**	**7,655**

Bonds issued by countries particularly affected by the sovereign debt crisis and held as part of the insurance business are only recognized in the proportion attributable to the shareholders of the DZ BANK Group.

Fair value hierarchy

The recurring fair value measurements as measured and recognized on the balance sheet are assigned to the levels of the fair value hierarchy as follows:

€ million	Level 1		Level 2		Level 3	
	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2019	Dec. 31, 2018
Portugal	**793**	669	**-**	-	**-**	-
Financial assets measured at fair value through profit or loss	439	347	-	-	-	-
Financial assets measured at fair value through other comprehensive income	354	322	-	-	-	-
Italy	**4,233**	4,183	**25**	211	**29**	23
Financial assets measured at fair value through profit or loss	1,824	1,715	-	19	-	-
Financial assets measured at fair value through other comprehensive income	2,409	2,468	25	192	29	23
Spain	**1,837**	1,347	**-**	282	**62**	56
Financial assets measured at fair value through profit or loss	1,198	902	-	164	62	56
Financial assets measured at fair value through other comprehensive income	639	445	-	118	-	-
Total	**6,863**	**6,199**	**25**	**493**	**91**	**79**

Maturity analysis

AS AT JUNE 30, 2019

€ million	≤ 1 month	> 1 month – 3 months	> 3 months – 1 year	> 1 year – 5 years	> 5 years
Portugal	-	-	25	120	800
Italy	11	66	191	1,636	4,181
Spain	10	6	55	591	1,919
Total	**21**	**72**	**271**	**2,347**	**6,900**

AS AT DECEMBER 31, 2018

€ million	≤ 1 month	> 1 month – 3 months	> 3 months – 1 year	> 1 year – 5 years	> 5 years
Portugal	-	-	26	101	808
Italy	15	86	282	1,598	4,581
Spain	4	6	109	614	2,030
Total	**19**	**92**	**417**	**2,313**	**7,419**

The maturity analysis shows the contractually agreed cash inflows.

E Other disclosures

>> 51 Contingent liabilities

€ million	Jun. 30, 2019	Dec. 31, 2018
Contingent liabilities arising from contributions to the resolution fund for CRR credit institutions	36	25
Contingent liabilities in respect of litigation risk	9	10
Total	**45**	**35**

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 annual contribution to the European bank levy for 2017 to 2019 were approved by the Single Resolution Board (SRB).

The contingent liabilities in respect of litigation risk comprise a small number of court proceedings relating to different cases. Where provisions have been recognized for particular claims, no contingent liabilities are recognized.

>> 52 Financial guarantee contracts and loan commitments

€ million	Jun. 30, 2019	Dec. 31, 2018
Financial guarantee contracts	**7,555**	**7,601**
Loan guarantees	3,973	4,022
Letters of credit	477	465
Other guarantees and warranties	3,105	3,114
Loan commitments	**54,474**	**54,270**
Credit facilities to banks	17,356	17,723
Credit facilities to customers	15,789	15,866
Guarantee credits	431	436
Letters of credit	1	1
Global limits	20,897	20,244
Total	**62,029**	**61,871**

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

>> 53 Trust activities

Trust assets and trust liabilities amounted to €903 million as at June 30, 2019 (December 31, 2018: €944 million).

>> 54 Disclosures on revenue from contracts with customers

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

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

€ million	DZ BANK	BSH	DVB
Income type			
Fee and commission income from securities business	183	-	-
Fee and commission income from asset management	-	-	-
Fee and commission income from payments processing including card processing	111	-	1
Fee and commission income from lending business and trust activities	30	-	24
Fee and commission income from financial guarantee contracts and loan commitments	26	-	1
Fee and commission income from international business	5	-	-
Fee and commission income from building society operations	-	17	-
Other fee and commission income	30	30	4
Fee and commission income in gains and losses on investments held by insurance companies and other insurance company gains and losses	-	-	-
Other income in gains and losses on investments held by insurance companies and other insurance company gains and losses	-	-	-
Other operating income	-	-	-
Total	**385**	**47**	**30**
Main geographical markets			
Germany	385	42	4
Rest of Europe	-	5	18
Rest of World	-	-	8
Total	**385**	**47**	**30**
Type of revenue recognition			
At a point in time	139	47	6
Over a period of time	246	-	24
Total	**385**	**47**	**30**

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR Smart Finanz	Other/ Consolidation	**Total**
	-	80	-	-	1,265	-	-31	1,497
	-	112	-	-	8	-	-8	112
	-	-	-	-	-	-	34	146
	2	-	-	2	-	-	12	70
	3	-	-	-	-	-	-1	29
	-	-	-	-	-	-	-	5
	-	-	-	-	-	-	-	17
	1	10	-	77	-	17	-65	104
	-	-	31	-	-	-	-	31
	-	-	38	-	-	-	-	38
	-	-	-	6	2	-	5	13
	6	**202**	**69**	**85**	**1,275**	**17**	**-54**	**2,062**
	6	42	69	85	990	17	-39	1,601
	-	159	-	-	285	-	-15	452
	-	1	-	-	-	-	-	9
	6	**202**	**69**	**85**	**1,275**	**17**	**-54**	**2,062**
	4	85	17	85	211	17	-63	548
	2	117	52	-	1,064	-	9	1,514
	6	**202**	**69**	**85**	**1,275**	**17**	**-54**	**2,062**

INFORMATION ON OPERATING SEGMENTS FOR THE PERIOD JANUARY 1 TO JUNE 30, 2018

€ million	DZ BANK	BSH	DVB
Income type			
Fee and commission income from securities business [1]	157	-	-
Fee and commission income from asset management	-	-	-
Fee and commission income from payments processing including card processing	109	-	1
Fee and commission income from lending business and trust activities	36	-	31
Fee and commission income from financial guarantee contracts and loan commitments	24	-	1
Fee and commission income from international business	5	-	-
Fee and commission income from building society operations	-	11	-
Other fee and commission income	25	29	15
Fee and commission income in gains and losses on investments held by insurance companies and other insurance company gains and losses [1]	-	-	-
Other income in gains and losses on investments held by insurance companies and other insurance company gains and losses [1]	-	-	-
Other operating income	-	-	-
Total	**356**	**40**	**48**
Main geographical markets			
Germany [1]	356	39	18
Rest of Europe [1]	-	1	24
Rest of World	-	-	6
Total	**356**	**40**	**48**
Type of revenue recognition			
At a point in time [1]	128	39	16
Over a period of time [1]	228	1	32
Total	**356**	**40**	**48**

1 Amount restated (see note 2).

	DZ HYP	DZ PRIVAT-BANK	R+V	TeamBank	UMH	VR Smart Finanz	Other/ Consolidation	**Total**
	-	57	-	-	1,188	-	-14	1,388
	-	113	-	-	8	-	-7	114
	-	-	-	-	-	-	14	124
	3	-	-	-	-	-	-	70
	3	-	-	-	-	-	-1	27
	-	-	-	-	-	-	-	5
	-	-	-	-	-	-	-	11
	-	5	-	77	-	18	-70	99
	-	-	29	-	-	-	-	29
	-	-	24	-	-	-	-	24
	-	-	-	5	2	-	4	11
	6	**175**	**53**	**82**	**1,198**	**18**	**-74**	**1,902**
	6	45	53	82	885	18	-86	1,416
	-	129	-	-	313	-	12	479
	-	1	-	-	-	-	-	7
	6	**175**	**53**	**82**	**1,198**	**18**	**-74**	**1,902**
	6	23	3	82	140	18	-56	399
	-	152	50	-	1,058	-	-18	1,503
	6	**175**	**53**	**82**	**1,198**	**18**	**-74**	**1,902**

>> 55 Employees

Average number of employees by employee group:

	Jan. 1 – Jun. 30, 2019	Jan. 1 – Jun. 30, 2018
Female employees	**14,045**	**13,792**
Full-time employees	8,600	8,513
Part-time employees	5,445	5,279
Male employees	**16,801**	**16,578**
Full-time employees	15,713	15,599
Part-time employees	1,088	979
Total	**30,846**	**30,370**

>> 56 Board of Managing Directors

Uwe Fröhlich
(Co-Chief Executive Officer)
Responsibilities: Cooperative Banks/Verbund; Communication, Marketing, CSR; Research and Economics; Strategy & Group Development; Structured Finance

Dr. Cornelius Riese
(Co-Chief Executive Officer)
Responsibilities: Group Audit; Legal; Strategy & Corporate 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; Organization

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 Special

Thomas Ullrich
Responsibilities: Group Human Resources; Operations; Payments & Accounts; Transaction Management

>> 57 Supervisory Board

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

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

Martin Eul
(Deputy Chairman of the Supervisory Board)
Chief Executive Officer
Dortmunder Volksbank eG

Heiner Beckmann
Senior manager
R+V Allgemeine Versicherung AG

Hermann Buerstedde
Employee
Union Asset Management Holding AG

Uwe Goldstein
Spokesman of the Board of Managing Directors
Raiffeisenbank Frechen-Hürth eG

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

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

Andrea Hartmann
Employee
Bausparkasse Schwäbisch Hall AG

Pilar Herrero Lerma
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

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

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

Renate Mack
Employee
DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

Rainer Mangels
Employee
R+V Rechtsschutz-
Schadenregulierungs-GmbH

Stephan Schack
Chief Executive Officer
Volksbank Raiffeisenbank eG, Itzehoe

Gregor Scheller
Chief Executive Officer
Volksbank Forchheim eG

Uwe Spitzbarth
Head of the Financial Services Division
ver.di Bundesverwaltung

Sigrid Stenzel
Regional Group Director
ver.di Bayern

Ingo Stockhausen
Chief Executive Officer
Volksbank Oberberg eG

Dr. Wolfgang Thomasberger
Chief Executive Officer
VR Bank Rhein-Neckar eG

Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the group in accordance with German principles of proper accounting, and the interim group management report includes a fair review of the development and performance of the business and the position of the group, together with a description of the material opportunities and risks associated with the expected development of the group.

Frankfurt am Main, August 20, 2019

DZ BANK AG
Deutsche Zentral-Genossenschaftsbank

The Board of Managing Directors

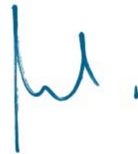
Fröhlich

Dr. Riese

Berghaus

Dr. Brauckmann

Brouzi


Köhler

Speth

Ullrich

Review report (translation)

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

We have reviewed the interim condensed consolidated financial statements, comprising the condensed income statement, the statement of comprehensive income, the balance sheet, the statement of changes in equity, the condensed statement of cash flows, and selected explanatory notes, and the interim group management report of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, for the period from January 1 to June 30, 2019, which are part of the six-monthly financial report pursuant to Sec. 115 WpHG ["Wertpapierhandelsgesetz": German Securities Trading Act]. The preparation of the interim condensed consolidated financial statements in accordance with IFRSs on interim financial reporting as adopted by the EU and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports is the responsibility of the Company's management. Our responsibility is to issue a report on the interim condensed consolidated financial statements and the interim group management report based on our review.

We conducted our review of the interim condensed consolidated financial statements and the interim group management report in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the review to obtain a certain level of assurance in our critical appraisal to preclude that the interim condensed consolidated financial statements are not prepared, in all material respects, in accordance with IFRSs on interim financial reporting as adopted by the EU and that the interim group management report is not prepared, in all material respects, in accordance with the provisions of the WpHG applicable to interim group management reports. A review is limited primarily to making inquiries of company personnel and applying analytical procedures and thus does not provide the assurance that we would obtain from an audit of financial statements. In accordance with our engagement, we have not performed an audit and, accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the interim condensed consolidated financial statements are not prepared, in all material respects, in accordance with IFRSs on interim financial reporting as adopted by the EU or that the interim group management report is not prepared, in all material respects, in accordance with the provisions of the WpHG applicable to interim group management reports.

Eschborn/Frankfurt am Main, August 20, 2019

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Eckl	Mai
Wirtschaftsprüferin	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Editorial information

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Ulrike Brouzi
Wolfgang Köhler
Michael Speth
Thomas Ullrich

Chairman of the Supervisory Board:
Henning Deneke-Jöhrens

This half-year financial report is available in electronic form
on our website at www.halfyearreport.dzbank.com.

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